

## **Paper Presentation**

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**The difference in emotional exhaustion, cynicism and diminished professional efficacy among employees with different sleeping quality in Macao hospitality industry**

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**Abstract:**

Sleeping quality of employees possesses a relationship with the work performance of employees which is a crucial concern of employers. In this study, a research is conducted to examine the difference in emotional exhaustion, cynicism and diminished professional efficacy of employees with different sleeping quality in Macao hospitality industry. Significant differences are found for emotional exhaustion and cynicism but not diminished professional efficacy between good sleepers group and bad sleepers group.

**Keywords:** burnout, emotional exhaustion, cynicism, diminished professional efficacy, sleeping quality

**1. Introduction**

Working in the hospitality industry is always considered as a high-pressure job (Birdir and Tepeci, 2003). Employees have to fulfill the demands and needs requested by customers. Meanwhile, they also have to finish the tasks and duties delegated by superiors. On the other hand, based on the result of Melamed et al. (1999), when an individual is working under high pressure or already suffering burnout, there is a negative influence to his/her sleeping quality, such as an individual is hard to fall into sleep at night or wakes up earlier in the morning.

In Macao, one of the main industries is hospitality. According to the data from Direcção dos Serviços de Estatística e Censos (2020), there are 116 hotels (including guesthouses) until 2018. According to the demand on manpower, 52,976 employees work in hotels, which is already 13.7% of Macao labor force (total labor force was 388,000 people in 2018) (DSEC, 2020).

According to the above, this study focuses on the employees working in hotels and examining if there is any interconnection among three dimensions of burnout (i.e., Emotional exhaustion, Cynicism and diminished professional efficacy) and sleeper groups i.e. good and bad (Buysse, Reynolds, Monk, Berman, & Kupfer, 1989). The results indicate there are significant differences in both emotional exhaustion and Cynicism comparing with good sleepers group and bad sleepers group. Yet, no significant result when comparing diminished professional efficacy with two groups.

## 2. Literature Review

### 2.1 *Burnout*

Burnout, which is a psychological indication, consists of Emotional exhaustion, Cynicism and diminished professional efficacy (Maslach and Jackson, 1986; Schaufeli, Leiter, Maslach, & Jackson, 1996). When it happens to an individual in a workplace, it leads to a negative influence on peers, superiors, organization and customers as well (Hakanen, Schaufeli, & Ahola, 2008). Furthermore, burnout is easier to occur in the workplace when the individual's position needs to have an interaction with other people, such as customers, clients, patients, students, etc. (Pines and Aronson 1988).

#### 2.1.1 *Emotional exhaustion*

Emotional exhaustion can be manifested as one of the dimensions of burnout (Maslach and Jackson, 1986). When emotional exhaustion happens in the workplace, it explains that the individual is suffering from both physical and psychological pressure. It would be due to the excess load on his/her work (Lee & Ashforth, 1990; Pines & Aronson, 1988). In addition, Maslach and Jackson (1981) found that the length of job is also an element to let emotional exhaustion occurred. It is easier for employees to get emotional exhaustion when they take that job position during the first two years.

#### 2.1.2 *Cynicism*

Organizational Cynicism is a cynical attitude. When someone establishes such attitude towards the organization, it leads to reduce the belief of the organization, to deprecate management, to disagree with the mission and vision of the organization as well (Cook and Medley, 1954; Dean et al., 1998). The level of cynicism is lessened when employees feel they are treated with respect and get the reasonable rewards from an organization (Byrne & Hochwarter, 2008; Chiaburu et al., 2013).

#### 2.1.3 *Diminished professional efficacy*

Bandura (1977) defines that professional efficacy is distinct from the actual outcome. Professional efficacy is more likely to focus on an individual's behavior towards the required circumstances. An individual should believe him/herself obtains the ability and capacity to finish the task requested (Cox, 1978; Lazarus and Folkman, 1984). As aforementioned, there are three dimensions of burnout (Maslach and Jackson, 1986); diminished professional efficacy is one of them.

### 2.2 *Burnout and sleeping quality*

Melamed et al. (1999) examine that when an individual is suffering burnout, there is a negative influence on his/her sleeping quality, such as an individual is hard to fall into sleep at night or wakes up earlier in the morning. In addition, some previous studies (Pagnin et al., 2014; Jansson-Frojmark and Lindblom, 2010) also proved the relationship between burnout and sleeping quality has an interconnected relationship. When an individual is suffering burnout, perhaps it makes sleeping quality even worse, and vice versa.

Therefore, three hypotheses are raised accordingly.

*H1: Employees working in the hotel industry who have low sleeping quality will have a higher level of Emotional exhaustion compare with those who have a better sleeping quality.*

*H2: Employees working in the hotel industry who have a low sleeping quality will have a higher level of Cynicism compare with those who have a better sleeping quality.*

*H3: Employees working in the hotel industry who have a low sleeping quality will have a higher level of Diminished professional efficacy compare with those who have a better sleeping quality.*

### 3. Methodology

#### 3.1 Measurement

The three dimensions of burnout (emotional exhaustion, diminished professional efficacy, and Cynicism) are examined in current study. Maslach Burnout Inventory (Maslach & Jackson, 1996) is used to measure the score on Emotional Exhaustion, Diminished Professional Efficacy, and Cynicism. Sleep quality is measured by the Pittsburgh Sleep Quality Index (PSQI) (Buysse, Reynolds, Monk, Berman, & Kupfer, 1989). The higher the score, the worse the sleeping quality.

#### 3.2 Survey Procedures

Electronic questionnaires were distributed to the employees working in the hotel industry. Convenience sampling is used as survey is sent out through researchers' personal networks and posted on the website. A total of 159 responses has been received.

### 4. Results

A correlation analysis is used to investigate the relationship between different constructs. Based on a survey of 159 employees, the correlation analysis results show Emotional Exhaustion (emotional\_exhaustion) and Cynicism (cynicism) are positively related to PSQI, but Diminished Professional Efficacy (low\_efficiency) does not have any significant correlation towards PSQI.

Table 1: Correlations

		emotional_exhaustion	cynicism	low_efficiency	PSQI_Total
emotional_exhaustion	Pearson Correlation	1	.739**	.085	.291**
	Sig. (2-tailed)		.000	.285	.000
	N	159	159	159	159
cynicism	Pearson Correlation	.739**	1	.281**	.420**
	Sig. (2-tailed)	.000		.000	.000
	N	159	159	159	159
low_efficiency	Pearson Correlation	.085	.281**	1	-.002

	Sig. (2-tailed)	.285	.000		.984
	N	159	159	159	159
PSQI_Total	Pearson Correlation	.291**	.420**	-.002	1
	Sig. (2-tailed)	.000	.000	.984	
	N	159	159	159	159

\*\* . Correlation is significant at the 0.01 level (2-tailed).

To further investigate how the level of sleeping quality affecting the score of emotional exhaustion, cynicism, diminished professional efficacy on hotel employees in Macao, the data is split into two groups based on the score on sleep quality according to literature. The first group contains respondents who have a score of greater than 5, which is labeled as bad sleeper (n=75). The second group contains respondents who have a score of less than or equal to 5 (n=84) and is labeled as good sleeper.

A MANOVA is used to investigate the score differences of emotional exhaustion, cynicism, diminished professional efficacy among different types of sleepers (i.e., good sleepers and bad sleepers). The Wilks' Lambda with .819, with F-value 11.429 and p-value <.00 indicate there are significant differences in scores of emotional exhaustion, cynicism, diminished professional efficacy among good sleepers and bad sleepers.

Table 2

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.945	882.318 <sup>b</sup>	3.000	155.000	.000
	Wilks' Lambda	.055	882.318 <sup>b</sup>	3.000	155.000	.000
	Hotelling's Trace	17.077	882.318 <sup>b</sup>	3.000	155.000	.000
	Roy's Largest Root	17.077	882.318 <sup>b</sup>	3.000	155.000	.000
sleepers	Pillai's Trace	.181	11.429 <sup>b</sup>	3.000	155.000	.000
	Wilks' Lambda	.819	11.429 <sup>b</sup>	3.000	155.000	.000
	Hotelling's Trace	.221	11.429 <sup>b</sup>	3.000	155.000	.000
	Roy's Largest Root	.221	11.429 <sup>b</sup>	3.000	155.000	.000

Further analysis shows that there is a significant difference in Emotional Exhaustion (emotional\_exhaustion) for different groups; good sleepers group has a mean of 3.59 compared with bad sleepers group (mean = 4.15).

Table 3

		Sum of Squares	df	Mean Square	F	Sig.
emotional_ exhaustion	Between Groups	12.011	1	12.011	8.921	.003
	Within Groups	211.386	157	1.346		
	Total	223.397	158			
cynicism	Between Groups	56.932	1	56.932	30.557	.000
	Within Groups	292.517	157	1.863		
	Total	349.449	158			
low_efficiency	Between Groups	.307	1	.307	.307	.581
	Within Groups	157.219	157	1.001		
	Total	157.526	158			

For Cynicism (cynicism), the score is lower for good sleepers (mean =2.76) compare with bad sleepers group (mean = 3.96). However, there is no significant difference in Diminished Professional Efficacy (low\_efficiency) among good sleepers (mean = 2.49) and bad sleepers (mean=2.58).

## 5. Discussion and Conclusion

Burnout gets the negative influence in a workplace, no matter on peers, superiors, organization and customers (Hakanen, Schaufeli, & Ahola, 2008). The results from current study prove that there are significant differences between two dimensions of burnout (i.e. emotional exhaustion and cynicism) with sleeper groups. This indicates when employees have good sleeping quality, the dimensions of burnout get a lower score. Then, in order to let employees obtain good sleeping quality and to reduce level of burnout, employers can think about improving the working environment and/or preparing a better working schedule for employees to let them have good sleep. It would benefit to both parties.

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## Hotel housekeepers' perceptions of their jobs

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### Abstract:

The purpose of this study is to obtain an understanding of hotel housekeepers' perceptions of their jobs. A thematic analysis was employed to analyze data. The top three things they liked about their jobs were *nothing*, *sense of achievement from cleaning rooms*, and *monetary rewards*; the top three things they disliked were *things that would increase difficulties in cleaning guest rooms*, *time pressure*, and *increasing workload*. The insight gleaned from this study can be used by hotel employers or managers to develop strategies to create a meaningful work environment for hotel housekeepers.

**Keywords:** Hotel housekeeper, Room attendant, Perceptions, Job satisfaction, Job dissatisfaction

### 1. Introduction

As one of the world's largest industries, the hospitality and tourism industry generates more than 10 percent of global Gross Domestic Product (GDP) (Ambardar & Rajeka, 2017). The industry continues growing very quickly, and competition in the market is fierce. According to an STR report, there are more than 16.9 million rooms around the world, and hotel housekeepers comprise a significant occupational segment (STR, 2019). The main responsibilities of hotel housekeepers include cleaning guest rooms, lobbies, lounges, and any other areas, and maintaining neatness and orderliness in a hotel (Eriksson & Li, 2009). More specific duties include making beds, changing bedsheets and towels, cleaning toilets, emptying trash, vacuuming floors, refilling bath amenities, and pushing heavy carts (Hsieh, Apostolopoulos, & Sonmez, 2013). Since guestrooms are the core feature of a hotel operation, hotels strongly rely on housekeepers to provide clean guestrooms and facilities to support sustainable profitable operations.

A full-time hotel housekeeper typically works one 8-hour shift per day, five days a week. On average, a hotel housekeeper cleans 12-16 rooms during an eight-hour shift, allowing less than 20 minutes to clean each room. Sometimes, they may encounter extremely dirty rooms that require deep cleaning, or guests who request a late checkout, which often delay their work process. Many times, they are rushed by the front desk to have rooms ready in order to check in guests. In order to meet the demands of a variety of situations, they are forced to assume awkward positions in order to get the job done quickly. As a result, hotel housekeepers have

the highest overall injury rate as well as the highest rate of musculoskeletal injuries among all hotel workers (Buchanan et al., 2010). The cleaning tasks they perform are repetitive and physically demanding. Additionally, hotel housekeepers are exposed to multiple workplace hazards (i.e. physical, chemical, biological, and psychosocial hazards) that may have a negative impact on their health and well-being.

Even though the work of a housekeeper is important in providing the core product (clean guest rooms) of a hotel operation, their pay is lowest among all hotel workers (Hsieh, Apostolopoulos, & Sonmez, 2013) and they are often perceived as silenced and invisible (Onsøyen, Mykletun, & Steiro, 2009). It is not surprising that the hotel housekeeping department is troubled with high employee turnover (Mest, 2017). Some of the hotel housekeepers stay in their jobs only for a short time period (Eriksson & Li, 2009). Studies have documented the negative consequences of high employee turnover rate, including low workplace morale, deteriorating product or service quality, reduction in marketing return on investment, and especially loss of revenue and profitability as the hotel has to spend money on hiring and training new employees (Markovich, 2018).

Previous studies have shown that a higher level of job satisfaction is associated with higher work productivity, higher morale, higher organization commitment, better customer satisfaction, better employee performance, less absence, and lower turnover rate (McShane & VonGlinow, 2000; Octaviannand, Pandjaitan, & Kuswanto, 2017). Hotel housekeepers are at the lowest level of the hotel's organizational hierarchy chart, which puts them in a disadvantaged position. They are considered an underserved and under-researched group (Buchanan et al, 2010; Lee & Krause, 2002). The purpose of this study is to respond to this paucity of research, and to obtain an understanding of hotel housekeepers' perceptions of their jobs in order to create a meaningful work environment that can retain hotel housekeepers and increase their job satisfaction.

## **2. Literature Review**

### *2.1 Job satisfaction*

The term "job satisfaction" first appeared in the 1920s (Dogan, Akyel, & Dogan, 2018). Scholars believed that how an individual feels about work and the meaning that work holds in his or her life is a critical component of his/her employment experience (Judge et al., 2017). Hoppock (1935) defined job satisfaction as a combination of psychological, physiological, and environmental circumstances that make someone feel truly satisfied with the job. Locke (1969) defined job satisfaction as "a pleasurable or potential emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (p.316), which is the most widely accepted and cited definition of job satisfaction. Luthans (1992) described job satisfaction as a condition when an employee thinks the working experience is cheerful, positive, and delightful. Spector (1997) defined this term as a combination of both positive and negative emotions regarding how people feel about their job. Based on these definitions, job satisfaction can be interpreted as a result of what employees like or dislike about their job.

Evidence of the positive impact that job satisfaction has on an organization further encourages studies exploring factors that contribute to job satisfaction and dissatisfaction. Kong et al. (2018) categorize hospitality and tourism job satisfaction predictors into four groups: (1) organizational (e.g. salary, work environment, leadership, management style, training, organizational support, career development, promotion, co-workers); (2) individual (e.g. person-organization fit, personal fulfillment, role clarity, self-efficacy); (3) social and family

(social atmosphere, customer incivility, work-family conflict, food and living quarters); and (4) psychological (e.g. emotion, stress and exhaustion, trust, personal feeling) factors.

The hospitality and tourism literature clearly documents that job satisfaction is positively associated with organizational commitment (Bai, Brewer, Sammons, & Swerdlow, 2006; Gunlu, Aksarayli, & Perçin, 2010), job performance (Hu, Woods, Chen, & Brandmeir, 2004; Øgaard, Marnburg, & Larsen, 2008), service quality (Choi & Joung, 2017; Choi & Kim, 2012), organizational citizenship (Nadiri & Tanova, 2010), life satisfaction (Zhao et al., 2011), and career satisfaction (Ko, 2012). Research also shows that job satisfaction is negatively associated with intention to quit (Thomas, Brown, & Thomas, 2017) and level of burnout (Lee & Ok, 2012).

## *2.2 Job satisfaction of hotel housekeepers*

A study of Latina hotel housekeepers in the U.S. reveals that more than half (54%) of housekeeping employees are satisfied with the job, while 23% of them think the job is okay, and 23% are dissatisfied with their jobs (Hsieh et al., 2016). This result is not consistent with a study of Danish hotel housekeepers (Eriksson & Li, 2009). Danish room attendants show a high level of job satisfaction due to higher wages and relatively short working hours compared to other countries. The researchers believed that a stable schedule and short working hours allow employees to have more time to spend with their families, thus increasing their job satisfaction (Eriksson & Li, 2009).

In addition to higher wages and shorter working hours, factors such as support from supervisors, flexible schedules, and friendly coworkers were found to have a positive impact on hotel housekeepers' job satisfaction (Hsieh et al., 2016). Coughlan, Moolman, and Haarhoff's (2014) study on hotel employees in South Africa proved that good supervision, a healthy organizational culture, and day-care services had a significant influence on hotel employees' job satisfaction.

Hsieh et al.'s study found that many housekeepers complained that they suffered from time pressure at work (2016). They had to give up their lunch break in order to finish their assigned rooms (Hsieh et al., 2016). Low wages, poor benefits, overtime work, heavy workload, hard work, unfair treatment by supervisors, little progression, problems with cleaning equipment, and unfulfilling work conditions are all negative factors affecting housekeepers' job satisfaction (Hsieh et al., 2016; Knox et al., 2015). Studies show that aged equipment, heavy cleaning carts, lack of supplies, shortage of tools, and harmful cleaning chemicals are all difficulties housekeepers face when performing their cleaning tasks (Hsieh et al., 2016; Knox et al., 2015).

## **3. Methodology**

In order to obtain a comprehensive understanding of hotel housekeepers' perceptions about their job, a qualitative approach was utilized for the research. Due to time and financial constraints, a convenience sample was chosen for the research. Open-ended surveys were conducted among 70 hotels in Taiwan through researchers' hotel contacts. Considering the lower educational background of hotel housekeepers and the limited free time they have at work, the survey was purposely kept simple and short. In addition to the demographic questions, the participating hotel housekeepers were asked to complete the following two sentences:

- I like my job because...

- I do not like my job because...

Data was analyzed by utilizing a thematic analysis. Maguire and Delahunt (2017) introduced that “the thematic analysis was the process of identifying patterns or themes within qualitative data” (p. 2). Steps involved in a thematic analysis include: familiarize oneself with the data, generate initial codes, search for themes, review themes, and define themes (Braun & Clarke, 2006).

*The first step* was to read the data repetitively to become familiar with it. The data was read several times until the basic body of data was in the researcher’s mind. Rough notes were also taken at this step to help deepen the impression. *The second step* was to code the data and organize it in a systematic way. Open coding was used during this step, which means the codes were developed during the coding process rather than pre-setting them (Maguire & Delahunt, 2017). Then, *the third step* was to search for themes. Preliminary themes were developed, and the codes were segmented to the themes at this step. The various factors in the work environment were identified when developing themes. Next, the preliminary themes were reviewed and modified to make sure they were clear and understandable (Maguire & Delahunt, 2017). *The fourth step* was to define themes, which means identifying the essence of each theme (Braun & Clarke, 2006). After defining themes, the frequency of each code was counted, and the percentage was calculated.

#### 4. Results

Of the 656 responses, 10 were excluded due to missing data, yielding 646 completed surveys for analysis. The majority of study participants were female (N=508, 79%) compared to male (N=138, 21%), with an average age of 31 (SD=10.68). Most of the respondents worked in a resort (50%), followed by a business hotel (48%), and bed-and-breakfast (2%). Overall, respondents were well educated, with 55% having a college degree and 32% having a high school diploma. More than half (57%) of the respondents reported monthly salaries ranging between NT 20,000-40,000 (US\$597-\$1,194), equivalent to or less than the national average monthly salary in Taiwan for workers aged 25-39 of NT 40,980 (US\$1,350) (National Statistics, 2019). On average, respondents reported working as hotel housekeepers for four years (SD=12.67). In the previous 12 months, 72% experienced either minor or severe work-related body pain. On average, respondents cleaned 15 rooms per shift, and 36% reported frequently having to shorten their lunch break in order to complete their assignments on time. When asked about working overtime, 45% indicated that they were occasionally required to work overtime, and 23% reported frequently working overtime.

##### 4.1 Things housekeepers liked about their jobs

The top six things that hotel housekeepers liked most about their jobs were *nothing, sense of achievement from cleaning rooms, monetary rewards, performing cleaning tasks, things that can reduce the difficulty in cleaning guest rooms, and get out of work on time or earlier*. It is worth noting that approximately 15% of respondents indicated that they liked nothing about the job. They may keep the housekeeping jobs for the purpose of making a living. These type of housekeepers may just do the minimum to keep their jobs. On the other hand, there were approximately 13 % of respondents indicated that they liked their jobs because of the sense of achievement from cleaning rooms. These type of housekeepers may enjoy performing cleaning tasks and take their jobs seriously. The cleaning activities that hotel housekeepers perform are monotonous and repetitive. However, some housekeepers were able to add variety and fun to their jobs by developing their social connections at the workplace. Many reported that they

liked their jobs due to positive interactions with guests, co-workers, and supervisors. It was obvious hotel housekeepers loved receiving rewards. In addition to monetary rewards, hotel housekeepers reported that they liked to receive gratitude or compliments from guests and their supervisors. They liked to work in a positive environment that embraces a culture of teamwork, where co-workers work together and help each other. In terms of the nature of the jobs, participants liked the freedom/autonomy they had to decide how to clean the guestrooms and being able to be exposed to an elegant hotel environment and broaden their view of the world by serving guests from different countries. They also liked the fact that the cleaning job was simple and easy and they did not need to worry about work after clocking out. They also enjoyed the free lunch and drink provided by the employee commissary. They also liked the flexibility they had in terms of scheduling and days off. Table 1 shows the details of the themes and sub-themes elucidated from the survey.

**Table 1**

*Things Hotel Housekeepers Liked about Their Jobs*

Like Themes	Like Sub-themes	Frequency	Percentage
Nothing	<ul style="list-style-type: none"> <li>• Liked nothing about the job</li> </ul>	114	14.9
Sense of achievement from cleaning rooms	<ul style="list-style-type: none"> <li>• Felt great by turning a dirty room to a clean room</li> <li>• Passing supervisor’s room inspection</li> <li>• Finish cleaning rooms efficiently</li> </ul>	97	12.7
Monetary rewards	<ul style="list-style-type: none"> <li>• Tips</li> <li>• Annual bonus</li> <li>• Reward system</li> <li>• Pay raise</li> <li>• Receiving gifts from guests</li> <li>• Payday</li> </ul>	64	8.4
Liked general and specific cleaning activities	<ul style="list-style-type: none"> <li>• Cleaning</li> <li>• Making beds</li> <li>• Cleaning bathroom</li> <li>• Dusting</li> <li>• Cleaning public area</li> <li>• Stocking the cleaning cart</li> <li>• Working in the linen room/folding pillowcases</li> <li>• Changing sheets</li> <li>• Collecting guestroom trash</li> <li>• Smell the scent of amenities</li> <li>• Performing routine housekeeping maintenance</li> <li>• Performing turn-down service</li> </ul>	64	8.4

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	<ul style="list-style-type: none"> <li>• Vacuuming</li> </ul>		
Guests	<ul style="list-style-type: none"> <li>• Interactions with guests</li> <li>• Providing service to guests</li> <li>• Smiles from guests</li> <li>• Solving guest problems</li> <li>• Eating guest leftovers (fruit in the rooms or food in the refrigerator)</li> <li>• Nice/friendly guests</li> <li>• Fun of observing guests from different countries</li> <li>• Observing happy/satisfied guests</li> <li>• Delivering requested items to guests</li> <li>• Returning guests/frequent guests</li> </ul>	60	7.9
Teamwork	<ul style="list-style-type: none"> <li>• Enjoyed working together as a team and helped each other</li> </ul>	59	7.7
Intrinsic rewards	<ul style="list-style-type: none"> <li>• Being well-treated and respected by employers</li> <li>• Receive gratitude or appreciation from guests or supervisors</li> <li>• Received compliments from guests</li> </ul>	57	7.5
Co-workers	<ul style="list-style-type: none"> <li>• Nice-friendly co-workers</li> <li>• Chatting with co-workers</li> <li>• Socializing with co-workers after work</li> <li>• Smiles from co-workers</li> </ul>	52	6.8
Reducing the level of difficulty in cleaning guest rooms	<ul style="list-style-type: none"> <li>• Not having messy rooms to clean</li> <li>• No special cleaning request from guests</li> <li>• There is nothing to fix in the guestrooms</li> </ul>	31	4.1
Get out of work on time/or earlier	<ul style="list-style-type: none"> <li>• Being able to finish cleaning rooms quickly</li> </ul>	29	3.8
Job characteristics (Nature of the job)	<ul style="list-style-type: none"> <li>• Job autonomy (self-pace work, perform cleaning tasks independently)</li> <li>• Regular work hours</li> <li>• The time passes quickly while cleaning</li> <li>• Simple, easy job/sense of job mastery</li> <li>• Allowing me to be creative</li> <li>• Exposed to an elegant hotel environment</li> <li>• Having a broader view of the world (by contacting guests from different countries)</li> <li>• Less guest contact (unlike Front Desk)</li> </ul>	28	3.7

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	<ul style="list-style-type: none"> <li>• Leaving my work behind when I am done with my shift (no need to worry about work after clocking out)</li> </ul>		
Reducing workload	<ul style="list-style-type: none"> <li>• Lower work load</li> <li>• Being assigned more stay-over rooms</li> <li>• Assistance from interns</li> <li>• Room assignment on the same floor</li> <li>• Low season-fewer rooms to clean</li> <li>• Have no room assignment (may be assigned to work in the laundry or linen room)</li> </ul>	17	2.2
Break time	<ul style="list-style-type: none"> <li>• Break time flexibility</li> <li>• Abilities to enjoy free time after finishing work assignment before clocking out</li> </ul>	17	2.2
Positive work environment	<ul style="list-style-type: none"> <li>• Enjoyed the positive work environment</li> </ul>	16	2.1
Supervisors	<ul style="list-style-type: none"> <li>• Nice/supportive supervisors</li> <li>• Frequently giving recognition and compliments to employees</li> <li>• Enjoy chatting with supervisors</li> <li>• Enjoy leaning things from supervisors</li> </ul>	13	1.7
Everything	<ul style="list-style-type: none"> <li>• Liked everything about the job</li> <li>• Was happy to be able to have a job</li> </ul>	11	1.4
Employee commissary	<ul style="list-style-type: none"> <li>• Free food and drink</li> <li>• Enjoyed lunch break</li> </ul>	10	1.3
Days off	<ul style="list-style-type: none"> <li>• Days they do not need to come to work</li> </ul>	8	1.0
Reducing Time Pressure	<ul style="list-style-type: none"> <li>• When guests check out earlier</li> <li>• Having sufficient time to clean guest rooms</li> </ul>	5	0.7
Scheduling	<ul style="list-style-type: none"> <li>• Flexible schedule</li> </ul>	4	0.5
Good employee benefits	<ul style="list-style-type: none"> <li>• Liked the employee benefits</li> </ul>	4	0.5
Enhancing health consequences	<ul style="list-style-type: none"> <li>• Opportunities to exercise</li> </ul>	2	0.3
Language	<ul style="list-style-type: none"> <li>• Opportunity to converse in other languages</li> </ul>	1	0.1

Training program	• Enjoyed participating in training program	1	0.1
Total		764	100

#### 4.2 Things housekeepers dislike about their jobs

With regard to things that they did not like about their jobs, the 10 most frequently mentioned things were *those things that would increase the level of difficulty in cleaning guest rooms, time pressure, increasing workload, job characteristics, performing cleaning activities, nothing, guests, co-workers, negative health consequences, and supervisors*. More than 23 % of respondents especially did not like things that would directly make the cleaning of guestrooms difficult or more challenging (for example, cleaning very messy rooms, party rooms, rooms with vomit, rooms with furniture out of place). Some did not like the inappropriate cleaning tools (e.g. broken vacuum cleaners, small cleaning cart) and amenity short stock, which may delay or slow down their cleaning tasks. They also did not like factors that may increase their workload, including full house, high season, being assigned too many checkout rooms, and short staff. They complained about the time pressure they experienced at the workplace and did not like the negative impact of cleaning jobs that were detrimental to their health. Some disliked the nature of the housekeeping jobs for its lack of variety (monotony), autonomy, and job security, being physically demanding, long work hours, low pay, and no promotion opportunity. Even though guests, co-workers, and supervisors were reported as factors that hotel housekeepers liked about their jobs, many expressed their frustrations with co-workers, supervisors, and high-maintenance guests. Some reported there was a lack of training, poor employee benefits, and poor-quality food provided in the employee commissary. Table 2 presents themes and sub-themes that hotel housekeepers disliked about their jobs.

**Table 2**

*Things That Hotel Housekeepers Disliked about Their Jobs*

Dislike Themes	Dislike Sub-themes	Frequency	Percentage
Increasing the level of difficulty in cleaning guest rooms	<ul style="list-style-type: none"> <li>• Very messy rooms</li> <li>• Cleaning rooms with group guests (used all beds)</li> <li>• Guests moving furniture around</li> <li>• Cleaning up vomit</li> <li>• Cleaning rooms with small children</li> <li>• Rooms with sand</li> <li>• Cleaning party rooms</li> <li>• Cleaning rooms with more than one bed</li> <li>• Fixing broken items in the guestrooms</li> <li>• Floor litter</li> <li>• Guestrooms poorly designed for cleaning</li> <li>• Travel far to reach the inventory room</li> <li>• Rooms are too spacious (a lot to clean)</li> </ul>	135	23.60

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Time Pressure	<ul style="list-style-type: none"> <li>• Late checkout/early check-in guests</li> <li>• Rush rooms</li> <li>• Not enough time to finish cleaning assigned guestrooms</li> <li>• Multi-floor cleaning assignment</li> <li>• No time left to maintain equipment or facilities</li> <li>• Unable to keep up with pace</li> <li>• No break time</li> </ul>	90	15.73
Increasing workload	<ul style="list-style-type: none"> <li>• Room assignment overload</li> <li>• Short staff</li> <li>• High housekeeper turnover rate</li> <li>• Full house</li> <li>• High season</li> <li>• Assignment of too many checkout rooms</li> <li>• Endless cleaning</li> <li>• Additional job assignment</li> </ul>	64	11.19
Job characteristics (Nature of the job)	<ul style="list-style-type: none"> <li>• Monotonous (boring/repetitive) job</li> <li>• Physically demanding</li> <li>• Lack of autonomy</li> <li>• Long work hours/work overtime/unable to get out of work on time</li> <li>• Low pay</li> <li>• Job insecurity (easily replaceable)</li> <li>• Lack of promotion opportunities</li> </ul>	55	9.62
Disliked general and specific cleaning activities	<ul style="list-style-type: none"> <li>• Cleaning in general</li> <li>• Cleaning bathrooms</li> <li>• Making beds</li> <li>• Moving furniture</li> <li>• Rotating mattresses</li> <li>• Performing housekeeping maintenance</li> <li>• Performing turn-down service</li> <li>• Cleaning public area</li> <li>• Stripping linen</li> <li>• Cleaning elevator</li> <li>• Dusting</li> <li>• Trash collection</li> </ul>	41	7.17
Nothing	<ul style="list-style-type: none"> <li>• They liked their jobs.</li> </ul>	36	6.29
Guests	<ul style="list-style-type: none"> <li>• High-maintenance guests</li> <li>• Indecent guests</li> </ul>	30	5.24

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	<ul style="list-style-type: none"> <li>• Guest complaints</li> <li>• Theft of room items</li> </ul>		
Co-workers	<ul style="list-style-type: none"> <li>• Lazy</li> <li>• Slow</li> <li>• Uncooperative</li> <li>• Irresponsible</li> <li>• Not a team player</li> <li>• Unfriendly</li> </ul>	25	4.37
Negative health consequences	<ul style="list-style-type: none"> <li>• Physical fatigue/body pain</li> <li>• Skin irritation</li> <li>• Respiratory disease due to fiber dust or the smell of cleaning chemicals</li> <li>• Work injuries/accidents</li> </ul>	24	4.20
Supervisors	<ul style="list-style-type: none"> <li>• Picky/demanding</li> <li>• Unappreciative</li> <li>• Do not listen</li> <li>• Hard to communicate with</li> <li>• Indecisive</li> <li>• Nagging</li> </ul>	14	2.45
Rooms with a smell	<ul style="list-style-type: none"> <li>• Stinky rooms</li> <li>• Smoke</li> <li>• Guests use drugs in the guestrooms</li> </ul>	12	2.10
Insufficient/inadequate cleaning tools	<ul style="list-style-type: none"> <li>• Insufficient cleaning tools (not enough gloves, mops)</li> <li>• Awkward clearing cart (hard to maneuver)</li> <li>• Broken vacuum cleaner</li> </ul>	10	1.75
Rush to finish lunch	<ul style="list-style-type: none"> <li>• Not enough time for lunch</li> <li>• Skip lunch</li> <li>• Rush to finish lunch</li> </ul>	7	1.22
Last-minute room change	<ul style="list-style-type: none"> <li>• Front Office changing guest room assignments</li> </ul>	7	1.22
Last-minute schedule change	<ul style="list-style-type: none"> <li>• Be called to work on days scheduled off</li> </ul>	5	0.87
Amenity short stock	<ul style="list-style-type: none"> <li>• Unable to restock the guestrooms</li> </ul>	4	0.70
Language barriers	<ul style="list-style-type: none"> <li>• Being unable to communicate with guests</li> </ul>	3	0.52

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Employee commissary	• Poor quality of food available to employees	3	0.52
Poor employee benefits	• Poor employee benefits	3	0.52
Everything	• They disliked everything about their jobs.	3	0.52
Lack of training	• Lack of opportunities to participate in training	1	0.17
Total		572	100

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### 5. Conclusion

This study explored hotel housekeepers' opinions regarding their jobs and elucidated important insights that can serve as a reference for managers to develop strategies to create a positive working environment, thereby motivating housekeepers, increasing their job satisfaction, and decreasing their job dissatisfaction and intention to quit. This study suggested that extrinsic rewards such as tips, gifts from guests, competitive pay, annual bonuses, reward systems for a job well done, employee benefits, and employee commissary were positively perceived by hotel housekeepers and can be utilized to motivate them. The same is true of intrinsic rewards such as sense of achievement, work freedom, gratitude and appreciation from guests, and recognition from supervisors. Managers should pay special attention to the list of things that housekeepers disliked about their jobs and seek solutions for improvement. For example, the majority of things that hotel housekeepers disliked pertained to dirtiness of the rooms and worries about being unable to complete cleaning guestrooms during their work shift. Managers need to be aware that cleaning hotel guestrooms is a physically demanding job with time pressure, which can wear down hotel housekeepers' health physically and psychologically in the long term. Therefore, instead of assigning tasks solely based on number of rooms (a quota), managers should try assigning hotel housekeepers a reasonable number of guestrooms per shift by considering the dirtiness of rooms, number of checkout rooms, number of stay-over rooms, and number of beds in a room. If possible, managers should try to assign guestrooms on the same floor for housekeepers to clean. To facilitate the completion of housekeepers' assignments, managers need to provide sufficient and appropriate cleaning tools, including purchasing ergonomic cleaning carts and lighter vacuum cleaners that are easy to maneuver. The housekeeping department should have a system to track the inventory of cleaning materials and guest amenities and to ensure these items are stocked for housekeepers to use. In addition, respondents did not like the additional cleaning assignments due to short staff. To cope with this problem, managers should pay special attention to manpower planning to avoid labor shortages. This can be done by collaborating with hospitality and tourism programs to recruit interns to assist housekeepers or working with outsourcing cleaning companies to cover labor shortages due to high employee turnover or high season. Most of all, managers should provide a positive working environment by incorporating extrinsic and intrinsic motivators to retain employees and reduce turnover rates.

In terms of the nature of cleaning jobs, some hotel housekeepers disliked the fact that housekeeping jobs were repetitive, monotonous, lacked variety, and had a low level of autonomy. It was interesting to see some housekeepers viewed these characteristics in a positive way. They actually enjoyed the monotony of the cleaning job because they felt it was easy and did not require critical thinking skills, which they were not good at. In terms of job autonomy, some liked the way they were able to determine how they wanted to clean rooms

and complete the job assignment. Some mentioned that they liked the fact that they were able to determine when to take a short break during the work shift as long as they were able to finish guestrooms as required. They remarked that they actually enjoyed the freedom they had in their jobs.

When asked about what they liked or disliked about their jobs, some mentioned “nothing” and some mentioned “everything.” These findings reinforce the importance of selecting the right employees who fit the housekeeping position. It is human nature that no one will enjoy a boring job. Even though the standardized operational procedures are widely adopted to control and monitor the operations of a hotel, managers should allow housekeepers the flexibility to make their own decisions without hindering the quality requirements. In order to increase the job variety and reduce job monotony and boredom, managers can rotate housekeepers to work in different areas of the housekeeping department such as cleaning public areas, performing maintenance, and working in the linen room or laundry room.

Housekeepers addressed their concerns regarding the negative health consequences resulting from their cleaning jobs, including physical fatigue/body pain, skin irritation, respiratory disease due to fiber dust and smell of the chemicals from cleaning products, accidents (trip, fall) and injuries (back, shoulder, ankle). In order to safeguard housekeepers’ occupational health, it is suggested that hotels offer mandatory work safety training to teach housekeepers how to perform cleaning jobs without hurting their bodies. Since those employees suffering body pains can recover given enough time, it is important that hotels enforce break time to allow physical recovery.

In addition to cleaning guestrooms, the social context where hotel housekeepers perform their jobs also impacted their perceptions of their jobs. The three major social contacts included guests, co-workers, and supervisors. Respondents reported that guests who were appreciative and friendly, supervisors who were supportive, appreciative, communicative, and helpful, as well as co-workers who were supportive and helpful, all added to their positive perceptions of their jobs. On the contrary, high-maintenance guests, supervisors who will not listen and communicate with housekeepers, and slow, irresponsible co-workers added to their negative perceptions of their jobs. They especially enjoyed the social time with their co-workers after work, indicating that positive people interactions can be a motivator to retain housekeepers.

Herzberg's motivation-hygiene theory proposed that there were job factors that are essential for creating motivation at the workplace but do not lead to job satisfaction. However, the absence of these hygiene factors will lead to job dissatisfaction (Herzberg, 1987). This study identified three themes that were not among housekeepers’ “like” list but were on the “dislike” list. These were *insufficient/inadequate cleaning tools*, *amenity short stock*, and *rushing through lunch*, which require attention from managers.

## **6. Limitations and Future Study**

Data was collected from a convenience sample consisting of housekeepers working in a variety of hotels in Taiwan. The findings may not be generalizable to housekeepers in other countries. Future studies can expand on the current study and collect data from different countries and compare it with this study to determine if there are differences regarding housekeepers’ perceptions of their jobs. Limited by the qualitative nature of the study and the scope of the study, this study focused on things that housekeepers liked and disliked about their jobs and was not able to empirically test which factors could satisfy or dissatisfy hotel housekeepers. Future studies can collect quantitative data to explore hotel housekeepers’ job satisfaction and dissatisfaction.

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## Have hospitality employees become more extrinsically motivated?

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### Abstract:

We used an employee's motivation scale to measure an employee's work performance. We include achievement, extrinsic, and intrinsic motivation and used a cross-sectional study (n=155) to test initial assumptions. We advance that achievement and extrinsic motivation are more relevant than intrinsic motivational factors in determining employee's perceptions of their work performance. We discuss practical implications of the use of this scale and suggest future research directions.

**Keywords:** intrinsic motivation, extrinsic motivation, achievement motivation, scale, measurement, perceived work performance, perceived work effort, and perceived work quality.

### 1. Introduction

Jobs in the hospitality industry have gradually become precarious, stretched between the ever-growing hospitality industry smart luxury demands, the tourism sector competitiveness, productivity, and service quality demands (Baum et al., 2016). This trend has significantly affected the hospitality industry, namely, in locations where (talented) labor is scarce, and, paradoxically, the number of hotel pre-openings increases exponentially like in China (Noordzy & Whitfield, 2016). Attracting, developing, retaining, and mobilizing talent is now a universal quest because successfully engaging employees is credited to enhance their level of trust, motivation, encourage training, skills development, and reduce turnover (ILO, 2013).

For some, employee compensation and the underlying motivational mechanisms remain a core discussion amongst practitioners, and interestingly, scholars seem to have overlooked employee compensation, notwithstanding its influence on employee attraction, employee performance, retention, and organization effectiveness (Gerhart & Fang, 2015a). Others argue that the advent of influential theories like Maslow's needs hierarchy, Herzberg motivation-hygiene theory and, the cognitive evaluation theory (CET) "demonized" pay, connected it to extrinsic motivation, and labeled it as damaging to employees' motivation (Rynes et al., 2005).

This study contrasts with the current trend elevating the importance of achievement motivation and extrinsic motivation. We look at a shift in the underlying motivational factors that support employees' perceptions of their work. We posit that extrinsic and achievement motivational factors are more relevant than intrinsic factors on employee's perception of their work performance. We aim at understanding the correlation between intrinsic, achievement, and extrinsic motivation factors towards employee's perception of their performance at work (work quality and work effort) using a modified I,A,E scale developed by Locke and Schatke (2018).

This study adds to the extensive literature published in the last 40-years focused on the dichotomy between intrinsic and extrinsic motivation to explain performance at work (Cerasoli et al., 2014b). We capitalize on the conceptualization proposed by Locke (1968) and his lifetime work for the past fifty years (Locke & Latham, 2019a). We substantiate our approach based on the latest research on motivation (Locke & Schattke, 2018a), pay-for-performance (Gerhart & Fang, 2015b), the evolution of performance management systems (Pulakos et al.,

2019), and finally, taking into account the work of practitioners on performance ratings (Adler et al., 2016).

We add to the existing body of literature on the theory of motivation. We trust that content and process motivational theories together explain better employees' motivation than they do in isolation. Therefore, we measure achievement motivation (McClelland, 1988), extrinsic, and intrinsic motivation within the goal-setting theory (Locke & Latham, 2019b; Locke & Schattke, 2018b).

The research question we would like to answer is if achievement motivation, in the context of extrinsic and intrinsic motivational factors, contributes significantly to developing employees' awareness of their performance at work. The independent variables of our study are intrinsic motivation, achievement motivation, and extrinsic motivation. The dependent variable of this study is perceived work performance: here is defined as a combination of the individual "perceived work quality" and "perceived work effort".

This study has material implications for practitioners. Suppose extrinsic and achievement motivation is more important than intrinsic motivation. If this is the case, hospitality brands may consider designing employee compensation policies accordingly and articulate achievement motivation and extrinsic motivational factors while understanding intrinsic factors. In turn, this will help to better engage employees in performing and aligning their perception with the organization's expectations.

The rationale provided paves the way for a mutually beneficial agenda: first, for the employee, setting the expectations right, and, second, for the organization who may design a system that creates coherence with organization adaptive goals and expectations.

## 2. Literature Review

The etiology of the word "motivation" derives from the Latin word "*movere*", and according to different authors, its' definition varies, yet there are three common denominators. They usually define it as the set of factors or events that energize, channel, and sustain human behavior over time (Steers et al., 2004). Motives are "primary" (biogenic) or "secondary" (sociogenic). The former caters to hunger, thirst, escape from pain, sex, etc. The later encompasses "psychological" (security, freedom, adventure), "social" (social approval, social affiliation, gregariousness, acquisition), and "personal" (competency, self-concept, values, achievement).

The understanding and study of motivation seduce academia and practitioners across different areas of knowledge with significant implications to management and the working environment given its impact on employee's performance (Elliot, 2018; Gagné et al., 2010; Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2010).

References to motivation in the tourism literature are focused on destination choice (Chung, Koo, & Kim, 2014; Hwang, Park, & Woo, 2018), entrepreneurship in the hospitality industry (Wang, Hung, & Huang, 2019), green tourism (Cheng, Chiang, Yuan, & Huang, 2018), wine consumption (Taylor, Bing, Reynolds, Davison, & Ruetzler, 2018), the paper review process (Correia & Kozak, 2017), tourist's adoption of smart technologies (Kim, Kim, Kim, & Kim, 2016; Li, 2017) and sports tourism participation and club association (Aicher & Brenner, 2015).

A classification of all motivation theories divides them into three main groups: environmentally based theories, content, and process motivation theories. Environmentally based theories focus on factors that sustain a behavior over time, while content theories focus on what and process

theories focus on how one may motivate human behavior (Bowditch et al., 2007; Rhee, 2019). Content theories, a.k.a. "needs theories," were embraced by practitioners with consequential embeddedness into company policies and management practice. Authors of these theories assume that we motivate the employee by attending to their "needs". By contrast, process theories authors explain how motivation occurs and the factors that may influence motivation.

In the following paragraphs, we advance a brief explanation of the theories and definitions that sustain our research's theoretical foundation.

The goal-setting theory introduced by Locke in 1968 remains one of the most influential and practical approaches to motivation (Latham & Locke, 2006; Locke & Latham, 2019b) and, more recently, supported by neuroscience (Berkman, 2018). Locke assumed that behavior is a consequence of conscious goals and intentions (Locke, 1968). He also posits that these goals' adequacy is determinant for the manager to influence subordinates' behavior. He advanced two specific goal characteristics: goal difficulty and goal specificity, credited to shape performance. Goal difficulty refers to the number of resources and effort that make it challenging to attain. Likewise, goal specificity refers to the clarity and precision of a goal. The author expanded these two constructs to include goal acceptance, the extent to which a person accepts a goal as his/her own, and goal commitment, the degree to which a person is personally interested in reaching a goal (Locke & Latham, 2019b).

Below we clarify our understanding of these three types of motivation: intrinsic, achievement, and extrinsic motivation. Intrinsic motivation is defined in this research as liking or wanting an activity for its own sake. It entails enjoyment and finding pleasure in the experience (Deci et al., 2017; Gerhart & Fang, 2015a). In this study, achievement motivation refers to the accomplishment or achievement of goals towards a norm. Intrinsic motivation refers to the liking or wanting an activity for its own sake (Steers et al., 2004). Extrinsic motivation is defined as involving means-end relationships, which is doing something to get some future value (or avoid some future disvalue) (Locke & Schattke, 2018b).

While the proliferation of motivation studies delves through identifying which one is more important for employee's performance, this study assumes the importance of all three. We believe that, in the context of work, the three independent constructs interact interchangeably, that is, between intrinsic, achievement, extrinsic, and may be measured first at an employee's perception of her/his performance. What we suggest is that employee's perception of their performance is better explained using these three types of motivation: loving what you do (intrinsic), doing it well comparing to a standard (achievement), and being rewarded for the efforts and choices taken through time (extrinsic) (Locke & Schattke, 2018). Therefore, we posit:

*H<sub>0</sub>: Intrinsic motivation has no influence on work performance*

*(H<sub>1</sub>: Intrinsic motivation has a significant influence on work performance)*

*H<sub>0</sub>: Extrinsic motivation has no influence on work performance*

*(H<sub>1</sub>: Extrinsic motivation has a significant influence on work performance)*

*H<sub>0</sub>: Achievement motivation has no influence on work performance*

*(H<sub>1</sub>: Achievement motivation has a significant influence on work performance)*

Moreover, this study aims to support the existence of the interaction mentioned above towards other factors that explain the hospitality worker's behaviors, like their perception of their work performance. Lastly, we aim to understand if there is a relation between these three motivation types while verifying when achievement and extrinsic motivation are significant and intrinsic motivation may not.

From a practitioner's hindsight, there is an urgent need to revise the dated goal-setting methods pervasive in corporations hence revisiting how companies decide upon goals and how they use them to generate participative success (Colquitt, 2017; Locke & Latham, 2019b). We also witness a shift to technology solutions, from accountability to learning (Cappelli & Tavis, 2016) and individual assessment to group assessment (Colquitt, 2017). Likewise, frequent conversations around achievement are seen to prevent employee performance, and career progression expectations seldom realistic (Ngan & Vong, 2018). Thus, we hereby propose the study of achievement motivation in the context of the extrinsic and intrinsic motivation given it sets a new course to understand better and fine-tune goals that sustain a value-based proposition in an organization context (Kotler et al., 2011).

### 3. Methodology

This study collected questionnaire responses through an on-line platform, and a convenience sample was obtained by crawling and filtering hospitality professionals working at Macao SAR using LinkedIn (n=155). We conducted a pilot study of 30 questionnaires a week before and modified the scale wording and sequence. The questionnaire's heading identified the study's objective, highlighting anonymity, confidentiality, and approximate time to answer all questions. Questions were in both English and Chinese with different links to each questionnaire in each respective language. We used a back-translation method to ensure the Chinese wording represented as near as possible the meaning of the English version (Cha et al., 2007; Forsyth et al., 2007).

The questionnaire had two parts. The first part asked questions related to intrinsic, achievement, extrinsic motivation, and work performance. The second part asked questions about respondents' demographics like gender, age, tenure, job role, job type, education, and civil status.

All independent variables were measured on a 7-point scale rating from 1 (totally disagree) to 7 (totally agree). We use various scale items selected and adapted from Schattke-Locke I,A,E Motivation Scales (unpublished work, personal communication). Sample items for intrinsic motivation are for example: 'my work tasks involve doing things I even enjoy doing off the job'; extrinsic motivation: 'On my job, I get credit for what I achieve' and achievement motivation: 'I am able to excel in my work tasks'. The Cronbach alpha is not reported for these scales.

All dependent variables were measured on a 7-point scale rating from 1 (totally disagree) to 7 (totally agree). We measured work performance with five scale items selected and adapted from May, Korczynski, and Frenkel (2002) and Dysvik and Kuvaas (2011). The work performance component included items like 'I often expend extra effort in carrying out my job' (Cronbach's  $\alpha = .89$ ).

We collected 172 responses in total, of which only 155 were validated based on three criteria: questionnaire completeness. The majority of the respondents were male (58.7%), with tertiary education (72.9%), married (60%), in a managerial role (59.3%), aged between 45-49 (20%), and most of them working for more than ten years (83.9%) see also Table 1.

Table 2 shows the means and standard deviation of the employee's level of agreement or disagreement towards the various motivation and work performance constructs. The following paragraphs describe the procedure used to build the model. We used SPSS and Amos to do so.

This study sought to establish the extent of the effect of intrinsic motivation, achievement motivation, and extrinsic motivation on work performance - is statistically significant or not. This section will provide a detailed analysis from the validation of the constructs to the structural equation modeling.

The model had four constructs, and each construct had several items; hence EFA was conducted to explore and uncover the underlying structure among the set of items (observed variables, questions in the survey) for each of the constructs. We used the Kaiser-Meyer-Olkin (KMO) test of sampling adequacy as well as Bartlett's test for sphericity to compute it. (J. F. Hair et al., 2011) furthermore, recommend that the optimal KMO statistic should be greater than 0.5, while Bartlett's test must be significant at  $p < 0.05$ .

These assumptions were tested for each of the four constructs, and the results are presented in Table 3. The KMO statistic for IM was  $0.930 > 0.50$ , while that for AM was  $0.931 > 0.5$ , and  $0.894 > 0.5$  for EM and for WP, this was  $0.796 > 0.5$ . With respect to the Bartlett's test, for IM,  $\chi^2(36) = 1318.296$ ,  $p = 0.000 < 0.05$  and for AM,  $\chi^2(36) = 1193.416$ ,  $p = 0.000 < 0.05$ , while for EM,  $\chi^2(153) = 2726.853$ ,  $p = 0.000 < 0.05$ , and lastly, for WP,  $\chi^2(3610) = 453.966$ ,  $p = 0.000 < 0.05$ . As explained above, the outcomes for KMO were greater than 0.5, and both outcomes for the Bartlett p-values were less than 0.05, thereby confirming the validity of factor analysis (Kline, 2011).

We considered the Principal Component Analysis (PCA) as the extraction method. This decision assumes that it is more robust than other extraction methods such as image factoring, alpha factoring, principal axis factoring, unweighted, or generalized least squares. To further improve the extraction robustness, the rotation was applied. Because the motivation sub-constructs were expected to be uncorrelated or negligibly correlated, the orthogonal varimax rotation method was chosen instead of the promax, equamax, quartimax, and the direct oblimin rotation methods (J. Hair et al., 2016).

Upon running the PCA, the first criterion of cleaning up the outcome was the consideration of the commonalities. These commonalities help determine the degree of correlation between an item and the aggregated items, and they show the common variance explained. Under optimal conditions, the common variance explained ought to be greater than 0.4 (Field, 2013). The key findings are presented below in Table 4.

For intrinsic motivation, the least commonality was 0.476, and for achievement motivation, this the least was 0.532, and 0.725 was the least observed for extrinsic motivation while for work performance, this was 0.595. Because none of the commonalities were less than 0.40, none of the items were dropped across all the four constructs.

For each of the four PCAs conducted, the Guttman-Kaiser criterion was used to establish the number of optimal components, and according to this criterion, only those with eigenvalues greater than 1.0 are selected. The key outcomes for the component extraction across the four constructs are presented in Table 5. For intrinsic motivation, only one component had an eigenvalue greater than 1.0 (eigenvalue = 6.277), and the total variance explained was 69.749%. For achievement motivation, only one component was again extracted (eigenvalue = 6.114), and the total variance explained was 67.936%. For work performance, one component was extracted (eigenvalue = 3.338), and the total variance explained was 66.761%. For the three constructs, the fact that only one component was extracted meant that the items were

homogeneous and unidimensional, in contrast to extrinsic motivation, which was multidimensional.

For extrinsic motivation, five components with eigenvalues greater than 1.0 were extracted. The eigenvalue for the first component was 8.430, 2.992 for the second, 1.358 for the third, 1.218 for the fourth, and 1.099 for the fifth. The cumulative total variance explained by the five components was 83.874%. For all the constructs, the cumulative total variance explained was greater than the prescribed minimum of 50.0%. The findings do confirm that the extracted components were valid (J. F. Hair et al., 2011).

The rotated component matrix was extracted, and considering the optimal threshold for item inclusion in each of the components was 0.5 and 0.4 would be tolerable for exploratory studies, while for confirmatory studies, 0.7 would be ideal. Since intrinsic motivation, achievement motivation, and work performance had one component, no rotation was done. However, the rotation was done for extrinsic motivation, and the rotated component matrix is presented in Table 6.

From the outcome in Table 6, five components were extracted. Using the inclusion criteria defined earlier, factor loadings greater than 0.50, the first, second, and third components comprised four items each while the fourth and fifth components comprised three items. Overall, none of the items was dropped as all the items had factor loadings greater than 0.50.

The last stage for EFA was the attribution stage, which entailed the assignment of names to the extracted components. For intrinsic motivation, achievement motivation, and work performance, only one component had been extracted, and therefore, the constructs did not have any sub-dimensions, and in this respect, they retained their names (Hair et al., 2011). However, for extrinsic motivation, there were new dimensions that were extracted, and these will be outlined below.

#### Component 1: Rewards

The first component for extrinsic motivation comprised of:

- *My job allows me to meet expenses.*
- *My job allows me to support my family.*
- *My job gives me financial security.*
- *My job allows me to improve my standard of living.*

Broadly, meeting expenses, supporting the family, financial security, and improving the standard of living all related to remuneration issues, and in this respect, the best name for the dimension was "reward".

#### Component 2: Recognition

The following items constituted the second item:

- *I get praise when I do good work.*
- *On my job, I get credit for what I achieve.*
- *On my job, I get recognition for task success.*
- *On my job, others make me feel visible for what I accomplish.*

Getting praise, getting credit, getting recognition, and being made to feel visible, all related to the issue of recognition, and thus the ideal naming for this dimension was named recognition.

### Component 3: Career Development

For component 3, the respective items were:

- *My job enhances my employment prospects elsewhere.*
- *My job helps me to develop marketable skills.*
- *Having this job makes me get ahead in my career.*
- *What I learn on my job increases my chances of getting promoted.*

Enhancement of career prospects, development of marketability skills, getting ahead in a career, as well as increasing promotion prospects are all related to the development of one's career. In this respect, the dimension was labeled career development.

### Component 4: Well-Being

The fourth component comprised of the following items:

- *My job enhances my daily mood.*
- *My job enhances my psychological well-being.*
- *My job enhances my physical well-being.*

From the foregoing, enhancing the daily mood, enhancing the psychological well-being, and enhancing the physical well-being could best be summarized as referring to one's daily well-being. In this regard, the dimension was labeled welfare.

### Component 5: Social Support

The last component comprised of the following:

- *My job gives me the chance to meet people with whom I can become personal friends.*
- *My job gives me chances to socialize with people whom I like*
- *My job allows me to reach goals in many life domains.*

Affording the chance to meet people and allowing the chance to socialize broadly refers to the ease of socialization that the job offers. The third item relating to the allowance for one to reach one's goals was nevertheless offset from the two socialization items. However, the fact that the first two socialization items had very high factor loadings, 0.902 and 0.896 respectively, vis-à-vis the 0.536 for the third item, meant that the first two items were the major constituents of the fifth component. In this respect, the fifth component was labeled social support.

We validated the research constructs prior to structural equation modeling, conducting both the reliability and validity testing of the extracted dimensions. For reliability testing, we considered the Cronbach's alpha, while for the construct validity, the researcher considered the use of the Confirmatory Factor Analysis (CFA) (Tabachnick & Fidell, 2006).

For reliability testing, the Cronbach's alpha was computed to help evaluate the reliability of the constructs, and the outcome from the study is presented in Table 6.

According to Field (2016), the general standard threshold for the assessment of reliability in 0.7; however, alpha loadings as low as 0.6 are still considered to be reliable, while those above 0.7 are considered to be the most desirable. From the above results, the least observed alpha statistic was 0.860 for the dimension social support, and this was a very high statistic, being greater than 0.70, and the second least was work performance, whose alpha statistic was 0.873. The rest of the other dimensions were all greater than 0.9, with the highest being 0.942 for the dimension rewards confirming all the extracted dimensions to be statistically reliable.

To test for construct validity, we computed confirmatory factor analysis (CFA), and two key tests were done: these include convergent validity and discriminant validity. The respective CFA measurement model diagram is presented in Figure 2. For the assessment of the convergent validity, we use as a reference a minimum path coefficient of 0.6 for the unstandardized, and 0.4 for the standardized. The convergent validity results are presented in Table 8 (J. F. Hair, 2010). From the results, neither of the standardized path coefficients was below 0.40, with the minimum observed being 0.635. In this respect, the convergent validity was not violated. With respect to discriminant validity, we considered a maximum standardized covariance of 0.85 between any two constructs. The discriminant validity results are presented in Table 9. From the results, the maximum covariance observed was 0.806, and this was between achievement motivation and intrinsic motivation, while the second was 0.769 between intrinsic motivation and performance. Because these were less than 0.85, this meant that discriminant validity was not violated; hence we considered all the dimensions to be independent.

#### 4. Results

Having validated the research constructs and items, we perform structural equation modeling. The main hypotheses that the research was testing were:

*H<sub>0</sub>: Intrinsic motivation has no influence on work performance*

*H<sub>1</sub>: Intrinsic motivation has a significant influence on work performance*

*H<sub>0</sub>: Achievement motivation has no influence on work performance*

*H<sub>2</sub>: Achievement motivation has a significant influence on work performance*

*H<sub>0</sub>: Extrinsic motivation has no influence on work performance*

*H<sub>1</sub>: Extrinsic motivation has a significant influence on work performance*

By adjusting the model using modification indices, covariates between items were observed, and the model was adjusted to indicate these covariates as a way to improve the model fitness (Hair *et al.*, 2010). The final structural equation model tested is presented in Figure 3. The respective path coefficients from the above SEM model are presented in Table 10.

The highest standardized coefficient was observed with extrinsic motivation, being 0.429 (S.E. = 0.151). The corresponding critical ratio was 2.758 > 1.96, and the p-value was 0.006 < 0.05. With the p-value being less than 0.05, the null hypothesis is therefore rejected, and we may

confirm that there was a statistically significant relationship between extrinsic motivation and work performance.

*H<sub>0</sub>: Extrinsic motivation has no influence on work performance*

*H<sub>1</sub>: Extrinsic motivation has a significant influence on work performance*

**NULL REJECTED**

On the other hand, the second-highest standardized path coefficient was observed for achievement motivation, and this was 0.346 (S.E. = 0.132). The critical ratio was 2.062 > 1.96, and the p-value was 0.039 < 0.05. Again, because the p-value was less than 0.05, the null hypothesis was therefore rejected, and the researcher confirmed that there was a statistically significant relationship between achievement motivation and work performance.

*H<sub>0</sub>: Achievement motivation has no influence on work performance*

*H<sub>2</sub>: Achievement motivation has a significant influence on work performance*

**NULL REJECTED**

The least standardized path coefficient was observed with intrinsic motivation (0.035), and the corresponding standard error was 0.102. The critical ratio was 0.346 and is less than 1.96; this meant that the relationship was not statistically significant. This is further confirmed by the very poor p-value of 0.729 > 0.05. In this regard, we fail to reject the null hypothesis, and this meant that work performance was not dependent on intrinsic motivation.

*H<sub>0</sub>: Intrinsic motivation has no influence on work performance*

*H<sub>1</sub>: Intrinsic motivation has a significant influence on work performance*

**NULL NOT REJECTED**

Overall, the squared multiple correlation (r-square statistic) was 0.601 (Table 10.). It followed from this finding that the three independent variables explained 60.1% of the variation in work performance.

To validate the structural equation model results, Hair *et al.* (2011) recommend the use of goodness-of-fit (GoF) tests. There are four main categories of these GoF tests, and they include absolute fit indices, relative fit indices, parsimonious fit indices, and non-centrality-based indices. For the *absolute fit indices*, the CMIN/DF was used, and the CMIN/DF threshold considered was 3.0. On the other hand, for the *relative fit indices*, Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), Incremental Fit Index (IFI), and Normed Fit Index (NFI) were used, and the threshold considered was 0.90. With respect to the *parsimonious fit indices*, the Parsimony Normed Fit Index (PNFI) and Parsimony Comparative Fit Index (PCFI) were considered with the minimum threshold considered being 0.50. Lastly, for the non-centrality-based indices, Root Mean Square Error of Approximation (RMSEA) was tested, and the threshold considered was 0.08. The results are presented below.

With respect to CMIN/DF, this was 1.703 < 3.0, and this favorable statistic, which was less than the 3.0 threshold, validated the structural equation model at an absolute fit level. At relative fit level, IFI=0.918 > 0.9; TLI=0.910 > 0.9; CFI=0.917 > 0.9 and because these statistics were favorable, the model validity was confirmed. With respect to the parsimony level, which penalizes the model for its complexity, PNFI=0.755 > 0.5 and PCFI=0.843 > 0.5.

In both instances, the computed statistics were greater than 0.5, and this meant that the parsimony validity was not violated. Lastly, considering the non-centrality level, the RMSEA was computed to be  $0.065 < 0.08$ , and this again was within the tolerable thresholds. For the four levels tested above, the validity statistics fell within the tolerable range. In this regard, the researcher confirms that the SEM model was valid.

## 5. Discussion and Conclusion

### 5.1 Discussion and implications

This research aimed to address motivation and perceived work performance (dependent variable) exploring three types of motivation extrinsic, intrinsic, and achievement motivation (independent variables). The study's findings support that achievement motivation emerged independently from both intrinsic and extrinsic motivation, and it accounts to explain more of the variance of this sample than extrinsic and intrinsic do.

Intrinsic factors seem not to be significantly correlated with employee's perception of their work performance. This seems to contradict previous studies that have addressed motivation under a different epistemology taking into account only intrinsic and extrinsic motivation (Cerasoli et al., 2014a). Therefore we believe that the context on which the study was conducted (pilot) and the fact that we were focused on hospitality professionals may pave the way to develop a more deep understanding hence designing new research methods considering both content and process theories of motivation.

Under extrinsic motivation, we unveil five sub-dimensions: Rewards, Recognition, Career Development, Well-Being, and Social Support. These dimensions support conceptual work previously conducted, placing extrinsic motivation within the recognition at individual and collective levels (Locke & Schattke, 2018a). We also contend that there is nothing wrong with using extrinsic factors as motivators as long as the workplace context purports to it and in tandem with the measurement of both achievement and intrinsic factors.

Finally, achievement motivation found its' place among the dichotomy once overruled by intrinsic and extrinsic motivation: loving what you do (intrinsic), doing it well comparing to a standard (achievement) and being rewarded for the efforts and choices taken through time (extrinsic) (Locke & Schattke, 2018).

### 5.2 Conclusion

#### 5.2.1 Intrinsic motivation does not have a direct effect on perceived work performance

Intrinsic motivation is defined as liking or wanting an activity for its own sake. It entails enjoyment and finding pleasure in the experience. (Locke & Schattke, 2018b). Interestingly, findings in this study somehow add to the existing literature considering that the perception of work performance is said to be moderated by intrinsic motivation (Dysvik & Kuvaas, 2011). (Kuvaas, 2006) using a cross-sectional study with a large sample ( $n=1508$ ), when examining intrinsic motivation as a moderator of the relationship between performance appraisal satisfaction and employee outcomes, these authors identified that the relationship between performance appraisal satisfaction and work performance was a relatively weak ( $\beta = .09$ ,  $p < .05$ ). This may explain why we did not find such an influence between work performance and intrinsic motivation in this study.

### *5.2.2 Extrinsic motivation has a direct effect on perceived work performance*

Extrinsic motivation is defined as doing something to get some future value. It is outcome-based and focused on attaining valued outcomes and related to satisfaction with the outcome (Gerhart & Fang, 2015a).

We identify a positive correlation between extrinsic motivation and perceived work performance. According to the literature, extrinsic motivation shows confusing results (Kuvaas, 2006). Zhang, Zhang, and Li (2018), using the goal content theory, identified that extrinsic goals positively predicted task performance, adaptive performance, and intrinsic goals. These were found to enhance the relationship between extrinsic goals and task performance. In the current study, we identify a positive relationship between extrinsic and intrinsic motivation and confirm that extrinsic motivation is more important for employee's perception of their performance at work than intrinsic motivation.

### *5.2.3 Achievement motivation has a direct effect on perceived work performance*

Achievement motivation is defined as a recurrent concern for a standard of excellence. The core aspect is about achievement and includes meeting a standard, improving building a skill wherein the drive is the improvement, the challenge (McClelland, 1985).

In this study, we identify that achievement motivation had a positive effect on work performance, and therefore we had this to the scarce literature on this matter. We believe that an explanation of this is the lack of experimental work aside from sports and education. In this research context, the only supporting literature we found is related to the positive relation between achievement striving and in-role performance in a study about emotional exhaustion (Halbesleben & Bowler, 2007).

The study of extrinsic motivation is connected to the design of effective incentive systems in organizations (Tremblay et al., 2010) and, inadvertently, money (Deci et al., 2017; Locke & Schattke, 2018b). Studies now reflect the fact that under specific contexts, it seems money relates to happiness (Biswas-Diener, 2008). We found that there is a relation between extrinsic and intrinsic motivation confirming recent studies that connect it to creativity and innovation when they have a positive effect on the outcome (Fischer, Malycha, & Schafmann, 2019).

In this study, we note that extrinsic motivation has a higher suggested relation to intrinsic motivation than it has for achievement motivation. In other words, the reward for doing an activity is more related to the pleasure of doing that activity than to achieve a result from that work. There is a lack of literature to support this hypothesis, but from a practitioner's point of view, rewards systems should pertain from business goals clarity. Therefore, achievements should pertain to the agreed rewards, and the measurement of these three types will help managers and organizations to understand what and how employees are motivated in an expedited way.

### *5.3. Limitations of this study and suggestions for future study*

Most of the pilot study's limitations are related to the sampling methodology, and the fact that the instrument used to measure motivation is still under development. Therefore, we cannot generalize the results. We contend that the replication of this study to other business areas within the hospitality industry and related sectors of the economy is advantageous. Doing so may shed light on the applicability of this IAE scale to the context of many other business

operations allowing organizations to adapt and fine-tune new forms of motivating employees within the new context of work after COVID-19.

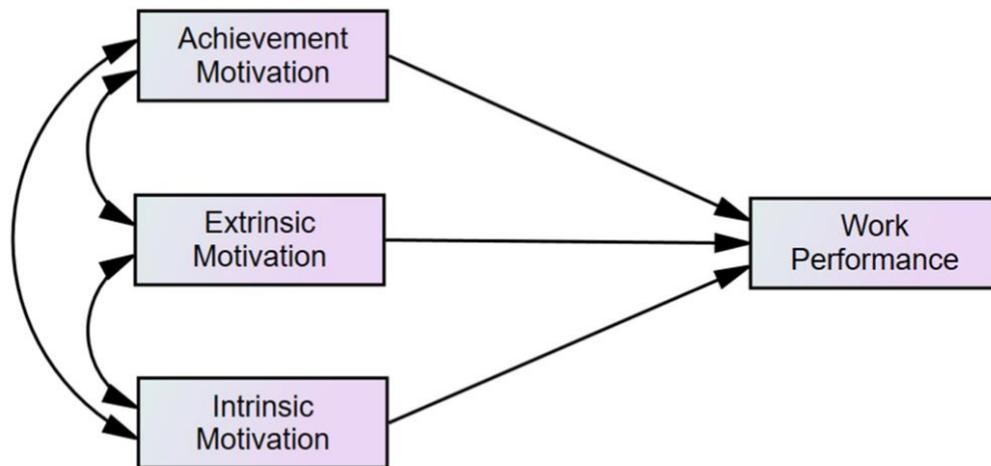
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### Appendixes



**Figure 1: Model on the perception of work performance and the three types of motivation.**

**Table 1 : Description of questionnaire respondents (n=155)**

	N	%		N	%
<b>Gender</b>			<b>Job nature</b>		
Male	91	58.7	Administrative	75	48
Female	64	41.3	Operational	80	52
<b>Civil status</b>			<b>Position</b>		
Married	93	60	Managerial	92	59.4
Single	41	26.5	Non-managerial	63	40.6
Divorced	21	13.5			
			<b>Tenure (years)</b>		
<b>Age</b>			<1	3	1.9
18-24	3	1.9	1-5	6	3.9
25-34	22	14.2	5-10	16	10.3
35-44	52	33.5	10 and above	130	83.9
45-54	50	32.3			
55-64	22	14.2			
65 and above	6	3.9			
<b>Education</b>					
Primary	15	9.7			
Secondary	27	17.4			
Tertiary	113	72.9			

**Table 2: Means and Standard Deviations of the level of agreement or disagreement (n=155)**

	<b>Mean</b>	<b>Std.</b>
<b>Intrinsic Motivation (IM)</b>		
My job allows me to work on things that I love doing.	5.15	1.41
I like the kind of work I do on my job.	4.86	1.69
I enjoy the tasks I work on in my job.	4.83	1.43
The type of work I do on my job gives me pleasure.	4.78	1.68
My work tasks involve doing things I even enjoy doing off the job.	3.95	1.97
<b>Achievement Motivation (AM)</b>		
I am able to excel in my work tasks.	5.52	1.36
In my work, I feel I can succeed in reaching challenging goals.	5.29	1.51
My work gives me a sense of achievement.	5.23	1.63
My work allows me to progress to higher and higher levels of achievement.	4.67	1.74
I go home from work feeling like I really accomplished something.	4.54	1.65
<b>Extrinsic Motivation (EM)</b>		
My job gives me financial security.	5.25	1.82
On my job I get credit for what I achieve.	4.51	1.68
Having this job makes me get ahead in my career.	4.10	1.84
My job enhances my psychological well being.	4.05	1.79
My job enhances my physical well being.	3.68	1.70
<b>Perceived Work Performance (WP)</b>		
I usually don't hesitate to put an extra effort when it is needed.	5.90	1.34
I often expend extra effort in carrying out my job.	5.45	1.41
The quality of my work is top notch.	5.14	1.46
I intentionally expend a great deal of effort in carrying out my job.	5.14	1.61
Others in my organization look at my work as typical high-quality work.	5.11	1.52

**Table 3: KMO and Bartlett’s Test**

		IM	AM	EM	WP
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.930	.931	.894	.796
Bartlett’s Test of Sphericity	Approx. Chi-Square	1318.296	1193.416	2726.853	453.966
	df	36	36	153	10
	Sig.	.000	.000	.000	.000

**Table 4: Exploratory factor analysis findings.**

IM	Extraction	AM	Extraction	EM	Extraction	WP	Extraction
I01	.736	A01	.567	E01	.867	P01	.735
I02	.709	A02	.532	E02	.882	P02	.595
I03	.476	A03	.689	E03	.832	P03	.650
I04	.738	A04	.797	E04	.868	P04	.728
I05	.616	A05	.743	E05	.824	P05	.631
I06	.857	A06	.685	E06	.867		
I07	.847	A07	.787	E07	.840		
I08	.651	A08	.630	E08	.850		
I09	.648	A09	.684	E09	.739		
				E10	.829		
				E11	.824		
				E12	.804		
				E13	.786		
				E14	.872		
				E15	.884		
				E16	.910		
				E17	.894		
				E18	.725		

**Table 5: Total Variance Explained**

#	Intrinsic Motivation		Achievement Motivation		Extrinsic Motivation			Work Performance	
	Eigen	% Variance	Eigen	% Variance	Eigen	% Variance	Cumulative	Eigen	% Variance
1	6.277	69.749	6.114	67.936	8.430	46.836	46.836	3.338	66.761
2	0.677	7.522	0.821	9.123	2.992	16.620	63.456	0.727	14.531
3	0.582	6.464	0.442	4.911	1.358	7.543	70.999	0.455	9.098
4	0.340	3.780	0.437	4.859	1.218	6.767	77.766	0.258	5.169
5	0.319	3.544	0.303	3.368	1.099	6.108	83.874	0.222	4.441
6	0.276	3.067	0.262	2.912	0.502	2.786	86.660		
7	0.261	2.899	0.243	2.702	0.378	2.098	88.758		
8	0.177	1.969	0.191	2.125	0.307	1.707	90.464		
9	0.090	1.005	0.186	2.065	0.256	1.422	91.887		
10					0.221	1.230	93.117		
11					0.209	1.162	94.278		
12					0.184	1.022	95.300		
13					0.176	0.976	96.277		
14					0.171	0.951	97.228		
15					0.158	0.879	98.107		
16					0.121	0.673	98.779		
17					0.115	0.639	99.418		
18					0.105	0.582	100.000		

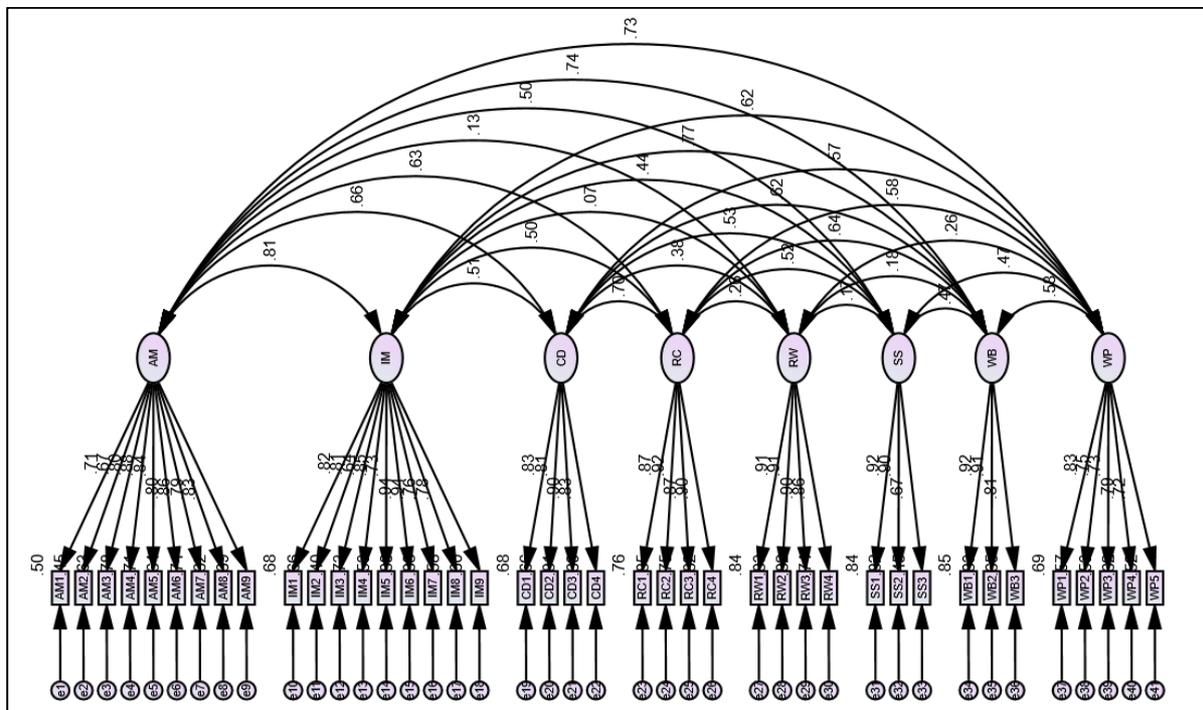
Extraction Method: Principal Component Analysis

**Table 6: Rotated Component Matrix – Extrinsic Motivation**

	Component				
	1	2	3	4	5
My job allows me to meet expenses.	<b>.930</b>	.012	.127	-.017	.005
My job allows me to support my family.	<b>.920</b>	.067	.089	.077	.047
My job gives me financial security.	<b>.919</b>	.105	.084	.037	.066
My job allows me to improve my standard of living.	<b>.862</b>	.177	.200	.113	.066
I get praise when I do good work.	.077	<b>.844</b>	.206	.239	.153
On my job I get credit for what I achieve.	.110	<b>.828</b>	.266	.240	.203
On my job I get recognition for task success.	.122	<b>.819</b>	.248	.229	.156
On my job others make me feel visible for what I accomplish.	.099	<b>.816</b>	.269	.276	.161
My job enhances my employment prospects elsewhere.	.223	.191	<b>.821</b>	.161	.198
My job helps me to develop marketable skills.	.050	.303	<b>.804</b>	.227	.107
Having this job makes me get ahead in my career.	.205	.260	<b>.764</b>	.314	.193
What I learn on my job increases my chances of getting promoted.	.207	.448	<b>.657</b>	.190	.165
My job enhances my daily mood.	.018	.267	.172	<b>.870</b>	.158
My job enhances my psychological well-being.	.127	.289	.219	<b>.838</b>	.151
My job enhances my physical well-being.	.010	.267	.247	<b>.803</b>	.095
My job gives me the chance to meet people with whom I can become personal friends.	.019	.221	.177	.129	<b>.902</b>
My job gives me chances to socialize with people whom I like	.063	.195	.160	.153	<b>.896</b>
My job allows me to reach goals in many life domains.	.192	.179	.338	.505	<b>.536</b>

**Table 7: Construct Reliability**

Initials	Construct Full Name	N	Composite Mean	Cronbach's Alpha
IM	Intrinsic Motivation	9	4.629	0.941
AM	Achievement Motivation	9	5.102	0.940
EM	Extrinsic Motivation	18	4.590	0.930
RW	<i>Rewards</i>	4	5.430	0.942
RC	<i>Recognition</i>	4	4.513	0.939
CD	<i>Career Development</i>	4	4.333	0.905
WB	<i>Well-Being</i>	3	3.905	0.913
SS	<i>Social Support</i>	3	4.601	0.860
WP	Work Performance	5	5.410	0.873



**Figure 2: Confirmatory Factor Analysis – Measurement Model**

**Table 8: Convergent Validity Results**

			<b>Estimate</b>	<b>Standardised</b>	<b>S.E.</b>	<b>C.R.</b>	<b>P</b>
AM1	←-	AM	1.000	<b>.707</b>			
AM2	←-	AM	.926	<b>.668</b>	.110	8.416	.000
AM3	←-	AM	1.171	<b>.796</b>	.117	10.015	.000
AM4	←-	AM	1.436	<b>.883</b>	.129	11.100	.000
AM5	←-	AM	1.476	<b>.844</b>	.139	10.616	.000
AM6	←-	AM	1.306	<b>.801</b>	.130	10.081	.000
AM7	←-	AM	1.382	<b>.862</b>	.127	10.839	.000
AM8	←-	AM	1.366	<b>.787</b>	.138	9.910	.000
AM9	←-	AM	1.406	<b>.833</b>	.134	10.480	.000
IM1	←-	IM	1.000	<b>.824</b>			
IM2	←-	IM	1.081	<b>.812</b>	.085	12.723	.000
IM3	←-	IM	.980	<b>.635</b>	.108	9.079	.000
IM4	←-	IM	1.051	<b>.852</b>	.077	13.718	.000
IM5	←-	IM	1.325	<b>.730</b>	.121	10.917	.000
IM6	←-	IM	1.384	<b>.937</b>	.086	16.117	.000
IM7	←-	IM	1.396	<b>.939</b>	.086	16.177	.000
IM8	←-	IM	1.315	<b>.763</b>	.113	11.609	.000
IM9	←-	IM	1.122	<b>.775</b>	.094	11.881	.000
CD1	←-	CD	1.000	<b>.826</b>			
CD2	←-	CD	1.027	<b>.810</b>	.084	12.253	.000
CD3	←-	CD	1.140	<b>.899</b>	.080	14.277	.000
CD4	←-	CD	1.110	<b>.830</b>	.087	12.708	.000
RC1	←-	RC	1.000	<b>.871</b>			
RC2	←-	RC	1.026	<b>.921</b>	.059	17.424	.000

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			<b>Estimate</b>	<b>Standardised</b>	<b>S.E.</b>	<b>C.R.</b>	<b>P</b>
RC3	←-	RC	.949	<b>.869</b>	.061	15.457	.000
RC4	←-	RC	1.082	<b>.905</b>	.065	16.777	.000
RW1	←-	RW	1.000	<b>.914</b>			
RW2	←-	RW	1.072	<b>.911</b>	.056	19.148	.000
RW3	←-	RW	1.118	<b>.904</b>	.060	18.788	.000
RW4	←-	RW	1.005	<b>.860</b>	.060	16.626	.000
SS1	←-	SS	1.000	<b>.916</b>			
SS2	←-	SS	.990	<b>.905</b>	.065	15.262	.000
SS3	←-	SS	.707	<b>.671</b>	.070	10.044	.000
WB1	←-	WB	1.000	<b>.924</b>			
WB2	←-	WB	1.025	<b>.913</b>	.054	18.925	.000
WB3	←-	WB	.866	<b>.805</b>	.060	14.397	.000
WP1	←-	WP	1.000	<b>.832</b>			
WP2	←-	WP	.916	<b>.752</b>	.085	10.762	.000
WP3	←-	WP	.797	<b>.728</b>	.077	10.305	.000
WP4	←-	WP	.896	<b>.787</b>	.078	11.451	.000
WP5	←-	WP	.933	<b>.723</b>	.091	10.226	.000

**Table 9: Discriminant Validity Results**

			Estimate	Standardised	S.E.	C.R.	P
AM	↔	IM	.925	<b>.806</b>	.145	6.355	.000
AM	↔	CD	.949	<b>.656</b>	.166	5.721	.000
AM	↔	RC	.966	<b>.630</b>	.169	5.723	.000
AM	↔	RW	.186	<b>.126</b>	.122	1.518	.129
AM	↔	SS	.820	<b>.501</b>	.165	4.969	.000
AM	↔	WB	1.199	<b>.740</b>	.190	6.313	.000
AM	↔	WP	.888	<b>.729</b>	.148	6.008	.000
IM	↔	CD	.843	<b>.514</b>	.162	5.196	.000
IM	↔	RC	.877	<b>.504</b>	.167	5.240	.000
IM	↔	RW	.115	<b>.069</b>	.136	.846	.398
IM	↔	SS	.818	<b>.440</b>	.173	4.723	.000
IM	↔	WB	1.414	<b>.769</b>	.204	6.941	.000
IM	↔	WP	.863	<b>.624</b>	.147	5.862	.000
CD	↔	RC	1.547	<b>.705</b>	.241	6.426	.000
CD	↔	RW	.812	<b>.385</b>	.193	4.216	.000
CD	↔	SS	1.251	<b>.534</b>	.233	5.371	.000
CD	↔	WB	1.439	<b>.620</b>	.239	6.020	.000
CD	↔	WP	.998	<b>.572</b>	.183	5.462	.000
RC	↔	RW	.574	<b>.257</b>	.191	3.009	.003
RC	↔	SS	1.289	<b>.519</b>	.239	5.385	.000
RC	↔	WB	1.573	<b>.639</b>	.249	6.308	.000
RC	↔	WP	1.080	<b>.584</b>	.190	5.673	.000
RW	↔	SS	.408	<b>.171</b>	.202	2.020	.043
RW	↔	WB	.425	<b>.180</b>	.199	2.140	.032
RW	↔	WP	.468	<b>.264</b>	.157	2.980	.003
SS	↔	WB	1.239	<b>.472</b>	.246	5.038	.000
SS	↔	WP	.931	<b>.471</b>	.192	4.839	.000
WB	↔	WP	1.135	<b>.581</b>	.199	5.711	.000

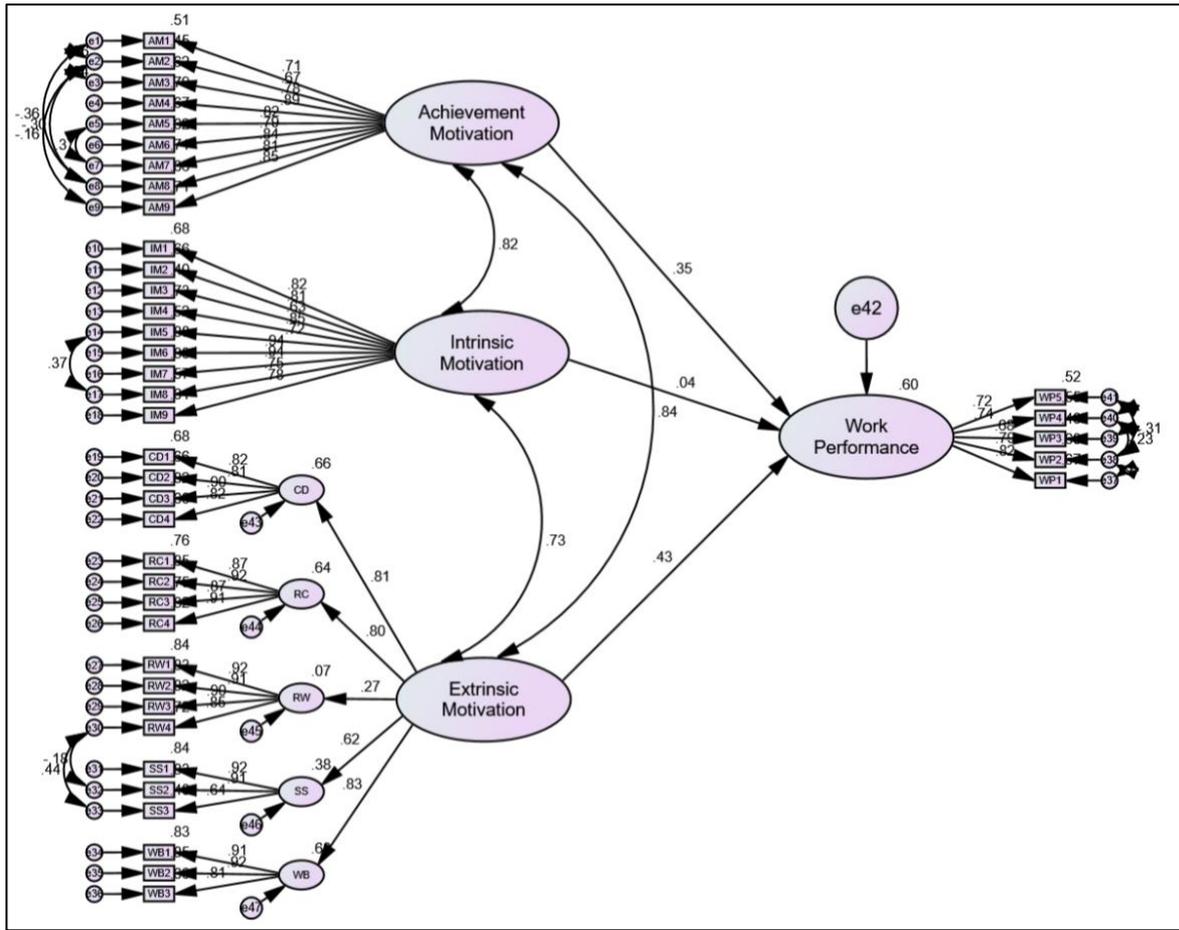


Figure 3: Structural Equation Model

Table 10: SEM Path Coefficients

			Estimate	Standardised	S.E.	C.R.	P
WP	←-	AM	.272	.346	.132	2.062	.039
WP	←-	IM	.035	.040	.102	.346	.729
WP	←-	EM	.417	.429	.151	2.758	.006

Squared Multiple Correlations

	Estimate
WP	.601

**Table 11: Model Fit Tests**

**CMIN**

<b>Model</b>	<b>NPAR</b>	<b>CMIN</b>	<b>DF</b>	<b>P</b>	<b>CMIN/DF</b>
Default model	107	1284.291	754	.000	1.703
Saturated model	861	.000	0		
Independence model	41	7197.285	820	.000	8.777

**Baseline Comparisons**

<b>Model</b>	<b>NFI</b>	<b>RFI</b>	<b>IFI</b>	<b>TLI</b>	<b>CFI</b>
Default model	.822	.806	.918	.910	.917
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

**Parsimony-Adjusted Measures**

<b>Model</b>	<b>PRATIO</b>	<b>PNFI</b>	<b>PCFI</b>
Default model	.920	.755	.843
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

**RMSEA**

<b>Model</b>	<b>RMSEA</b>	<b>LO 90</b>	<b>HI 90</b>	<b>PCLOSE</b>
Default model	.065	.059	.071	.000
Independence model	.216	.211	.220	.000

## **Customer-related social stressors, self-esteem and tourism involvement for frontline-service employees in integrated resorts**

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### **Abstract:**

This study examines the relationships among customer-related social stressors (CSS), self-esteem and tourism involvement. Data collected from a survey of frontline-service employees in integrated resorts of Macao is analyzed by structural equation modeling. Our findings verify that CSS adversely affects self-esteem. While CSS exerts a positive impact on tourism involvement, self-esteem affects tourism involvement in a negative manner. This study confirms that tourism involvement is a good way to relieve CSS and maintain the psychological health of service employees.

**Keywords:** customer-related social stressors, self-esteem, tourism involvement

### **1. Introduction**

Recent years saw the vigorous development of integrated resorts worldwide in tourist destinations such as Macao, Malaysia, Mexico, Singapore, the United States and Vietnam. Integrated resorts offer casinos, exclusive shops, star hotels and upscale restaurants to tourists. They are mega luxurious complexes to keep tourists' expenditure within their boundaries (Andriotis, 2008). Thus, frontline employees as service providers in integrated resorts are endeavored to provide high-quality service to secure customer loyalty. Irrespective of dealing with liked or disliked customers with unreasonable requirements, frontline employees are required to behave with positive attitudes and warm smiles. However, unpleasant interaction with customers may make them under work stress, which is known as customer-related social stressors (CSS) (Zhang et al., 2016; Dudenhöffer and Dormann, 2013). Past studies indicate that CSS adversely affects employees' emotions and psychology (Dormann and Zapf, 2004; Zhang et al., 2016; Dudenhöffer and Dormann, 2015; Kim et al., 2012). Self-esteem is an important determinant of psychological health, which can be lowered by work stress that triggers feelings of incompetence and pessimism (Golembiewski and Aldinger, 1994; Kivimäki and Kalimo, 1996). Previous studies usually investigate the relationship between stress and self-esteem focusing on generic works. However, since CSS is one of the most important sources of work-related stress, the significance of how CSS affects self-esteem should not be overlooked (Dudenhöffer and Dormann, 2013).

Tourism involvement is a process of getting pleasure, enjoyment and refreshment (Suhartanto et al., 2018). Past studies identify tourism involvement as an antecedent to positively predict frontline employees' work engagement, job satisfaction and service performance, while stress is regarded as a motivation for tourism that people are eager to seek relief and recovery by involving in tourism activities (Yeh, 2013; Suhartanto et al., 2018; Amara, 2018; Chen et al., 2016). Moreover, people participate in tourism for the purpose of maintaining self-esteem and keeping psychological health (Todd, 2001). Consequently, CSS and self-esteem are drivers for

people to engage in tourism. It is therefore reasonable to treat tourism involvement as an outcome variable in this study.

The aim of this paper is two-fold. First, we close the research gap by exploring the relationships among CSS, self-esteem and tourism involvement, which provide both theoretical and practical contributions to the tourism literature. Second, our study confirms that tourism involvement is positively affected by CSS and negatively affected by self-esteem, which could be a good reference for human resource managers of integrated resorts to have a better understanding about relieving employee's CSS and improving their psychological health so as to maintain sustainable development of the industry.

## 2. Literature Review

As one kind of work-related stressors, CSS is firstly identified by Dorman and Zapf (2004). It consists of four dimensions, namely disproportionate customer expectation, ambiguous customer expectations, disliked customers and customer verbal aggression. Previous research demonstrates that CSS not only has a negative effect on work performance and job satisfaction but also causes bad psychological issues for service providers, such as emotional exhaustion burnout (Dormann and Zapf, 2004; Zhang et al., 2016; Dudenhöffer and Dormann, 2015; Kim et al., 2012).

The literature suggests that work stress is closely related to self-esteem (Golembiewski and Aldinger, 1994; Kivimäki and Kalimo; 1996). Self-esteem is an important personality trait that has a significant influence on an individual's daily life, which reflects the person's subjective self-evaluation (Zhang, 2009). Lee et al. (2012) confirm that work-related stress lowers self-esteem and leads to depression. Despite CSS being an inevitable factor to reduce employees' self-esteem, there is a lack of related research that formally study their relationship to the best of our knowledge. We therefore contribute in the present study by testing the effect of CSS on self-esteem under the first hypothesis as follows:

H1: CSS is negatively related to self-esteem.

Havitz and Dimanche (1990) identify the definition of tourism involvement as "a psychological state of motivation, arousal or interest between an individual and recreational activities, tourism destinations or related equipment, at one point in time, characterized by the following elements: importance, pleasure value, sign value, risk probability and risk consequences". Individuals experience the freedom of getting away from work and enjoy the feeling of self-control while involving in tourism (Yeh, 2013). Existing studies show that stress is a motivator of tourism and tourism experience helps people to gain refreshment and recovery (Amara, 2018; Chen et al., 2016). Moreover, Todd (2001) points out that people want to maintain self-esteem needs or improve self-concept by 'showing off' their tourism experience. Different from simply participating in tourism activities (e.g. vacation), tourism involvement not only has long-term effects on tourists' attitudes and behaviors but also profound influences on people's lifestyle (Yeh, 2013). Therefore, relationships among CSS, self-esteem and tourism involvement, rather than short-term travel or vacations, are worthwhile to explore with the goal of improving the psychological health of the integrated resort employees. In this research, we thus examine how tourism involvement is affected by CSS and self-esteem. Accordingly, we present the second and third hypotheses with the proposed model (Figure 1) as shown below:

H2: CSS is positively related to tourism involvement.

H3: Self-esteem is negatively related to tourism involvement.

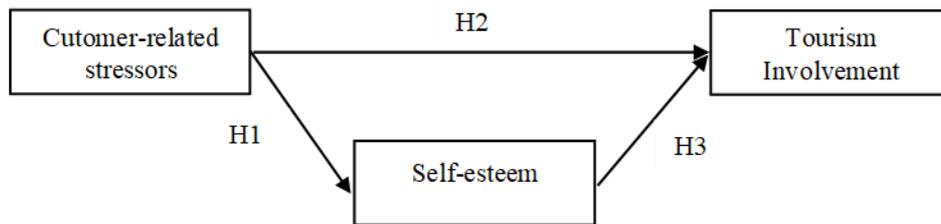


Figure 1. The proposed model

### 3. Methodology

The target respondents are employees who have full-time customer-facing jobs in the 6 integrated resorts of Macao, as a tourist destination in the world that is developing the industry most aggressively. After deleting the invalid ones, 788 questionnaires are used for the study. The questionnaire consists of 3 sections to measure CSS, self-esteem and tourism involvement respectively and all items are measured with a 7-point Likert-type scale (1 = “strongly disagree”, 7 = “strongly agree”). Structural equation modeling (SEM) with maximum likelihood estimation is applied for data analysis using AMOS21.0.

### 4. Results

Before the data analysis, confirmatory factor analysis is conducted. The overall goodness of fit of the estimated model indicates an acceptable fit (Chi-square = 753.87,  $p = 0.000$ , CFI = 0.917, TLI = 0.906, RMSEA = 0.050, SRMR = 0.070, CD = 0.870). The standardized factor loadings of all items are above 0.40, while the average extracted values and composite reliability of each latent construct are larger than 0.5 and 0.7 respectively, which show good validity and reliability (Fornell and Larcker, 1981). The SEM helps to examine the relationships among CSS, self-esteem and tourism involvement. As we can see from Table 1, results are supportive of our proposed Hypotheses 1, 2 and 3. CSS indeed has a significantly negative influence on self-esteem. More importantly, while CSS exerts a significantly positive impact on tourism involvement, self-esteem significantly affects tourism involvement in a negative manner.

Table 1. Estimated results

Hypothesis	Coefficients	Accept/ Reject
CSS → Self-esteem (H1)	-0.12***	Accept
CSS → Tourism involvement (H2)	0.48***	Accept
Self-esteem → Tourism involvement (H3)	-0.11***	Accept

Note: \*\*\*  $p < 0.001$

## 5. Discussion and Conclusion

In this research, we use customer-facing employees of integrated resorts in Macao as sample participants and identify the negative relationship between CSS and self-esteem. Low self-esteem is not only bad for employees' work performance in the short-run but also has profound negative impacts on subjective well-being on a long-term basis. More strategies should be put forward by managers to encourage employees to transfer CSS into the motivation for self-improvement, such as offering more professional job training and psychological counseling.

One of our main results shows that frontline employees with a higher level of CSS are more involved in tourism. Therefore, tourism as a good stress reliever should be made aware of by managers. In particular, tourism packages could be offered as a form of employee welfare to foster both physical and psychological relaxation among employees. After all, the healthy condition of employees is conducive to overall service quality and company success.

Another finding of this research suggests that self-esteem has a negative relationship with tourism involvement. Employees with low self-esteem are more eager to get away from stressful work and gain recovery from tourism. Word of mouth of tourism experience, sharing tourism photos on the social network are good ways for them to fulfill self-esteem needs. This research helps human resource managers of integrated resorts to explore a viable and effective way for relieving employee's CSS and improving their psychological health, thereby achieving overall long-term development and growth of the company as a whole.

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## **Effects of psychological empowerment and job characteristics on job embeddedness in hotels: The mediating role of positive psychological capital**

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### **Abstract:**

This study aims to investigate the mediating effects of positive psychological capital between psychological empowerment and job characteristics on job embeddedness among hotel employees. The findings of this study provide organizations of hotel industry to redesign the work and employee training, to reexamine the importance of positive psychology and to develop successful operational strategies by engaging hospitality employees.

**Keywords:** Psychological Empowerment, Job Characteristics, Positive Psychological Capital, Job Embeddedness

### **1. Introduction**

Hospitality industry has been developing vigorously in the era of internationalization. Nowadays, the working population of the industry has been increasing, while the entry threshold of the hospitality employees is quite low. Psychological empowerment of positive psychological resources and psychological capital play an important role in organizational change, and attracting and retaining employees with positive psychological capital can also bring positive advantages to organizations under a high degree of psychological empowerment (Lizar et al., 2015). In addition, job embeddedness is more effective in predicting personal and work outcomes (Hechanova et al., 2006).

### **2. Literature Review**

#### *2.1 Psychological empowerment, Job characteristics, and job embeddedness*

Psychological empowerment and psychological capital as positive psychological resources play an important role in organizational change, and psychological empowerment is more likely to influence an individual's readiness for change than psychological capital (Lizar et al., 2015). The Job Characteristics Model (JCM) is the most widely cited job analysis model today (Hackman & Oldham, 1975). Through the core variables of job characteristics, key psychological states of employees are elicited, acting as mediators between core job variables

and personal and work outcomes. Finally, there are three key psychological states that influence personal and work outcomes (Hackman & Oldham, 1976). The job characteristics dimension is positively correlated with the four components of psychological capital (Sameer et al., 2019). In the concept of positive psychology, scholars regard psychological capital as an individual whose psychological state can be developed (Luthans et al., 2007; Sun et al., 2012). Research has shown that psychological capital and job embeddedness are closely related. Improving an employee's cumulative psychological state will have a positive impact on his or her willingness to stay in a job and on job performance (Sun et al., 2012). Hypotheses are hence proposed as the following, H1: Psychological empowerment positively and significantly affects positive psychological capital, H2: Job characteristics positively and significantly affect positive psychological capital, H3: Positive psychological capital positively and significantly affects the job embeddedness.

### *2.2 The mediating role of positive psychological capital*

Job characteristics directly affect job embeddedness, but also affect job retention intentions through job embeddedness mediation (Nguyen, 2015). The relationship between job crafting and job embeddedness, and positive psychological capital has significant mediating effects (Arasli et al., 2019). Job diagnostic survey (JDS) is to verify the psychological state generated by the job characteristics and finally affect the employee's personal and work outcomes (Hackman & Oldham, 1975). Therefore, employees in the hotel industry, who are labor-intensive, need to face the unexpected challenges of customers and have a good psychological attitude to solve problems. Psychological empowerment is positively correlated with job satisfaction and performance, and subsequent studies across multiple industries have found that job embeddedness is a better predictor of important organizational outcomes (Hechanova et al., 2006). Job embeddedness is more predictive of turnover intention and voluntariness, two key outcomes, and explains significant incremental differences over job satisfaction, organizational commitment, job choice, and job search (Mitchell et al., 2001). Further studies have also shown a significant correlation between psychological empowerment and job embeddedness (Sun et al., 2012). Hypotheses are hence proposed as the following, H4a: Psychological empowerment positively affects job embeddedness through the mediation of positive psychological capital, H4b: Job characteristics can positively affect job embeddedness through the mediation of positive psychological capital.

## **3. Methodology**

Stratified random sampling was utilized from each level containing 15 employees of 40 distinct departments and organizations of hotels in Taiwan. All measure items were adopted from previous studies on a 7-point Likert Scale. Data were assessed by utilizing SPSS 24 and AMOS 24. Structural equation modelling (SEM) was subsequently conducted to examine all hypotheses in this study. Based on a two-step approach recommended by Anderson and Gerbing (1988) was applied to test the measurement and structural models, confirmatory factor analysis (CFA). Additionally, bootstrap approach was recommended to test the mediating effects based on 10,000 bootstrapping samples (Hayes & Preacher, 2014).

#### 4. Results

By a time lag of 2 months, out of 600 questionnaires, 465 were usable, amounting to a response rate of 77.5%. Among the respondents, the majority were: female; aged 20s; working experiences in hospitality industry of 1 year or more but less than 3 years; job type depending on monthly salary. The outcomes of the CFA revealed a good fit and Cronbach's alpha coefficient were higher than 0.70. The factor loadings of all measures were significant. Besides, average variance extracted (AVE) values were recorded greater than 0.5 and composite reliability (CR) were even greater than that. The results from SEM revealed that psychological empowerment, job characteristics are positively related to positive psychological capital and job embeddedness. Therefore, *H1*, *H2*, *H3* are supported. Based on the bootstrap approach, the effects of psychological empowerment and job characteristics on job embeddedness are mediated by positive psychological capital, supporting *H4a*, *H4b*.

#### 5. Discussion and Conclusion

##### 5.1 Discussion and conclusion

According to the results, all hypotheses are supported. On one hand, this the first empirical research to examine positive psychological capital mediates job characteristics, psychological empowerment on job embeddedness with a mediation model. On the other hand, psychological measurement is used to enhance the management approach of employees in hotel organizations.

##### 5.2 Implications and limitation of this study

This study contributes to the hospitality industry and literature in three ways. Firstly, in order to reduce the losses of the hotel industry, the benefits of human resources in the hotel industry can be achieved by measuring and training employees' positive psychology. Secondly, most of the previous researches focus on human capital and work performance, but ignore the importance of employee psychology. Therefore, we emphasize the results of psychological empowerment and positive psychological capital on employee's job embeddedness. Finally, the positive psychology of employees enables them to endure a difficult working environment, which in turn transforms into psychological energy and willingness to stay in the organization for a long time. In future research, data can be collected from other countries to design a transnational study or to conduct tests from different service environments.

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## **Linking abusive supervision surface acting and emotional exhaustion on service quality and customer loyalty in hospitality**

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### **Abstract:**

This article explores the effects of the frontline employees' surface acting and emotional exhaustion caused by abusive supervision on service quality and customer loyalty. Research subjects were mainly restaurant and hotel practitioners from whom the questionnaire data were collected. The valid questionnaires were analyzed and presented using descriptive statistics and structural equation modeling analysis. The results of this study confirm that surface acting has a significant positive effect on emotional exhaustion, abusive supervision has a significant positive effect on emotional exhaustion, emotional exhaustion has a significant positive effect on service quality, and service quality has a significant negative effect on customer loyalty.

**Keywords:** Frontline employee, Surface acting, Abusive supervision, Service quality, Customer loyalty

### **1. Introduction**

Being the hospitality employee are front-line service staff, facing different types of consumers every day, and must serve each customer well. From the perspective of hospitality industry management, where the consumer is the top priority customer orientation is the concept essential for the improvement of customer satisfaction and retaining customer loyalty in today's industry environment (Chen, 2015 ; Nyadzayo & Khajehzadeh, 2016). The hospitality industry should internalize customer loyalty as a belief of all hospitality employees, and increase customer loyalty through direct implementation of this concept by frontline staff in service quality delivery. By creating customer-valued services in hospitality. Accordingly, all of the above forms the motivation for this study.

This study aimed to investigate the effect of the negative emotional labor of hospitality workers on service quality and customer loyalty using surface acting, abusive supervision, emotional exhaustion, service quality, and customer loyalty as the study dimensions. The objectives of the current study were to:

Objective 1: Explore the surface acting of hospitality workers in relation to emotional exhaustion.

- Objective 2: Explore the effects of abusive supervision on the emotional exhaustion of hospitality workers.
- Objective 3: Explore the effects of emotional exhaustion on the service quality of hospitality workers.
- Objective 4: Explore the effects of service quality on hospitality workers to customer loyalty.

## 2. Literature Review

### 2.1 Social network

Hochschild, Irwin & Ptashne (1983) consider that surface acting is a disguise which focus on changing the way of expressing external emotions. Goodwin, Groth & Frenkel (2011) indicated that emotional labor is a collective theoretical model. It is a process in which employees can adjust their emotional expression during work in order to accomplish the organizational goal. While emotional labor is about adjusting feelings and expressions to achieve organizational goals, deep and surface acting are seen as ways to regulate and manage emotions. Based on the above literature, this study defines "surface acting" as a behavior in which frontline service workers in the hospitality industry adjust their outwardly visible expressions of emotions to cover up the inconsistencies between their true feelings and expressed emotions and to conform to the service regulations of the hospitality industry, striving to change their feelings to adapt the specific emotions that should be exhibited in accordance with their job expectations. Besides, Ramachandra & Rotimi (2015) show that improper supervision by supervisor will cause victims to reduce their job and life satisfaction, produce negative psychology, increase resign tendency and decrease organizational commitment. In a business organization, abusive supervision by a supervisor will cause more emotional distress (Tepper, 2000; Ramachandra, & Rotimi, 2015) and lower satisfaction levels among subordinates (Tepper, 2000; Farahani, Ghaffari, Oskowie, & Tafreshi, 2017). Abusive supervisory behaviors, such as shouting at employees, belittling and taunting subordinates, or even taking public humiliating and abusive actions without regard to the employee's dignity, will cause harm to the employee's physical, mental, and work performance, especially if the supervisor continues to use unfriendly words and non-verbal behaviors in front of customers (Tepper, 2002; Li, 2018). Based on the above literature, this study defines inappropriate supervision as the non-physical hostile behavior toward hospitality industry employees by their supervisors, which is also not episodic but persistent, that affects the psychological health of hospitality industry employees and has a negative impact on their work attitude. In addition, Lee & Chelladurai (2016) proposed that emotional exhaustion is a kind of work pressure reaction which lead to an increase in retreat, and lower production. It regarded as the main reason of burnout. Moreover, service quality is a very vague concept, which provide the difference feelings between of consumer and employee. (Parasuraman, Zeithaml & Berry, 1988). Conway, Fu, Monks, Alfes & Bailey (2016) conducted a study from an interpersonal perspective and defined emotional exhaustion as a state of physical or emotional overload resulting in depletion of energy during interactions between people, which can lead to increased frequency of regressive behaviors, lack of energy, and feelings of depletion of psychological resources and reduced productivity in the person concerned, and is a specific stress response that is often seen as the main cause of occupational burnout. Finally, Sayani (2015) proposed that customer loyalty represents the behavior tendency of customers towards products and services, and it can be said to be an important factor that governs the actual purchase behavior of customers. Although each industry may have different definitions of service quality, the study of service quality is often discussed in

four characteristic perspectives: intangibility, heterogeneity, inseparability, and perishability (Sun, & Kim, 2013; Bradley, Sparks, & Weber, 2015; Lai, & Hitchcock, 2016). This study defines service quality in the hospitality industry as an evaluation determined by consumers' perceptions before receiving services and their feelings after actual consumption and is based on the overall evaluation of the hospitality industry, including the consumption environment, the consumption process, the experience of using the product, the interaction with the service staff, and the difference between their expectations and the actual feeling of service.

### **3. Methodology**

#### *3.1 Measurement*

This study aims to investigate the impact of negative emotions on service quality and customer loyalty from the perspective of hospitality workers. The study collected questionnaire data mainly from Australian hotel and restaurant workers, using a convenient questionnaire. Besides the paper form, a Google questionnaire form was also used to collect data in order to reduce the time of the workers to complete the questionnaire. In this study, data collection was completed over a period of two months and communicated through each of the different departments, as the strict sampling method required sufficient time for distribution. In order to ensure that respondents might be sampled at the same time, two groups were divided to obtain data. There was a total of 34 items in this study, and after eliminating 16 invalid data, the final 520 questionnaires were used with 320 from the first group and 200 from the second group, giving a valid response rate of 97.01%. Specifically, 63 companies, each with 1 to 5 departments and each department containing 3 to 22 respondents, were involved.

IBM SPSS 24.0 and AMOS 24.0 statistical software packages were used in this study. While SPSS 24.0 was used for narrative statistics and reliability analysis, AMOS 24.0 was used for validation factor analysis to verify the model suitability in this study. Confirmatory factor analysis (CFA) was performed in this study by first assessing the overall fitness of the model, and if the model was well fit, then the estimated model parameters were further evaluated and explained. The fit indicators used were: Goodness of Fit Index (GFI), Adjust Goodness of Fit Index (AGFI) and Root Mean Square Residual (RMR).

### **4. Results**

#### *4.1 Profile of the respondents*

According to Anderson and Gerbing (1988), Goodness of Fit Index (GFI), Normed Fit Index (NFI), and Comparative Fit Index (CFI) should be higher than 0.9, with an approximate Root Mean Square Error (RMSE) of less than 0.05; the factor loadings of each indicator should be significant; the composite reliability (CR) of each component should be higher than 0.7; average variance extracted (AVE) should be higher than 0.5. The data of each component were analyzed by AMOS version 24.0, and the composite reliability and average variance extracted of each component were calculated using the estimation parameters of the Maximum Likelihood Estimation (MLE).

In the model, the RMSEA was 0.05, lower than 0.05, while the GFI, NFI, and CFI were 0.92, 0.93, and 0.96, respectively, all higher than 0.9. The factor loadings of the indicators were over than 0.5; the composite reliability and average variance extracted were 0.78, 0.81, 0.87, 0.93, 0.83, and 0.78, 0.81, 0.87, 0.93, 0.83, 0.83, respectively. Therefore, based on the analysis of the data, the convergence was within the acceptable range.

According to Gaski and Nevin (1985), the correlation coefficient between two components should be less than 1; the correlation coefficient between two components should be less than the individual Cronbach's alpha reliability coefficients, indicating that the two components have discriminant validity. Two components have discriminant validity if their correlation coefficient is less than the square root of AVE. In this study, we used SPSS 24.0 and AMOS 24.0 to perform matrix analysis of the correlation coefficients of the measurement variables, and it showed that the discriminant validity between components was favorable.

In addition, confirmatory factor analysis and Cronbach's alpha coefficient analysis are conducted for each research component and its questions in the first stage to develop a stable evaluation model through the analysis of convergent validity, discriminant validity, and reliability. In the second stage, the hypotheses of this study were validated using a structure model by reducing the number of evaluation questions to a few evaluation indicators.

The result of absolute fit measures: the evaluation indicators for the absolute fit measures of the overall theoretical model of this study were:  $\chi^2= 545.13$ , d.f.= 256,  $\chi^2/d.f.= 2.13$ , GFI= 0.92, RMR= 0.09, RMSEA= 0.05, and AGFI= 0.90. All indicators were within the standard except AGFI, which was slightly below the best standard of 0.9 but still within the acceptable range. In addition, incremental fit measures: the evaluation indicators for the incremental fit measures of the overall theoretical model of this study were: NFI= 0.93, and CFI= 0.961. Both were within acceptable range. Finally, parsimonious fit measures. Both PNFI and PGFI were within acceptable range ( $> 0.5$ ). In general, the overall SEM results of the theoretical model of this study was judged to be fair, based on a combination of indicators.

The results of analyses showed that, in the model, surface acting and emotional depletion had a path coefficient of 0.54, and the p-value was significant, ( $\beta = 0.54$ ,  $p<.001$ ), so the H1 hypothesis is valid; abusive supervision and emotional depletion had a path coefficient of 0.35, and the p-value was significant, ( $\beta = 0.35$ ,  $p<.001$ ), so the H2 hypothesis is valid; emotional depletion and service quality had a path coefficient of -0.29, and the p-value was not significant, ( $\beta = -0.29$ ,  $p<.001$ ), so the H3 hypothesis is not valid; service quality and customer loyalty had a path coefficient of 0.81, and the p-value was significant, ( $\beta = 0.81$ ,  $p<.001$ ), so the H4 hypothesis is valid.

## 5. Discussion and Conclusion

### 5.1 Discussion and implications

This study found that frontline workers were emotionally and physically drained and exhausted due to emotional exhaustion, and had lost their enthusiasm for their work, resulting in depressed mood (Sambasivan & Kumar, 2016 ; Zadow, et al., 2017). The service provided to customers also failed to comply with the standards of the hospitality industry, resulting in easy tension and heightened frustration in workers. Thus, affects the quality of customer service. Abusive supervision in the form of non-contact supervision by managers, often through verbal or visual signals, can cause work, family and psychological imbalances, which in severe cases can lead to emotional exhaustion and increase the difficulty of managerial control. Moreover, Farahani, et al. (2017) also argued that subordinates who encounter abusive supervision by supervisors will be depleted of their own resources, and the ongoing depletion of intrinsic energy will cause serious emotional depletion of employees. However, the customers' demand for service quality is getting higher and higher. In order to satisfy the customers' demand, the hospitality industry provides high quality service and creates customer loyalty through the service process, hoping that customers will think of the corporation whenever they have demands.

## *5.2 Conclusion*

### 1. Reduce the frequency of surface acting

This study found that hospitality workers spend a great deal of time and effort in adjusting their true feelings to meet the needs of their customers. The recurrent repetition of surface acting will create emotional disturbances and lead to a feeling of depleted competence, a state of helplessness, and constant emotional exhaustion, and in serious cases, conflict with customers. Therefore, supervisors should help their subordinates so that they can enjoy a pleasant working environment and make their work meaningful and purposeful so that they can devote themselves to their work.

### 2. Reducing the incidence of staff emotional exhaustion

This study found that when hospitality workers are in a state of sustained emotional depletion, it will result in increased withdrawal behaviors, lack of energy, and feelings of depleted psychological resources. At this time, the supervisor should intervene appropriately to create a buffer period to ease the emotions of the worker to avoid burnout.

### 3. Reduce abusive supervision by supervisors

This study found that abusive supervision by supervisors will affect the psychological health of hospitality workers and have a negative impact on their work attitude. Therefore, supervisors should not exercise abusive supervision on their employees by taking advantage of their position. Rather, they should communicate rationally and avoid short intermittent interruptions of verbal abuse, verbal bullying, and unfriendly verbal and non-verbal behaviors so that the workers can work hard and perform.

### 4. Value the quality of service that employees provide to customers

This study found that customers' assessment of service quality starts before the service is provided. It is therefore suggested that the hospitality industry should emphasize on customer-oriented services in official websites, media, and image advertisements.

### 5. Continuous enhancement of customer loyalty

Customer loyalty is reflected in purchase behavior, such as frequent repeat purchases. Therefore, a high level of customer loyalty will continue to generate revenue for the hospitality industry. It is recommended that the hospitality industry offer appropriate discounts or small gifts to repeat customers in recognition of their support for the industry.

## *5.3 Limitations of this study and suggestions for future study*

In addition to the research perspectives used in this study such as surface acting, emotional exhaustion, abusive supervision, service quality, and customer loyalty, other perspectives such as job achievement and job satisfaction may be considered in the future to improve the study.

This study is mainly a quantitative study based on a questionnaire survey. Although the scales were found to have good validity, they could not be used for more in-depth research due to the limited response tendency and statement contents, as well as the limitations of manpower and

financial resources. It is proposed that future studies should instead use the focus group method. A total of five groups of 5-7 people should be interviewed separately for cross-comparison to identify the important factors so that the findings will be more in line with the actual situation.

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## **Will hotel's online picture affect the purchasing intention of potential customers?**

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### **Abstract:**

Hotel's images often depend on features and contents of online pictures generated by suppliers. However, most managers in hospitality concern the attractiveness of photos but ignore the visual sources. Accordingly, this research conducts a 2x2x2 experimental model based on the theory of visual marketing. The study explores three important attributes of online pictures (functional value vs. aesthetic value vs. identity value), and investigates their impact on customer psychology and behavior intention. The results reveal that: Identity has no significant effect on both trust and emotion; functional value positively affects trust and emotion without identity difference; aesthetic value only affects positive emotion; trust and positive emotion appear to be important predictors of purchasing intention. Final conclusions inspire managers to make use of combined effect of identity rather than the single effect. In addition, Hotel practitioners should consider the study findings to better design their pictures to improve consumers' trust.

**Keywords:** Identity Visual value Purchase intention Perceived credibility

### **1. Introduction**

Visual images have been extensively used by E-commerce. A picture could deliver a complex concept and make it possible to quickly convey large amounts of product information (Zimbardo, 1992; Li, 2016). In reality, many online booking platforms, such as Trip Advisor, encourage users to publish product reviews and pictures together (Pan, 2014). Such pattern will have a profound impact on consumers' perception and promote purchase intention (Lobinger, 2011; Hou, 2017). The image that the viewer is "reading" from the photographs often includes two aspects (Kim, 2015): manifest content (MC) and latent content (LC). MC usually refers to the elements that consumers could observe directly, such as product elements, color elements, clarity and so on. Present hotel managers take MC as a key consideration while arranging marketing pictures. Consequently, many customers are willing to spend more time browsing because of "charming photos". LC could only be perceived after consumers' comprehension and one of most classic LCs is visual provider's identity. A growing trend for hotel assessment is the e-WOM produced by social media, which improves the persuasiveness of consumers' information (Wei, 2019). For example, Sparks (2011) found that information surfacing from consumer-generated media is more useful and credible than information associated with seller-generated media. Therefore, from a practical perspective, we appeal hotel managers to use LCs and highlight more empirical researches

about the role of identity.

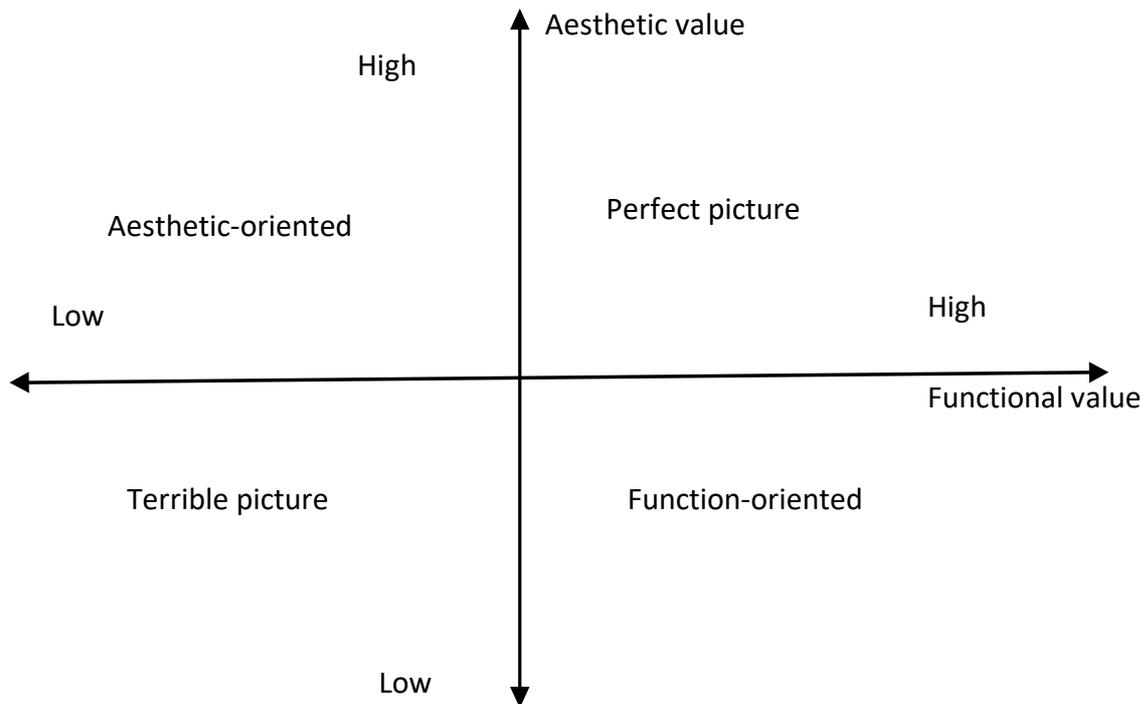
A handful of scholars have shown great interest in studying photographic images (Li,2016) in hospitality marketing, including photo structures and effects. Based on the content elements of the pictures, Ert (2016) 、Nikjoo (2019) 、Li (2016) 、Balomenou (2017) have confirmed the functions of characters, scenery, words, etc on the photographs. In addition ,Siamionava (2018) 、Tantanatewin (2018) 、Kim (2013) investigated the positions of basic structural elements such as color, brightness and saturation. Referring to the effect level, original scholars mainly regarded online pictures as supporting materials of text messages, and proved their effect on information usefulness (Andriotis, 2012; Chatterjee, 2020). Given the rapid improvement of visual research technology, researchers have gradually explored the internal mechanism of visual influence, which shows that the impact of online pictures is mainly realized by arousing users' positive emotion (Laros, 2005; Song, 2017; Yan, 2018). In total, previous studies have roughly explained key issues of visual research, such as "what is a high quality picture" , "why photos are important". Despite the extensive inquiry into online images, existing research conclusions still pay much attention to the MC elements and the LC perspective (especially identity) has not been identified yet. Furthermore, the opinion of identity determines whether we should regard pictures as entertainment tools or decision-making aids.

Recognizing above omissions, this paper proposed a systematic approach to understand online visual images. Through a 2x2x2 experimental design, this study analyzed three kinds of values (functional value & aesthetic value & identity value) from pictures and examined their impacts on consumers' trust, emotion as well as behavior intention. Final research conclusions could provide new inspirations for visual literatures and hospitality practice.

## **2. Literature Review**

### *2.1 Visual value of online pictures*

Marketing studies have highlighted the significance of photographs as a valuable tool for potential customers, such as an old adage says "A picture is worth a thousand words." The above influence of pictures benefits from the transmission of clue values. Based on the framework of visual marketing theory (VMT), Kim (2015) proposed that images contain both functional and psychological features. Kirillova (2018) divided the characteristics into specific functional value and aesthetic value. The former mainly reflects the functional attributes of image, such as the number of visual elements, etc; The latter is related to the pure art, consisting of color, brightness and saturation (Tantaatewin & Inkarojri, 2018), etc. Different combinations of two values will generate distinct types of pictures, as shown in the following figure:



**Fig 1.** Types of pictures from Kim (2015) & Kuo (2015)

High functional value is defined as a photo whose elements are complete and reflect a common theme. For example, the picture of clean bedroom should contain clean bed, clean table, clean chair, clean lamp and cabinet, etc. High aesthetic value is often related to high visual appeal, such as “beautiful”, “charming”. “Perfect picture” refers to an image with high functional value and aesthetic value, while “Terrible picture” represents the opposite. It has been argued in previous literatures that consumers' perception of image quality largely depends on the combination of two values.

## 2.2 Value of identity

The ‘meaning-transfer model’ (Kim,2013) explains the photo concept by showing that a symbol can be transferred to consumers, who must then decode the symbols to understand their meaning, which delivers the wishes of publishers. Moreover, with rapid growth of user participation in online platforms, the identity of information publisher has gradually shifted from sellers toward buyers. Identity cues can be important as consumers may use such information to evaluate the expected service (Filiari,2019). Thus, studies on visual identity and behavior among potential consumers in the online environment have become inevitable. In the related researches, there are few literatures that directly consider the identity variable, but test the identity from the perspective of distinct information sources.

Isabel (2015) distinguished the identity attributes of images, and pointed out that the photos reflected the ideas of suppliers or customers, which affected the information helpfulness. On the one hand, source in online environment is not physically present, so identity cues from an unfamiliar participant could be particularly valuable to reduce the insecurity that arises from the lack of nonverbal communication (Tidwel & Walther, 2002). On the other hand, identity factors to a very charming photo could increase the trustworthiness and consequently the potential purchasing intention (Filiari, 2016). However, scholars have not yet reached a consensus on the effective types of identity. Xie (2011) appeals consumers to use the personal

identification information of other reviewers as the evaluation clues. Due to lower profit relationship and higher interpersonal relationship (Du,2020), the pictures provided by same users are easier to be accepted. By contrast, Isabel (2015) believes that a more honest and professional image presented by a seller could enhance the positive impression of consumers. In total, with regards to the helpfulness of visual photos, it is suggested that richer identity information is more diagnostic or informative than a simple image.

### *2.3 Visual value, identity value and perceived credibility*

While online transaction brings positive benefits to consumers, such as convenience, it will also lead to users' uneasiness caused by the separation of time and space (Cheng, 2019; Moes, 2017). Trust has been proved to be the primary means to address such kind of concerns (Sparks, 2011; Esfahani & Kang, 2019). Specifically, in the case of online environment, trust is defined as perceived credibility.

Specifically, the transmission of function clues provides a proof carrier for the products in the picture. In addition to evoking feeling of warm, functional value also creates real atmosphere (Noy, 2014), which enhances consumers' confidence in product evaluation and reduces their risk perception from online uncertainty (Kuo,2014; Rad, 2016). Further, plenty of research endeavors have shown that aesthetic value is closely related to consumers' perception or judgment (Yang, 2016; Vos, 2019), such as service quality, reviews effectiveness, etc. The mechanism from aesthetics to trust cognition, also known as "halo effect", involves the legacy effect from physical appearance to other fields (such as service quality or availability) (Tractinsky et al, 2000).such concept comes from social psychology, which initially refers to that people with visual appeal are always considered to have ideal personality characteristics (Dion et al, 1972). Schnurr et al (2017) extended it to the field of marketing, which verified that website attraction can affect the trust of product quality, especially when consumers are not familiar with it.

Thus, two hypotheses are proposed as follows:

**H1:** Functional value of pictures significantly affects consumers' perceived credibility.

**H2:** Aesthetic value of pictures significantly affects consumers' perceived credibility.

Identity has been confirmed as a salient element in marketing. Viewers have no direct profit relationship with social information providers, but approve each other's identity. Therefore, consumers tend to trust the information released by similar consumers rather than the seller's clues. Isabel (2015) explored the weight of different information sources in tourists' decision-making: the marketing information formed tourists through social media will have more profound effect on target customers. Hilary (2016) concluded that tourists prefer to adopt the information obtained by family or friends through decision-making rather than the information provided by hotel itself. Nevertheless, much of the early research focused on the providers of text reviews, but few studies have been found investigating whether visual-provider styles may have an apparent effect. As a result, in order to enhance existing literature, the following hypotheses are proposed:

**H3:** The influence of pictures on perceived credibility will differ according to identity of image providers.

#### *2.4 Visual value, identity value and positive emotion*

Emotion is regarded as another key factor in decision-making. Emotion could explain the change of individual response beyond rational cognition (Ouyang, 2017), especially in enjoyable products (Song, 2017). Scholars of service marketing argue that the functional values are the results of delivering product clues. Owing to increase of the clues, pictures gradually create the feeling of contacting with others (Walters, 2012), which greatly reduces the psychological distance between buyers and sellers. Further, Gefen (2004) proved that once users describe images as "gentle", "personal" and "social", their positive emotion is easy to be aroused.

The mechanism from aesthetic value to emotion can be divided into two sub mechanisms. The first one, known as visceral effect (Norman, 2004), is closely related to the basic visual clues (color, brightness, etc.). The second one, known as reflection effect (Norman, 2004), involves advanced aesthetic judgment and interpretation, including composition, symmetry, etc. Once the visual information is accepted by our eyes, we will spontaneously arouse the positive emotional results like "happiness", "arousal" and "domination".

The hypothesis is as below:

**H4:** Functional value of pictures significantly affects consumers' positive emotion.

**H5:** Aesthetic value of pictures significantly affects consumers' positive emotion.

Consumers' positive emotion usually comes from temporary visual stimulation rather than complex information which require more concentration to assimilate. Consequently, while browsing the internet, users might be more pleased by appealing elements of a website instead of identity. Once pictures lead to perfect visual experience, the consumer's emotional state tends to be stable. In other words, the presence of identity affects trust, but not positive emotion. The following hypotheses are suggested:

**H6:** The influence of pictures on positive emotion will not differ according to identity of image providers.

#### *2.5 Purchasing intention*

Consumers' purchase intention is regarded as the ultimate goal of online marketing. Heuristic-systematic theory (H-S) demonstrates consumer's process of decision-making: After acceptance of relevant information through photos, their psychology will be further guided, including cognitive guidance (Ladhari, 2015) (trust) and emotional guidance (Han, 2014)(positive emotion). Eventually, according to the "H-S" process of "information stimulation - psychological change - intentional response", consumers' willingness to buy will also change (Ladhar, 2015; Mauri, 2013).

Thus, two hypotheses are proposed as follows:

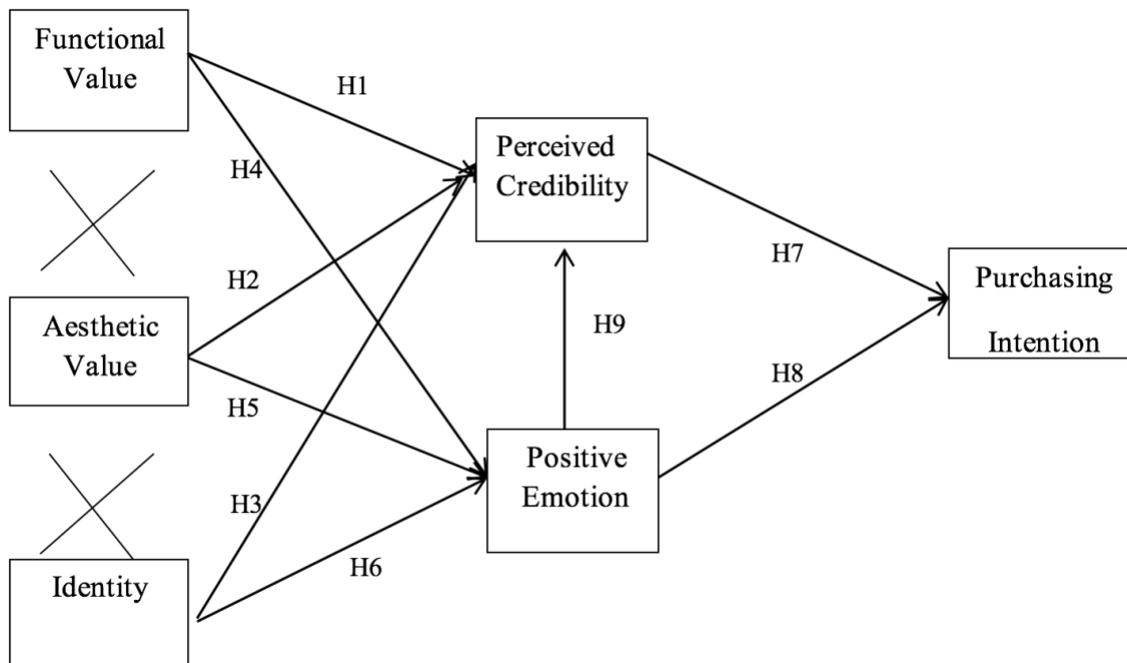
**H7:** consumers' perceived credibility positively influences their purchase intention.

**H8:** consumers' positive emotion positively influences their purchase intention.

Nonetheless, it should be emphasized that the perceptual and affective processing of the target pictures continuous (Baek, 2017). That means quality judgment might be activated by the

emotion experienced. For instance, Choi (2017) suggested in the study of destination image that tourists' emotional image had a significant impact on their cognitive intention. Above results reveal that consumers' emotion will inevitably permeate into rational judgment, especially in uncertain environment (Kirillova & Chan, 2018), so the following assumption is put forward:

**H9:** consumers' positive emotion positively influences their perceived credibility. The conceptual framework of this study is represented in Fig. 2.



**Fig. 2.** Proposed research model

### 3. Methodology

#### 3.1 Data collection

To examine the impact of functional value versus aesthetic value versus identity on affective evaluations, cognitive evaluations, and subsequent behavioral intentions, the current study employed a 2 (functional value: low vs. high) x 2 (aesthetic value: low vs. high) x 2 (identity: buyer vs. seller) scenario-based experimental design. To eliminate the effect of previous experience, only potential customers were allowed to participate in, which was achieved by asking “have you been to the hotel in photos?”. Attention check questions were built into the survey to evaluate whether respondents browsed the pictures, understood the directions, and answered questions carefully. Incorrect attention answers would also be removed from the analysis. Finally, a total of 340 surveys were collected by using Questionnaire Star (an online survey panel). After reducing respondents with missing and invalid values, 268 samples were utilized for analyses, netting 79% of the usable sample rate.

#### 3.2 Scenarios

Previous studies applied a scenario-based method (Bufquin, 2019; Kuo et al., 2015) to identify

respondents' emotions or behavioral intentions. Similarly, the present study also utilized a scenario method. The participants were first asked to imagine that they were going vacation and reserving a hotel room by descriptive text directions. In order to reduce the influence of other factors, it was reasonable to set participants' scenario hotel as a place with "Good location" and "appropriate price". After reading the directions, all participants were randomly assigned to one of the hypothetical hotel websites and viewed 6 hotel Photos. All settings of the pictures had been checked. First, hotel images were selected from official websites of foreign countries and removed the brand names to rule out the effect of the brands. Each set of hotel pictures consisted of two different parts: public areas like the hotel lobby, front desk, restaurant, swimming pool and private areas like guest rooms and bathrooms. Each group was showed in actually the same order. Secondly, present manipulative approach of aesthetic value was adopted from Hidayetoglu et al (2012) and adjusted brightness, contrast and saturation to change the aesthetic degree. Further, in terms of functional value, this study inherited the word experimental method (Li ,2016), and overcame the drawback of focusing on single element in previous studies. Specifically, we first defined the main element of a picture, for example, the main element of a guest room was a bed. Then, we controlled the level of functional value by increasing or decreasing additional decorative element, such as a chair beside the bed. As for the difference between hotel and consumers, we constructed a virtual hotel page and customer comment area respectively. After the reading task, participants would complete a questionnaire about their trust, emotion and intention. Finally, we captured demographic information such as gender, age, education level, household income, hotel type at the end of the survey.

### *3.3 Measurement*

The study used scales to measured three sets of variables: positive emotion, perceived credibility, purchase intention. Most scales were adapted from previous studies. A measure of positive emotion toward visual images was adapted from Tsauro (2015) and Sukhria (2019) . According to a seven-point Likert scale ranging from 1 (definitely disagree) to 7 (definitely agree), subjects responded to items such as, "the image is satisfactory, enjoyable, and pleasing." Four measures of perceived credibility (e.g., "the above image content is trustworthy") were adopted from Cheung (2009) and Ladhar (2015) , anchored at strongly disagree (1) and strongly agree (7) . Measures for purchasing intentions came from Kim (2013) and Han (2012), and assessed using seven-point scales ranging from highly unlikely to highly likely (7) (e.g., "I would like to book this room").

### *3.4 Analysis method*

This study adopted a two-step approach to fulfill the research objectives. In the first step, a two-factor ANOVA was performed with positive emotion and perceived credibility as the dependent variables. In the second step, the validity of each construct and model fit were tested by confirmatory factor analysis (CFA). Once the validity of all constructs was verified, structural equation modeling (SEM) was employed to measure the overall fit of the proposed conceptual model and test the proposed hypotheses. Data analysis was realized by SPSS22.0 and AMOS.

## **4. Results**

### *4.1 Descriptive statistics*

Of the 268 respondents, most were female (61.94%,  $n = 166$ ), and the overall mean of age was 26.4 (standard deviation = 0.913). Most of the respondents were undergraduate students (64.55%) or master graduates (31.72%). Forty-two percent of the respondents had a monthly household salary below 3000 yuan. The two most frequently checked average hotel stays per year was 3-5 times (33.96%,  $n = 91$ ) and 1-2 times (29.85%,  $n = 80$ ). Approximately 57.46% of the respondents indicated that they would choose budget hotels. Participants assigned to each scenario was about 30-50.

#### 4.2 Manipulation check

To confirm whether participants perceived the scenarios as intended, a series of manipulation check questions were conducted. First, participants were asked to indicate their perception of the beauty of photographs they had viewed. The results suggested that there was a significant difference in the perceived aesthetic value in the scenarios ( $t = 4.655$ ,  $p < 0.01$ ). Second, participants were asked to indicate the feeling of integrity of functional clues in photographs. The t-test result also showed that there was also a significant difference in the perceived functional value in the scenarios ( $t = 9.30$ ,  $p < 0.01$ ).

#### 4.3 Measurement model

It was necessary to assess the overall fit of the measurement model by conducting a CFA before SME. Overall, the goodness of fit indicators ( $\chi^2 = 63.861$ ,  $df = 34$ ,  $\chi^2/df = 1.878$ , CFI = 0.991, NFI = 0.981, GFI = 0.961, RMSEA = 0.057) suggested that the proposed model fit the data properly (Table 1).

The results of this study confirmed that all of the constructs exceed a satisfactory level of CR and Cronbach's  $\alpha$  (0.7), hence indicating sufficient internal consistency. The average variance extracted (AVE) for all constructs was well above the 0.50 cut off (Bagozzi & Yi, 1988), demonstrating the convergent validity of the measurement scales (Fornell & Larcker, 1981).

Discriminant validity was assessed by comparing the AVE and the squared correlations of the two constructs of interest (Fornell & Larcker, 1981). Based on the final results, all the square roots of the AVEs, diagonally arranged, exceed the maximum value of related construct correlations, indicating adequate evidence of the discriminant validity.

**Table 1** Results of CFA

Construct	Item	Std. Loading	t-value	Cronbach's $\alpha$	AVE	CR
Positive Emotion	PE1	1	-	0.952	0.771	0.953
	PE2	1.073	22.064			
	PE3	1.032	30.478			
	PE4	1.111	19.954			
	PE5	1.035	19.166			
	PE6	0.986	16.889			
Perceived Credibility	PC1	1	-	0.891	0.735	0.973
	PC2	1.051	14.659			

	PC3	0.969	11.449			
	PC4	1.08	10.429			
Purchasing Intention	PI1	1	-	0.917	0.848	0.918
	PI2	1.101	23.867			

$\chi^2=63.861$  ,  $df=34$ ,  $\chi^2/df=1.878$ , CFI= 0.991, NFI=0.981, GFI=0.961, RMSEA =0.057

4.4 SEM results

The model fit was appropriate ( $\chi^2/df=1.489$ , CFI= 0.987, NFI=0.963, GFI=0.947, RMSEA =0.043), and the hypothesized from 5-7 were evaluated by using structural equation modeling (Table 2) . As expected, the results indicated that both positive emotion and perceived credibility influenced users’ purchasing intention of hotels. Positive emotion affected purchasing intention positively ( $\beta= 0.637$ ,  $t = 11.499$ , and  $p <0 .01$ ), supporting H7. Besides, perceived credibility had a positive, direct effect on purchasing intention ( $\beta= 0.361$ ,  $t = 6.629$ , and  $p <0 .01$ ) ,supporting H8. Moreover, the effect of positive emotion on perceived credibility were significant ( $\beta=0.578$ ,  $t = 10.262$ , and  $p <0 .01$ ), supporting H9. Finally, Gender variables deserves attention ( $\beta=0.094$ ,  $t = 8.711$ , and  $p <0 .01$ ). Results suggested that women are more susceptible to visual images.

**Table 2** SEM results

Hypotheses			Std. Coef.	SE	t-value	results	
H7	Perceived Credibility	->	Purchasing Intention	0.637	0.052	11.499***	Supported
H8	Positive Emotion	->	Purchasing Intention	0.361	0.061	6.629***	Supported
H9	Positive Emotion	->	Perceived Credibility	0.578	0.056	8.711***	Supported

$\chi^2=139.982$  ,  $df=94$ ,  $\chi^2/df=1.489$ , CFI= 0.987, NFI=0.963, GFI=0.947, RMSEA =0.043

Note: \*\*\* 1% significance level.

4.5 Multigroup analysis

To investigate the effects of aesthetic value, functional value and publisher identity on subjects' emotion and trust, a multi-group analysis of variance was conducted in this research (Table 3).

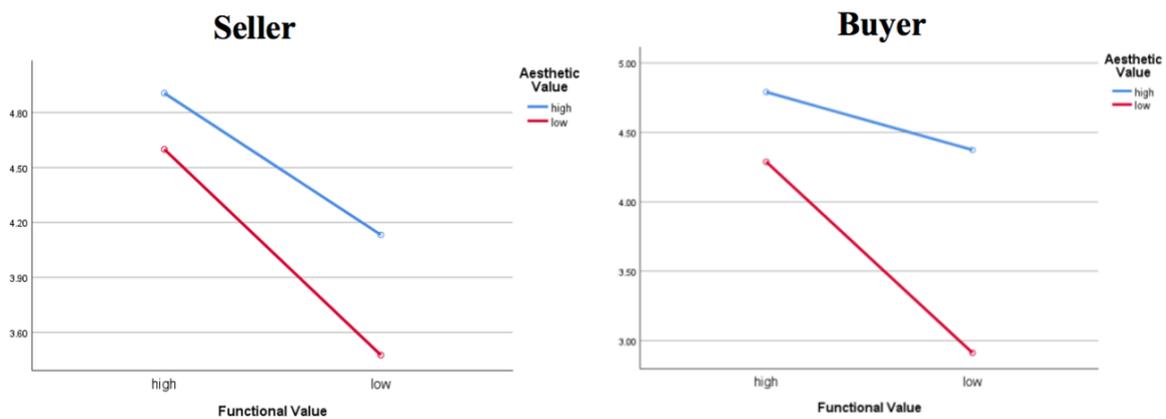
**Table 3** Results of ANOVA

Dependent Variables	df	F	positive emotion	perceived credibility	
			significance	F	significance
Main effects					
Aesthetic clue	1	20.466	0.000***	0.457	0.499

Functional clue	1	28.585	0.000***	20.581	0.000**
Identify	1	0.913	0.34	3.134	0.078
R <sup>2</sup>		0.156		0.084	

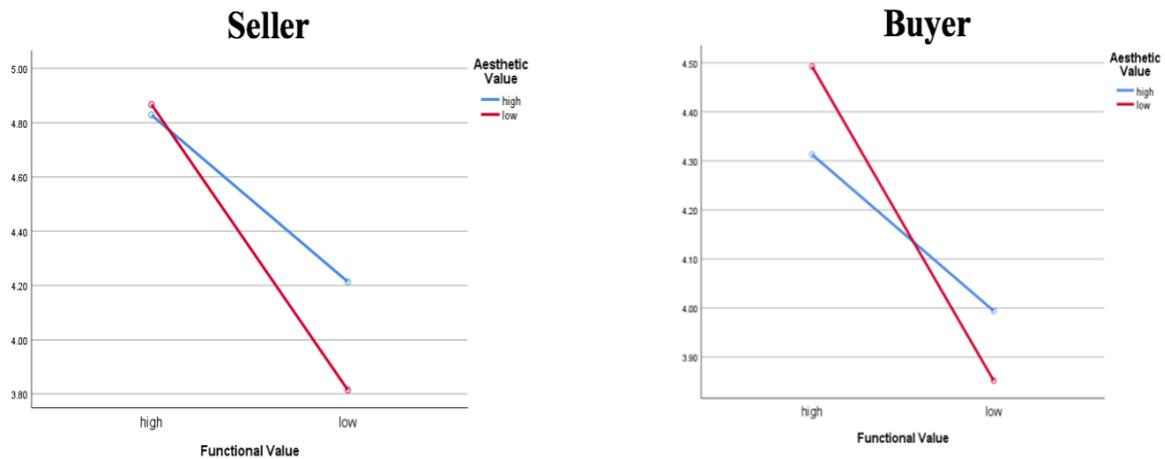
Note: \*\*\* 1% significance level.

Whether positive emotion would vary by functional value, aesthetic value and identify was investigated (table 7). A three-way ANOVA was first performed with positive emotion as the dependent variable and functional value, aesthetic value and identify as independent variables. The results showed significant main effects of functional value and aesthetic value (Fig3) on positive emotion, but insignificant main effects of identify. Given the same visual situation, the positive emotion of high aesthetic value was evidently higher than the low one (F=20.466, P < 0.01), therefore, H5 was supported. Similarly, keeping aesthetic value and identify unchanged, the functional value also showed a significant effect on positive emotion (F = 28.585, P < 0.01), hence, H4 was supported. However, whether viewing buyers' pictures or seller's pictures, participants' emotions would not be affected (F=0.913, P>0.1), H6 was supported.



**Fig 3.** The influence of AV and FV on positive emotion under different identities

The perceived credibility was also examined (Table3). A three-way ANOVA was performed with perceived credibility as the dependent variable and functional value, aesthetic value and identify as independent variables (Fig4). The results indicated a significant main effect of functional value (F=20.581, P < 0.01), participants demonstrated higher perceived credibility in high functional stimulation than in the low functional stimulation, H1 was supported. However, the results did not show any significant main effect of aesthetic value (F=0.457, P > 0.1), indicating that perceived credibility did not vary by aesthetic value. H2 was not supported. It could be clarified by online trust theory. Online trust was determined by three key factors: information content, information channels and information publishers. Over beautification of product images could be perceived as a superficial assessment (Fileri, 2019) of a product rather than trust enhancement. In addition, the main effect of identity is not significant (F=3.134, P > 0.05), suggesting that the trust of participants was not determined by identity, H3 was not supported.



**Fig 4.** The influence of AV and FV on perceived credibility under different identities Since the interaction items could not meet the significance level of 0.05, it was not necessary to consider the interaction effect.

**Table 4** Results of H1-H6

Hypotheses	F-value	Results
H1 Functional Value -> Perceived Credibility	9.255***	Supported
H2 Aesthetic Value -> Perceived Credibility	0.606	Not Supported
H3 Identify -> Perceived Credibility	3.134	Not Supported
H4 Functional Value -> Positive Emotion	15.974***	Supported
H5 Aesthetic Value -> Positive Emotion	20.322***	Supported
H6 Identify -> Positive Emotion	0.913	Supported

Note: \*\*\* 1% significance level.

## 5. Discussion and Conclusion

### 5.1 Findings

The current study employs a 2x2x2 experimental model to explore the joint impact of functional value, aesthetic value and identity value on customers' positive emotion, perceived credibility and purchasing intention in the context of hotel online marketing. The findings shed light on a better understanding of customers' responses to online photos, extending the existing literature in the field of visual marketing. To sum up, the conclusions of this study are as follows:

1. The identity of picture provider has no significant effect on consumers' perceived credibility or positive emotion.
2. Both aesthetic and functional values positively affect consumers' positive emotions, and the "high function- high emotion" group arises the optimal effect , which does not differ with the identity.
3. Only functional value positively affect consumers' perceived credibility, which does not differ with the identity.
4. Both positive emotion and perceived credibility positively affect purchasing intention ,

furthermore, perceived credibility partially mediates the relationship between positive emotion and purchasing intention.

### *5.2 Theoretical implications*

Firstly, there is no agreement on what kind of information provider is beneficial to visual marketing. The current study begins to clarify this by showing that the types of identity had no significant influence on enjoyment or trust. Such enlightening results take an important step towards expanding the theory of visual communication and visual trust. The traditional marketing theory regards information provider as an important factor of reliability, and supports the distinction between buyer and seller. However, given the online visual context, identity differences seem to be ignored automatically, which can be summarized into two aspects: 1. The results obtained from t-test suggested that the main effect of provider's identity on perceived credibility was not significant. It was proved that the identity could not be considered as an independent variable while keeping other elements unchanged. 2. Identity still had no effects on perceived credibility when coupled with other visual values. Three-factor ANOVA test revealed that the coefficient of identity is still not significant even if the functional elements and aesthetic elements were taken into account. In total, this study indicates that there is no obvious combination effect between the identity variables and other elements of the picture itself. In other words, the collocation of information provider and information presentation does not affect consumers' subsequent decisions. Despite the difference with our prediction, final finding doesn't mean that identity is not important in decision-making. One possible explanation is related to the consistency of online information. When the seller and the buyer show ambivalent information about the product, the image observer tends to suspect picture content and trust the identical consumer. Therefore, current research identifies the action boundary of image identity attributes. Strong consistency of information weakens the consumers' recognition of identity. Emphasis on photo providers are more likely to occur in contradictory situations.

Besides, the present study initiates the examinations of picture elements in visual processing research which expands the previous research of text (Li, 2016). In particular, it considers the unique role of functional value in hotel photographs, namely functional value naturally influences consumer's cognitive and affective responses. Through an ANOVA analysis, functional value, as an important element of online photos, has been confirmed to elicit and change consumers' positive emotion as well as trust. In other words, the attractiveness of high-quality pictures depend on the complete presentation of the functional elements in the photographs. Through the combination of main functional elements and additional functional elements, consumers could quickly establish the high-quality perception of the products and arouse their purchase intention.

Besides, a good few visual scholars have proved the positive effect of aesthetic elements (color, brightness, contrast) on consumers' emotional arousal, but no previous studies regarding the rational influence (like trust) of aesthetic value have been found. This research extends the literature into this important area. Based on the existing aesthetic theory, this study further attempts to explore the rational path of "aesthetic-trust", and confirms that the enhancement of aesthetic value will not directly affect the rational judgment of consumers. Nevertheless, SEM results also suggests that the influence of aesthetics on rational response is indirect, namely emotional state plays a mediating role between aesthetic value and trust. The indirect effects of aesthetics deepen the understanding of picture elements, thereby contributing to the literature on sensory marketing and consumer responses toward online photos.

### 5.3 *Practical implications*

The present findings provide suggestions about developing valuable identity materials. Whether seller-provider or buyer-provider, the inner perception of consumers could not be affected, which is largely related to the online "information booming". Once hotel's review area is filled with consistent comments (either from a real consumer or an individual employed by seller), the persuasive effect of their identity information will be greatly reduced. The present findings encourage image managers to make use of this online characteristic to compare their own pictures with the pictures in the comment area. Pictures coupled with consistent positive reviews often reveal the hotel's profession or advantage in a certain field. On the contrary, the inconsistency between official images and users' images highlights the weaknesses in management, especially a large number of contradictory reviews. The above situation usually prompts managers to focus on improvement in a certain area of hotel management. In addition, current appeals hotels to properly manage their customer reviews. Hospitality marketers should give priority to high-quality image reviews, and control the number of low-quality reviews, so as to avoid trust "fatigue" caused by excessive visual materials.

Similarly, it would be prudent to coordinate functional and aesthetic value. While it is common practice for hotels to use highly edited images in their promotional materials, participants in our study did not consider it is suitable for hotels to use "over-charming" photos alone. Although aesthetic elements are attractive, it seems that there is a limit to their effectiveness: their effect on trust is not as significant as functional elements. Hence, when hotels simply post "perfect pictures" (Kuo, 2015), it is easy to result in the huge gap between buyers' photos and sellers' pictures, which usually leads to lower brand trust even negative emotions. Conclusions of this study also support Colliander's (2018) concept of "snapshot aesthetics", which has previously been tested in online store environment. : marketing pictures released by enterprises should be as close to the real world as possible. Moreover, a high-quality hotel picture should cover all the elements of relevant functional areas, including the main elements and additional elements for embellishment. For example, while presenting the guest room, a bed could be regarded as the main element, besides, the murals, tables, chairs, carpets and other additional elements are also essential. Therefore, to enhance the emotion and trust of potential customers, we advocate hotel managers to cultivate a sense of "complete function" in the process of images selection. On the one hand, online hotel platform can keep a certain proportion of the high functional pictures and eliminate the low ones. On the other hand, online hotel websites and apps developers can redesign the picture system by allowing readers to sort or rank photos by sensation or emotion filters (Li,2019).

### 5.4 *Limitations and future research*

Like many studies, our research is not exempt from limitations. Above all, the study of identity variable is mainly based on the same functional and aesthetic value, which only reflect the consistent scenario. Thus, it is suggested that future researches consider contradictory product pictures to explore the value of identity. Second, the measurement of subjects' psychological perception was mainly realized by self-report. Consequently, the accuracy of final results may be affected by the common method variance of the questionnaire, like subjective biases. Future studies could measure the role of visual images with a more advanced method to alleviate many of the above mentioned concerns about previous approaches., such as eye-tracking (Wang, 2014).

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## Exploring the role of human images on hotel websites

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### Abstract:

Based on the media richness theory, this study explores the effect of human images on consumers' positive affect toward hotel websites, their stickiness to the website, their perceived quality of hotel, and their booking intentions. An online experiment was conducted on 115 Chinese participants. Despite human-present website represents higher media richness, this study finds that embedding human images on hotel websites do not necessarily generate more positive consumer responses. The findings contribute practical suggestions to hoteliers on effective website design. Future research directions are also provided.

**Keywords:** human image, hotel website, media richness theory, experiment

### 1. Introduction

Hoteliers strive to constantly improve the design of their websites so as to leave a positive impression on consumers, enhance consumers' evaluation of the hotel, and thereby encourage purchases (Tang, Jang, & Morrison, 2012). Although a hotel is able to communicate its service quality and brand image to its customers via the hotel website, this communication is generally impersonal. Hotels increasingly embed human images on their websites to bring the impersonal online experiences closer to face-to-face interaction. However, the effect of these human-present hotel websites on consumers has yet to be studied. This study fills this important gap by examining the effect of human images on consumers' positive affect toward the hotel website, perceived quality of the hotel, website stickiness, and booking intention. To ease readability, "no-human website" refers to "website without any human images, while "human-present website" denotes website containing human images.

### 2. Literature Review

#### 2.1. Human images on website design

Communication in the online environment is impersonal. Users rely on various cues to determine the trustworthiness and service quality of a firm (Wang, Law, Guillet, Hung, & Fong, 2015). According to Cyr, Head, Larlos, and Pan (2009), human image refers to the visual representation of humans. Embedding human images on websites re-introduces social interactions to the online environment (Riegelsberger, Sasse, & McCarthy, 2003). In general, researchers agree that the presence of human images on a website can increase trust on the company and mitigate the negative effect of impersonal interaction (Cyr et al., 2009). Furthermore, people are more attracted to human images showing facial expressions because

these images make people feel warm and a stronger sense of belongingness (Cyr et al., 2009; Riegelsberger et al., 2003). In other words, human-present websites create a higher level of social presence, which enhances customers' experience in the online service environment (Hassanein & Head, 2007). Cyr et al. (2009) suggested that human images affect people's decision on hedonic products such as hotels.

## *2.2. Media richness theory*

Media richness theory suggests that various communication channels possess different levels of features that determine a channel's strength in carrying information, with rich information being superior to lean information in minimizing equivocality (Daft & Lengel, 1986). Channels that incorporate more features are considered to be richer. For instance, face-to-face communication is a richer type of medium than e-mail messages as the former allows instant feedback and simultaneous communication of multiple cues, such as facial expression, emotions, and body language. Information communicated via richer media is easier to understand and interpret, and thus positively affects consumers' decision quality and behaviors (Maity, Dass, & Kumar, 2018)

Drawing on the media richness theory, the current study postulates that embedding human images on a hotel website enhances the media richness of the website. In other words, a no-human website is a literal presentation of the hotel, whereas a human-present website represents a higher level of media richness, which communicates more information about the service environment of the hotel. Thus, a human-present website is likely to generate more positive affects toward the website, higher website stickiness, higher perceived quality of the hotel, and higher booking intention. This study defines website stickiness as the ability of a website to attract and retain browsers in the website to browse more information (Zhang, Ye, Law, & Li, 2010). Specifically, the following hypotheses are proposed:

*H1: Human-present website is positively related to positive affects toward the hotel website.*

*H2: Human-present website is positively related to website stickiness intention.*

*H3: Human-present website is positively related to perceived quality of the hotel.*

*H4: Human-present website is positively related to booking intention.*

## **3. Methodology**

### *3.1. Participants*

Participants were approached via an online survey company in Mainland China. They were asked to read a scenario, which instructed them to browse a hotel website and respond to questions related to the website. They were then randomly assigned to either the control condition (i.e., no-human website) or the treatment condition (i.e., human-present website).

### *3.2 Experimental instruments*

Two fictional hotel homepages with an unfamiliar brand name were developed. Except for the main pictures in the middle of the hotel homepages which represent the manipulation of human-presence images, the two homepages contain identical features. The image on no-human homepage shows the interior environment of the hotel room, while that on the human-present homepage shows the same room with a lady added. This study adopted a self-administered questionnaire to collect participants' responses after the experiment. Measurement items were adapted from previous research (Zhao, Muehling, and

Kareklas, 2014 for positive affect, Elliot, Li, and Choi, 2013 for website stickiness, Baek and Ok, 2017 for perceived quality of hotel, and Ajzen and Fishbein, 2005 for booking intention).

## 4. Results

### 4.1. Profile of respondents

A total of 115 valid responses were collected, with 52 observations assigned to the control condition and 63 assigned to the treatment condition. There were slightly more female (51.3%) than male participants (48.7%). The participants were young, with 95.7% participants aged between 18 to 25 years old, and the rest aged 26 to 32 years old.

### 4.2. Hypotheses testing

Table 1 shows the effect of human-present website on consumers' responses toward the homepage and the hotel, after controlling age, gender, and perceived website authenticity. Comparing the two groups, the effects of human-present website on positive affect toward the website ( $F=0.39$ ,  $p>0.05$ ), website stickiness ( $F=0.27$ ,  $p>0.05$ ), perceived quality of the hotel ( $F=0.44$ ,  $p>0.05$ ), and booking intention ( $F=0.98$ ,  $p>0.05$ ) are not statistically significant. In other words, participants' feelings toward the hotel website, thoughts about the hotel, and their behaviors do not differ between the no-human group and the human-present group. Thus H1, H2, H3, and H4 are not supported.

Table 1. Effects of human-present websites

	Dependent variables							
	Positive affect		Perceived quality		Stickiness		Booking	
	F	p	F	p	F	p	F	p
<i>Antecedent</i>								
Human image	0.39	0.54	0.44	0.51	0.27	0.61	0.98	0.325
Intercept	8.24	0.01	6.05	0.02	0.11	0.74	6.06	0.02
<i>Covariates</i>								
Gender	3.27	0.07	3.74	0.06	1.35	0.25	0.23	0.63
Age	1.23	0.27	0.86	0.36	0.09	0.76	0.67	0.42
Web Authenticity	44.24	0.00	34.79	0.00	44.03	0.00	60.67	0.00

## 5. Discussion and Conclusion

### 5.1. Discussions

Incongruent with the existing literature (Hassanein & Head, 2007; Jeong & Choi, 2004), this research demonstrated that embedding a human image on the hotel website neither evokes more positive affects toward the website itself, nor induces higher perceived quality related to the hotel shown. The mere presence of human image might therefore be considered distracting and irrelevant, which does not add value to consumers in the evaluation process of the hotel website and the hotel itself. Cyr et al. (2009) found that Germans are less affected by the human images on a website compared to their Japanese and Canadian counterparts. German participants are more interested to know about the facts of the product that they purchase. Likewise, Chinese participants in the current study may be more concerned about the functional aspects of the hotel and thus the presence of human images did not make any significant differences in their feelings toward the website nor thoughts about the hotel. In addition, only one picture was used in the hotel websites, which may not be sufficient to stimulate consumers to perform more elaborative processing, as customers generally prefer to see a variety of pictures when making hotel purchase decisions (Jeong & Choi, 2004).

### 5.2 Implications

Based on the findings of the current study, the use of human-present hotel websites may not necessarily outperform no-human websites in creating positive consumer responses. Hoteliers and website designers may adopt no-human websites highlighting the functional aspects of the hotel, rather than human-present websites even though the latter may demonstrate the hedonic experience at the hotel.

### 5.3 Limitations and future research

Since most of the participants in the current study are 18 to 25 years old and they are all Chinese, the experimental results only represent the opinions of this group of young adults, which may not be generalized to other ethnic or age groups. Future research may explore the effects of human-present websites on other online users with different demographic characteristics, and investigate whether different types of human images will generate different effects.

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## Management response to restore online company image

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### **Abstract:**

The technology of web 2.0 is a two-edged sword for hotel business. Being able to harness and leverage on the trend of social network certainly can create great business potential for hotels. On the other hand, it places hotels in the limelight and makes their reputation vulnerable to attack. Underestimating the threats posed by negative eWOM, a crisis may strike at any moment and severely damage the image of a hotel. This exploratory study provides an in-depth understanding on how hotel managers monitor eWOM and craft management response in addressing undesirable customer comments.

The findings of this study revealed among the four identified categories of eWOM sources, the researched luxury hotels in Hong Kong most frequently monitor “review site and blog.” Their selection of eWOM monitoring channels are associated with the function of a site, booking sources and the functional area of the manager’s work.

When framing management response in addressing negative eWOM, the structure in general follows a business letter with an opening and close. To demonstrate the genuine care of the hotel, the reply content should be case specific and more importantly, it is crucial to use the right word to match with hotel branding and avoid misattribution of problems.

**Keywords:** Electronic word-of-mouth, management response, strategic communication, online company image, hospitality management

### **1. Research Background**

Word-of-mouth (WOM) are the feedback and opinions created by the customer of particular products, brands, or services, which can influence the attitude and buying intention of other potential customers (Tham, Croy, & Mair, 2013; Hawkins, Best, & Coney, 2004). Compared with commercial advertisement, WOM is perceived by customers as a more reliable information source that can help lower risk and formulate better buying decisions. This interpersonal influence is especially important in purchasing tourism and hospitality services because of the high risk arouse from product intangibility (Walker, 2007; Roehl, & Fesenmaier, 1992).

Social media provide various Internet-based technological platforms supporting the generation of user-generated content (UGC). When WOM goes digitalized in different communication channels, it spreads at an unprecedented rate without the limitation of the geographic boundaries (Litvin, Goldsmith, & Pan, 2008). Because of the proliferation of UGC and the powerful impact of electronic word-of-mouth (eWOM), many product/service providers acknowledge the

strategic importance of social media and incorporate this channel into their e-marketing campaign (Digital Insights, 2013).

EWOM has thus become an emerging research topic in academia. Through a thorough review on the literature researched on eWOM, Chen and Law (2016) found the number of research pieces published continuously increased since 2008, and many researchers explored the subject matter from the perspective of customers. Examples of these studies are to investigate the characteristics of eWOM (Melián-González, Bulchand-Gidumal, & López-Valcárcel, 2013; Racherla, Connolly, & Christodoulidou, 2013; Ong, 2012), the antecedents of eWOM (Boo, & Kim, 2013; Reza Jalilvand, Samiei, Dini, & Yaghoubi Manzari, 2012; Rong, Vu, Law, & Li, 2012) and the influence of eWOM on travel and hospitality business (Jalilvand, Ebrahimi, & Samiei, 2013; Mauri, & Minazzi, 2013; Huang, Chou, & Lin, 2010).

Positive eWOM are free and persuasive advisement for hospitality companies; whereas, negative ones could create devastating effect. In the worst situation, unfavorable eWOM communications could develop into a crisis, such as destruction of the image and reputation of a company, and exert an undesirable effect on the attitude of potential buyers and their purchase intention (Hoffman, & Chung, 1999; Pizzutti, & Fernandes, 2010; Tax, & Brown, 2012).

Proper management responses addressing negative eWOM can be employed as an effective tool to demonstrate and communicate responsive actions of a company to affected consumers, potential consumers, and the community members at large. Such an approach cannot only serve as a second chance of service recovery but also help to restore the online image of a company (Massey, 2005). Chen, Yan and Law (2017) discovered luxury hotels in Hong Kong acknowledge the importance of eWOM, and developed a specific mechanism to monitor and handle these electronic customer comments. Their research findings also revealed that hotels tend to make a justification or demonstrate corrective actions when responding to negative eWOM.

Corporate response strategy was primarily studied in literature focusing on public relation management and crisis management. In recent years, although researchers studying on eWOM attempted to explore how hospitality companies handle eWOM and what are the best strategies to manage negative eWOM. Few of them explore how hospitality companies strategically frame management response when they deal with customers with limited background information in the cyber space. In this regard, this exploratory research uses luxury hotels in Hong Kong as the case to investigate how hotel managers oversee and address negative eWOM to restore online company image. Specifically, the objectives are: (1) to identify and examine the sources of eWOM, (2) to identify and examine the frequency of eWOM monitoring, and (3) to analyze the strategies of crafting management response on eWOM sites. Luxury hotels strive for service excellence and have more resources for digital marketing, and thus, are chosen as the object of study.

## **2. Methodology**

With the aim to uncover and develop an in-depth understanding on how negative eWOM was handled and addressed from the perspective of hotel management, this study adopted semi-structure interview as the instrument for qualitative data collection, followed by an analysis of management responses posted on different eWOM sites. An interview guide with the three key questions below was developed and pre-tested by a hospitality management scholar with substantial industrial experiences to ensure the clarity and appropriateness of questions.

1. *What eWOM channels do you use to learn about customer feedback about your hotel?*
2. *How often do you monitor these channels?*
3. *How do you craft management response to address negative eWOM?*

This guide facilitated the interviewer to explore the subject matter within the established the framework, and at the same time allowed participants to flexibly bring up new ideas during the interview. The target population of the study was the luxury hotels in Hong Kong which reviewed and monitored guest feedback posted on any eWOM channels.

Through convenience sampling method, this study conducted 13 face-to-face interviews with middle and top managers who work in the department of Front Office, Housekeeping, Food and Beverage, Sales and Marketing, and General Management. The average length of interviews was approximate one hour. All interviews were audio recorded, transcribed verbatim and analyzed following spiral analysis (Boeije, 2010). In this analytical activity, the researcher began with opening coding, data collection and proceeded with axial coding. Then there was another around of data collection. Finally, the researcher performed selective coding. The key findings of content analysis are presented in the following section.

### 3. Findings and discussions

#### 3.1 Sources of eWOM

This study identified four major categories of sources from which the respondents learned about eWOM related to their hotels, including: (1) review site and blog, (2) online travel agent site, (3) social media, and (4) reputation management system. Table 1 exhibits the specific sites under these four categories and the usage by the number of respondents.

**Table 1: EWOM channels monitored by the researched hotels in Hong Kong**

EWOM monitoring site and category	Usage by the number of respondents
<b>Review site and blog</b>	
TripAdvisor / daodao.com	13
OpenRice	3
Travel blogs	1
<b>Online travel agent site</b>	
Ctrip	6
Booking.com	1
Agoda	3
Quar.com	1
Travelocity (connected with TripAdvisor)	1

Expedia (connected with TripAdvisor)	3
<b>Social media</b>	
Facebook page of the hotel	6
<b>Reputation management system</b>	
Brand Karma	3
ReviewPro	1

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It was also found that their selection of eWOM channels associated with the function of a site, booking sources of a hotel and the functional areas of the respondents' work. TripAdvisor was the major channel that the vast majority of respondents used to learn about eWOM related to their hotels. Because of its world-wide popularity in many countries, TripAdvisor allows hotel managers to learn about feedback from international travelers through language translation, and more importantly, to make a management response to address guest concerns.

Booking sources of a hotel and the functional areas of the respondents' work were the other two determinants of eWOM channel selection. A respondent explained, "Ctrip, Agoda, Travelocity, and Expedia are our important booking sources. We, therefore, include these four sites as well as some other six sites in our service plan [of Brand Karma]." To particularly know the comments of local diners, respondents who worked in Food and Beverage department often monitored the reviews posted on OpenRice, a popular online platform in Hong Kong for searching different types of restaurants and bars with consumer reviews.

In the category of social media, the Facebook page of the hotel was the sole channel monitored by many respondents to learn about customer feedback. Nowadays, Facebook is becoming an important and convenient platform which not only connects hotels and their customers around the world but also helps to generate customer enquiries and business leads. Since the main function of social media was social networking, few customers used it to register complaints. A respondent expressed, "We seldom receive negative eWOM on social media sites because most of the people visit these sites are our fans or followers. What they often do is to comment on our posts. If guests have a bad experience, they will express their dissatisfaction in our comment cards...some will do on TripAdvisor."

A reputation management system collects electronic information of all kind regarding specific companies (e.g., product reviews and press reports) and periodically generates a market report which contains qualitative and quantitative data to help its service users to better monitor and manage their online company reputation. Brand Karma was one of the systems used by the researched hotels. There were pros and cons of using this service. The respondents commonly agreed that Brand Karma was an efficient and useful tool, which not only assembled customer comments from various e-channels but also showed the performance of competitions for benchmarking. However, such overview report cannot provide sufficient details of the context for complaint cases, and therefore, the hotel managers had difficulty to figure out the underlying reasons of customer dissatisfaction and took proper follow-up actions to service failures. Besides, some hotels concern its expensive service charge.

### *3.2 Frequency of monitoring eWOM sites*

The findings indicated that TripAdvisor was the eWOM channel which was most intensively checked by the respondents. Many of them visited this review site to learn about customer comments on their hotel services every day. For other eWOM channels (except reputation management systems), the monitoring frequency mainly ranged from “two to three days a week” to “once a week.” A respondent expressed that the frequency of site monitoring was related to the expected response time to customer feedback/enquiries set by the corporate office, and whether a site has the notification function for review posting. In a case where the response time was within 24 hours, all the e-channels used by that hotel would be constantly monitored. In addition, higher frequency of monitoring was required if the sites under surveillance would not send an alert of newly posted reviews to the representative of the researched hotel. Only one respondent stated that he reviewed and responded to eWOM twice a week. His department was short of manpower. He, therefore, had very limited time to check eWOM because of the heavy workload every day.

Although Brand Karma helped some hotels to assemble customer feedback from numerous electronic sources, the collected data would be presented in a monthly report which showed their overall performance and the performance of specific service dimensions over a period of time. To promptly react to eWOM, hotels had to monitor individual sites as frequently as they could. A respondent commented, “We will have a monthly meeting in the end of each month to review our performance and see what we can improve. But it is a bit late. Our staff, therefore, will visit the individual sites every day to monitor customer comments, print them out and debrief others at the morning briefings [of the following day].”

### *3.3 Strategies of management response in addressing negative eWOM*

A vast majority of respondents expressed the difficulty in harassing eWOM because customers had freedom to express their personal opinions and share this information on any electronic platform. They commonly agreed that taking preventive measure was the best and the most effective way to manage negative eWOM. Striving to provide quality services minimized the possibilities of service breakdowns and further prevented negative eWOM generation (Harrison-Walker, 2001). When interacting with guests, frontline employees should observe their subtle expressions of body languages (e.g. having a frown on face or speaking in a displeased tone). Early detection of customer dissatisfaction and solve the problem on spot is the last line of defense for negative eWOM generation.

Drawing on the analysis of interviews, the structure of a management response basically followed the pattern of a business letter, which comprises key elements of recipient name, opening, main body, conclusion, close, name of sender and his/her resignation (Taylor, 2004). Communication is an art, let alone virtual communicating with someone one has never met. Since thousands of potential customers may read the management responses posted online when selecting a hotel, crafting communicative messages requires hotel managers’ special attention.

In most online communities, the real names of eWOM generators were unknown. Guests, therefore, were addressed by their account names or the preferred names they registered with a particular review site. In the introduction, hotel managers thanked customers for providing feedback and/or expressed ‘regret’ for learning that the hotel experience did not meet their expectation. A respondent illustrated that the word ‘regret’ sounded more neutral. Using the word ‘sorry’ implied that a hotel admitted to making a mistake and might need to bear legal

responsibility. It was also suggested not to use the word ‘complaint’. Instead, respondents more often used the word ‘comments’ to refer to the negative reviews that they received.

The main body was to address the core matter at issue. Despite complainers often listed several problems in a negative review, a respondent commented that the reply should focus on and address the most serious one or two concerns. In the close part, hotel managers expressed their wish to see customers again in the future. More importantly, to defend company images, they stressed that such unpleasant experiences were ‘individual cases’ and assured to the customers that the hotel always provided quality services. The name of the general manager was indicated at the very end of the response to demonstrate the sincerity and care by senior management.

It was evident from the analysis that there were five basic principles for drafting a management response. First, in an online environment, apology should be cautiously used. A respondent stated, “Usually we won’t apologize to customers at once when receiving a negative message. Instead, we tell the customer that we will look into the matter and get back to him/her.” Second, it was unwise to argue with customers or blame them for mistakes even customers account for the problem. Third, the tone should be kept genuine and any words which deliver defensive messages should be avoided. A respondent stated, “...the priority of responding to these comments is trying to diffuse customer dissatisfaction and not let the problems escalate. Never use any strong or defensive wording!” Fourth, it was suggested using proper service language which matched with the branding of a hotel. Fifth, many respondents highly emphasized the importance of customizing a management response. A standard reply showed no respect to the involved customer and made other review readers perceived that the management response lacked genuineness.

#### **4. Conclusions and Future Research**

In the cyber world, customers are exposed to an environment which comprises commercial product information provided by the service providers as well as abounding personal opinions shared by peer customers. Some are compliments; whereas, some are critics. With the advancement of web function, hotels now have a choice to express their voices in response to online commentary or stay silent.

Litvin, Goldsmith, and Pang (2008) identified six types of channels where customers can generate eWOM. To learn about customer feedback associated with the company and its products, the interviewed hotel managers mainly use two types of them only, namely (1) blogs and virtual communities, and (2) websites, product review, and hate sites. More specifically, the three sites which are most commonly and frequently monitored in this study are TripAdvisor/daodao.com, Ctrip and Facebook page of a hotel. The analysis further uncovers that when selecting eWOM monitoring sites, hotel managers consider whether a site provides the function of management response, the major booking sources of the hotel, and the functional area of his/her work. TripAdvisor is one of the most popular product review sites where travelers around the world share and exchange personal experiences with their peer. From the perspective of service providers, this platform serves as a crucial source where hotel managers can review customer feedback, and get to know what customers like and dislike for future enhancement. This platform also provides hotels an opportunity to address customer comments. Such response function is especially important when customer comments are untrue, partial true or in the worst cases, are slander.

Because of the popularity and convenience of the Internet, more customers nowadays are comfortable with and enjoy ‘finger shopping’ (Morrison, 2010). Product information can be accessed anywhere and anytime customers like, and the completion of bookings and

transactions often takes a few minutes only. The valence of eWOM on the websites of online travel agents, such as Ctrip, Agoda and Expedia, is of great concern for hotels, especially those depending much on e-business because the experience sharing of previous customers exerts a powerful impact on the purchase behavior of future customers. Social media are an increasingly important tool which hotels use to connect and cultivate relationship with their customers. Because of such function and characteristics, Facebook is found to be one of the common eWOM monitoring sites but it should be noted that few customers express their dissatisfaction through this channel.

When drafting a management response addressing guest comments, the structure of a hotel reply comprised key elements of name of recipient, opening, main body, conclusion, close, name of sender and his/her resignation. To post such communicative messages in an online environment, hotel managers need to be particularly cautious about the wording they use. For example, it will be better to use the word “regret” instead of “apologize” to avoid affected and potential customers attribute the problem to hotel. In writing, it is also important to use proper service language which matches hotel brand and avoid standardized reply.

Numerous research studies eWOM from the perspective of customers and proves its powerful impact on the attitude and purchase behavior of customers. However, few of them explore the subject matter from the viewpoint of companies. Chen, Law and Yan (2016) discovered in the recent years more and more hotel adopt a more active approach in responding to eWOM. The findings of their research indicated many hotels publicly respond to both positive and negative eWOM. Some hotels prefer to privately contacting complainers, and only one takes no response. Chen, Yan and Law (2017) explored the evolutionary development of eWOM handling mechanism of hotels. To continuously advance knowledge in this research area, the current study investigate how management response perform as strategic communication to restore online company image. The merit of this qualitative research is to have an in-depth exploration of eWOM; nevertheless, the generalization of results is limited because of small sample size.

Nevertheless, the sample size is small, this qualitative study advances the knowledge of corporate response in the context of eWOM. Future studies may explore how the personality traits of consumers affect the eWOM motivations and eWOM behavior. The findings will provide hotel managers practical insights on how they can better interact with different types of eWOM generators. Another possible research direction is to empirically investigate how the intervention of management response influence hotel performance by examining customer comments and hotel rating.

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## **A cross-cultural study of tourists' perceptions on smart tourism applications and information search behavior**

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### **Abstract:**

This research aims to compare tourists' perception toward smart tourism applications (STAs) and behavioral intention in terms of region of residence and income level and assess the association between the tourists' information search and region of residence. A total of 6 out of 14 STAs and 3 out of 5 behavioral intention items are statistically significant based on the region of residence and income level. Moreover, an association was observed between the tourists' information search behavior and region of residence.

**Keywords:** Smart tourism applications (STAs), Behavioral intention, Information search, Region of residence, Income level

### **1. Introduction**

Many destinations have adapted various technological applications to facilitate the interaction of visitors by providing platforms through smart tourism applications (STAs) to exchange information instantly among stakeholders and increase the quality of experience for visitors. STAs include mobile devices, virtual reality applications, location-based services, and recommendation systems (da Costa Liberato, Alén-González, & de Azevedo Liberato, 2018). The use of smart systems can improve the visitors' experiences, encourage them to share their experiences, improve their overall satisfaction toward the destination, and predict and recommend potential experiences to them (da Costa Liberato, et al., 2018; Shafiee, Ghatari, Hasanzadeh, & Jahanyan, 2019). Tourists' characteristics (e.g., region of residence and income level) and their travel behavior (e.g., frequency and sources of information search) can influence the patterns of smart application usage. Chiang, King, and Nguyen (2012) addressed the relationship between culture and information search behaviors.

Therefore, this study aims to: 1) investigate tourists' perceptions on STAs and behavioral intention in terms of region of residence and income level, and 2) explore whether information search can shape tourists' perceived experience during their visit as they learn more about the destination.

## **2. Literature Review**

### *2.1 Smart tourism applications (STAs)*

STAs refer to technological tools that facilitate interactions between the tourists and the destination. Focusing on the consumer can illuminate their motivations and preferences toward smart tourism, such as their preferences regarding STAs, smart tourism destinations, and experiences (Mehraliyev, Chan, Choi, Koseoglu, & Law, 2020). Identifying tourist preferences is crucial because these ICTs influence tourist behavior and destination choice, which would indicate the shift for public and private sectors to adapt accordingly (Ghaderi, Hatamifar, & Henderson, 2018). Smart destination refers to where intelligence guides economic growth and increases quality of life through smart systems (Shafiee, et al., 2019).

### *2.2 Region of residence*

Culture is important and has been discussed widely in many studies on tourism (Matzler, Strobl, Stokburger-Sauer, Bobovnick, & Bauer, 2016; Quintal, Lee, & Soutar, 2010). Investigating the impact of culture on tourists' satisfaction and behavior is important because aspects of cultural dimension can influence tourists' behavioral intention as delineated by nationality (Quintal et al., 2010). As such, in the context of smart tourism, researchers have also discussed the relationship between culture and STAs perceptions and behavioral intentions to use STAs. Visitors of different backgrounds may perceive ease of use; usefulness; and enjoyment of STAs, such as augmented reality to varying degrees caused by cultural dimensions (e.g., power distance and uncertainty avoidance) (Jung, Lee, Chung, tom Dieck, 2018).

### *2.3 Income level*

Income is a key socio-demographic factor that influences tourist behavior (Peterson, 2007). Studies have also found that individual income affects the decision-making process of choosing a destination (Djeri et al., 2014) as well as information search behavior prior to travel, such as the choice to utilize Internet sources versus other sources like word-of-mouth or travel agents (Luo, Feng, & Cai, 2004; Djeri et al., 2014).

### *2.4 Information search*

Information search is a part of the trip process that may occur in different forms depending on the visitor's cultural background. Internal information search depends on previous personal experiences, whereas external information search involves outside sources, such as online resources and past experiences of other travelers. In the past, culture influences travel information search behavior significantly (Chiang et al., 2012).

## **3. Methodology**

The self-administered questionnaire was developed on the basis of the study of Papadimitriou, Apostolopoulou, and Kaplanidou (2015) and Wang, Li, and Li (2013) by using a 7 Likert-type scale from 1 – strongly disagree to 7 – strongly agree. Demographic characteristics, such as age, gender, and region of residence, were asked using close-ended questions. Various quantitative data analyses were applied to test the research objectives. Descriptive analysis was used to explore the demographic characteristics of visitors. MANOVA test was utilized to

investigate any differences between STAs and behavioral intention in terms of the region of residence and income level. Lastly, chi-square test was used to assess any associations between information search and the region of residence. A convenience sampling approach was conducted on international tourists at major attractions in Hong Kong during June – October 2019. Respondents were enlisted to voluntarily participate in the study survey in Hong Kong, of which 1,459 responses were accepted.

## 4. Results

### 4.1 Profile of the respondents

Respondent characteristics are presented in Table 1. Out of the 1,459 respondents, 46.1% (n = 673) were male and 53.9% (n = 786) were female. A total of 48.0% of the respondents were between 18 to 30 years old, 37.6% were between 31 and 45 years old, and 14.5% were 46 years old or above. In terms of region of residence, 67.4% of respondents resided in the Asian region, and 32.6% of respondents lived in the Western region. For monthly income, 31.6% of respondents earned more than US\$4,001 and 46.6% earned between US\$2,000-4,000.

**Table 1:** Respondent characteristics

Item	N	%
Gender		
Male	673	46.1
Female	786	53.9
Age		
18-30 years old	700	48.0
31-45 years old	548	37.6
46 years old and above	211	14.5
Residence		
Asian region	983	67.4
Western region	476	32.6
Income (per month)		
< US\$2,000	318	21.8
US\$2,000 – 4,000	680	46.6
US\$4,001 and above	461	31.6

### 4.2 Perceptions of STAs and behavioral intention by region of residence and income level

MANOVA test is applied to figure out the answers. Among the 14 items of STAs, 6 items are significant. Perceived effectiveness of E-tour map ( $F$ -value = 6.59,  $p < 0.01$ ) was the most significant. Moreover, kiosk bookings (e.g., airline check-in) ( $F$ -value = 4.55,  $p < 0.05$ ); mobile apps ( $F$ -value = 3.82,  $p < 0.05$ ); sight-seeing tools, such as personal-itinerary design ( $F$ -value = 3.54,  $p < 0.05$ ); E-tourism-recommendation system ( $F$ -value = 3.38,  $p < 0.05$ ); and free Wi-Fi ( $F$ -value = 3.24,  $p < 0.05$ ) are statistically different in terms of region of residence and income level.

Among the five items of behavioral intention, three items differ in terms of statistical significance. “I will encourage friends to travel Hong Kong” ( $F$ -value = 5.43,  $p < 0.01$ ), “I will recommend to others the places in Hong Kong” ( $F$ -value = 5.34,  $p < 0.01$ ), and “I will say positive things of Hong Kong” ( $F$ -value = 4.02,  $p < 0.05$ ) are significantly different in terms of region of residence and income level.

#### *4.3 Region of residence and information search priority*

Chi-square test was conducted to assess the prioritized association relationship between information search and region of residence. The region of residence of the participant was significantly related to all information search categories. The categories of shopping/retail shops ( $F$ -value = 29.39,  $p < 0.01$ ), directions/Google maps ( $F$ -value = 12.82,  $p < 0.01$ ), and food/what to eat ( $F$ -value = 12.23,  $p < 0.01$ ) were especially significant. Meanwhile, transportation schedule ( $F$ -value = 6.44,  $p < 0.05$ ) and attractions and tourist sports ( $F$ -value = 6.11,  $p < 0.05$ ) were associated with tourists’ regions of residence.

## **5. Discussion and Conclusion**

### *5.1 Discussion and implications*

This study aims to compare the tourists’ perception toward STAs and behavioral intention in terms of the region of residence and income level and assess the association between the tourists’ information search and region of residence. Westerners in the middle-income group of US\$2,000–4,000 consistently ranked perceived effectiveness of the STAs, free Wi-Fi, mobile apps, personal-itinerary design, E-tourism recommendation system, E-tour map, and kiosk bookings the most favorable, whereas lower and higher income Westerners displayed the least agreement to perceived effectiveness of these STAs. Wi-Fi availability and quality are particularly important to tourists, especially in airports and hotels. These findings are in line with previous studies that noted the importance of Internet availability and widespread usage of STAs to establish interactivity among stakeholders in a tourism ecosystem and enable tourists to co-create their experiences (da Costa Liberato et al., 2018; Shafiee et al., 2019).

Perceptions and information search behavior regarding transportation and food are also aspects of the experience that can be shaped by culture. For a certain segment of travelers, transportation can be a priority. Chen and Gursoy (2001) noted the significant influence of convenient transportation and safety on destination loyalty, suggesting that quality and ease of transportation were crucial elements to the tourist’s experience. For Hong Kong, the local culinary scene is key to its tourism industry. Kivela and Crofts (2005) found that almost a quarter of their study sample traveled to Hong Kong mainly for food. Tourists who traveled for gastronomical experiences tend to travel from Taiwan, Singapore, and Japan rather than in Europe or North America. The researchers concluded that Hong Kong was a regional rather than an international gastronomy destination, thereby reflecting the relationship between the residence and information search priority in this study. Björk and Kauppinen-Räsänen (2015) also found that regardless of whether a tourist was traveling primarily for food, he will engage in information search regarding food but only to varying extents and sources.

Managerial implications are also introduced. Initially, the government bodies and destination marketing organizations can explore tourist segments based on the demographic profiles of their region of residence and income level and their travel behavior to develop advanced smart technologies to respond to their needs. In addition, the tourism contents of map and attractions should be accurate and updated to enhance the tourists’ travel experiences. Tourists’ behaviors

will change after the COVID-19 pandemic. STAs can facilitate the new normal of travel patterns and tourists' needs such as using e-tour mapping with travel flow can be introduced so that tourists can avoid traveling there due to crowdedness. The availability of Koisk booking counters can reduce the socially physical contact between the tourists and tourism providers.

### *5.2 Limitations of this study and suggestions for future study*

Several limitations are stated as follows. Respondents in this study were categorized into residence within the Asian or Western region. Future studies could focus on specific countries or cultures to niche specific tourist segmentation. Convenience sampling approach was applied, thereby possibly restricting the result generalization. Different sampling techniques can be considered to improve the findings and reduce data bias and errors.

### **Funding details**

This work was supported by the Research Grants Council of the Hong Kong Special Administrative Region, China under Grant Project No. UGC/FDS24/B02/18.

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## **Challenge stressors versus hindrance stressors: A daily diary study of hotel employees**

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### **Abstract:**

Employees' hindrance stressors and challenge stressors have received increasing attention in hospitality management as both stressors are found to influence many organizational outcomes, such as work engagement, turnover intention, job performance, and organizational commitment (Kang & Jang, 2019; Karatepe et al., 2014). Despite most of the previous studies confirming the results of Cavanaugh et al. (2000), how employees assess challenge stressors needs to be further investigated. Different from what the challenge stressors and hindrance stressors framework proposes, Kang and Jang (2019) found that a high workload is viewed as a hindrance stressor, but not as a challenge stressor from the hotel employees' perspective. Employees in the hospitality industry experience extremely stressful situations daily because of repetitive tasks, longer working hours, and shift work (Pienaar & Willemse, 2008). As the hospitality industry is defined as a guest-focused industry, employees in this industry experience more accentuated stressors than employees from other industries (Zohar, 1994). Hence, we propose to use a daily diary approach to study the influences of hindrance stressors and challenge stressors. We investigate if and how challenge stressors and hindrance stressors influence job satisfaction and work engagement daily. Meanwhile, we consider the daily moderating effects of coworker support.

Participants were 65 full-time employees who were hourly paid full-time employees who were working in the guest-facing positions in food and beverage and front office departments in full-service hotels and luxury hotels in the United States. Such a sample was chosen as employees who are in guest-facing positions are more likely to experience fluctuations in job demands (e.g., dealing with various guest issues within a day) and job resources (e.g., working with different coworkers daily). Experience sampling methodology (ESM) was used to ask participants to complete one survey a day for a minimum of 5 workdays (defined based on their work schedules).

The results supported that both daily challenge and hindrance stressors are negatively associated with daily job satisfaction. We found that daily challenge stressors have a positive influence on daily work engagement. The daily relationship between hindrance stressors and work engagement was not found. Different from most of the previous studies that found challenge stressors have motivating effects (Cavanaugh et al., 2000; Tadić Vujčić et al., 2017; Rodell & Judge, 2009), this study shows that the influences of challenge stressors should be viewed differently depending on if the outcome has an affective or emotional component. We found that although daily challenge stressors increase hospitality employees' immediate work engagement, they have a negative influence on their momentary job satisfaction. Daily coworker support was found to moderate the relationship between hindrance stressors and job satisfaction, such that the negative relationship only exists on the days when employees perceive low coworker support.

Our study contributes to the literature in several ways. First, combining affective events theory (AET) (Weiss & Cropanzano, 1996) and the challenge stressors and hindrance stressors framework (Cavanaugh et al, 2000), we propose that hotel frontline employees' challenge stressors and hindrance stressors could vary on a daily basis. Further, responding to the call for future research from Yu et al. (2020) and Kang and Jang (2019), we used a within-person approach to investigate the work stressors – job satisfaction and work engagement relationships because both studies suggest that hotel employees' emotions, attitudes, and behaviors change frequently. Lastly, we further suggest that although there is no consensus regarding how employees assess challenge or hindrance stressors, the nature of the industry and nature (e.g., affective oriented, behavioral oriented) of the outcome variable needs to be considered.

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## **Dining in the sharing economy: A comparison between private social dining and restaurant**

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### **Abstract:**

This study compared dining experiences in private social dining and restaurants. A theoretically derived model was empirically tested using data from 840 diners across four sample groups. Structural equation modeling and multigroup analysis revealed significant differences among the four sample groups in the mechanism through which the dining experience influences diners' psychological and behavioral responses. These findings present a novel angle on experiential consumption in the sharing economy and provide practical implications for catering businesses.

**Keywords:** private social dining, sharing economy, experience economy, dining experience, word-of-mouth

### **1. Introduction**

The most prominent framework of the experience economy is from Pine and Gilmore (1998), who suggest four experiential dimensions: entertainment, educational, esthetic, and escapist. This study on dining experience was motivated by two main research gaps. First, the literature fails to incorporate the concept of experience economy into dining activities (Hussein, 2018) because dining experience has usually been considered as a part of the experience (Loureiro, 2014; Hosany & Witham, 2010). This approach fails to reflect de Albeniz's (2018) contention that dining experience does not describe the way diners eat, but the way that diners experience eating.

Second, the sharing economy contains a unique experiential value proposition to transform how dining experience is staged (Oskam & Boswijk, 2016). In the food and beverage industry, private social dining emerges as one of the biggest trends in the global hospitality industry. It is a food-sharing service allowing diners to enjoy a meal with locals in the local's private home. Lin and Au (2019) proposed six additional dining experiential domains, namely, authenticity, culinary, relationship, unrestrained, adventure and personalization, on top of Pine and Gilmore's four original domains to reflect the unique experiential value proposition of private social dining.

### **2. Literature Review**

While accommodation-sharing service was found to outperform hotels in staging experience (Mody et al., 2017), Lin and Au (2019) doubted whether it holds true in private social dining.

Diners would all be satisfied with a good dining experience, but not all types of dining experience are equally attractive (Getz et al., 2014). Hence, the present study adopts the stimuli-organism-response (SOR) model to (1) investigate the dimensionality of the dining experience, (2) explore the differences between private social dining and conventional restaurant dining in terms of the guest experience, and (3) investigate how diners respond to the dining experience.

The SOR model is a theory from environmental psychology that describes an individual’s reactions to their environment (Turley & Milliman, 2000). This model consists of three elements—stimulus, organism, and response—to explain how environmental factors influence an individual’s attitudinal and behavioral responses. This model was adopted to hypothesize that the ten experiential domains (i.e., stimulus) trigger diners’ arousal and memorability (i.e., organism) to influence their willingness to spread word-of-mouth (i.e., response) because Cao et al. (2019) suggested that dining activities go beyond food consumption to encompass environmental input.

### 3. Methodology

We used a cross-sectional online survey for data collection purposes. The sampling frame for this study consisted of diners who have at least one dining experience in either restaurant or private social dining event in the last twenty-four months. Participants were then assigned to a 2 (the type of diners: local vs. overseas) x 2 (the type of dining experiences: private social dining vs. conventional restaurant dining) design (Figure 1). The local and overseas perspectives were taken into account because the target markets of private social dining have recently enlarged from overseas tourists to local inhabitants (Price, 2016). Ketter (2019) believed that overseas and local diners are differently motivated to consume private social dining.

	Private social diners	Conventional restaurant diners
Local diners	<p><b>Group 1</b> (n=184) Hong Kong residents who have private social dining experience in Hong Kong</p>	<p><b>Group 2</b> (n=200) Hong Kong residents who have conventional restaurant dining experience in Hong Kong</p>
Non-local diners	<p><b>Group 3</b> (n=222) non-Hong Kong travelers who have overseas private social dining experience</p>	<p><b>Group 4</b> (n=234) non-Hong Kong travelers who have overseas conventional restaurant dining experience</p>

Figure 1. Final sample

Screening questions were presented before the start of the survey to ensure that all respondents were eligible to participate and belonged to one of the four target groups. Respondents were asked about their private social dining experience before their restaurant dining experience because private social dining was less popular than restaurant dining. This approach ensured

that Groups 1 and 3 constituted a representative sample. The online self-administrated survey contains 62 questions. All questions were asked using seven-point bipolar Likert scales anchored with “strongly disagree” to “strongly agree” to measure the ten dining experiential domains, arousal, memorability, and diners’ willingness to spread positive word-of-mouth and electronic word-of-mouth. Prior to actual data collection, the survey was piloted with 20 Hong Kong residents and 12 overseas travelers. The final sample consisted 840 valid responses after adopting three criteria to eliminate invalid responses: those completed within less than two min, those with a relatively low standard deviation (i.e.,  $<0.25$ ), and those fell into the trap question (i.e., If you are reading this statement, please select “Strongly Disagree”) (Figure 2).

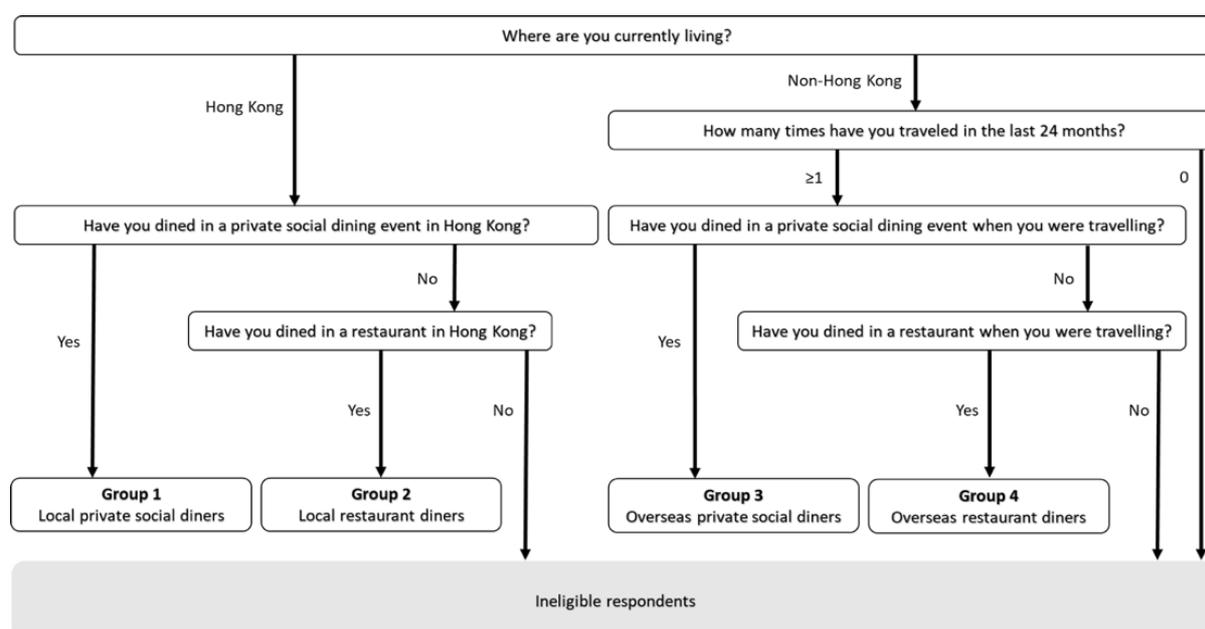


Figure 2. Group assignment

#### 4. Results

One-way ANOVA analysis and Chi-square tests revealed three significant general differences: compared with restaurant diners, private social diners were (1) mainly men, (2) highly educated, and (3) earned a higher income. While the gender difference seems to challenge the male-agentic and female-communal relationships, it supports Prayag et al.’s (2019) finding that male diners expect a closer relationship with the restaurant than female diners. The high safety risks in private social dining also obstruct female diners from consuming because females were found to have higher safety concerns in the sharing economy (Lee, 2016).

Confirmatory factor analysis on SmartPLS 3 validates the ten-dimensional conceptualization of dining experience proposed by Lin and Au (2019). The result of PLS-SEM modelling is presented in Figure 3. Multiple-group t-test and permutation tests suggested that the composition of the dining experience significantly varied across the four sample groups. An unrestrained experience is the distinct characteristic of private social dining. Perceived cultural distance explained why private social diners value entertainment, escapism, and relationship with companions more when they are dining in their home country. The mediating role of

memorability between dining experience and diners' behavioral responses was found significantly weaker in the local settings, suggesting that sharing food-related elements at a destination with others were always a high point of travel experience.

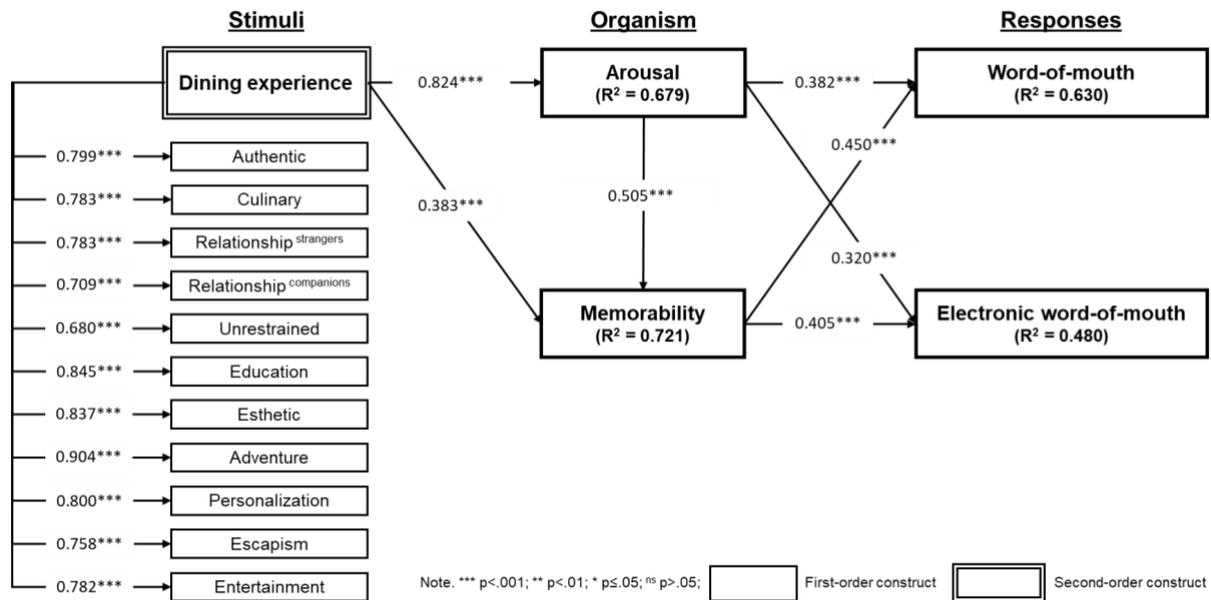


Figure 3. Result of a structural equation modeling

## 5. Discussion and Conclusion

Theoretically, amid the conceptualization of experience economy, the expansion of Pine and Gilmore's (1998) four experiential domains is timely needed (Walls et al., 2011), especially when the sharing economy contains a unique experiential value proposition to redefine the guest experience in the hospitality industry (Oskam & Boswijk, 2016). This study serves as a pioneering attempt to incorporate experience economy into the sharing economy by focusing on the dining experience in private social dining. The comparisons between private social and conventional restaurant dining experience, as well as between local and overseas diners, provide new insights on the competitive relationship between sharing economy businesses and conventional businesses.

Practically, the investigation on dining experiences allows catering operators to stage dining experience through understanding the intricate linkages between experimental domains and diners' psychological and behavioral responses. The findings help restaurateurs to be proactive and expansive in designing compelling dining experiences that go beyond dining satisfaction and the experimental dimensions originally suggested by Pine and Gilmore. This study also benefits destination marketers by demonstrating ways of differentiating private social dining events and conventional restaurants to diversify the catering offerings in a destination.

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## **The effect of perceived error stability and relationship norm on consumers reaction towards data breach**

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### **Abstract:**

This research aims to investigate the impact of perceived error stability on hotel guests' attitudes and behavioural intentions. A 2 (Error stability: high vs. low) x2 (Relationship norms: high vs. low) experiment was conducted. Results indicated that consumers show a higher likelihood to spread positive word-of-mouth towards a hotel that they have a communal relationship with. No such difference was observed when a company is under exchange relationship norm.

**Keywords:** Data breach, Error stability, Relationship norms, Consumer reactions

### **1. Introduction**

The past a few years have witnessed a growing number of data breaches reported by multiple hotel companies such as Choice Hotels, with the latest victim being Marriott. In 2018, Marriott International announced that a breach of its Starwood guest reservation database exposed the personal information of up to 500 million people. Information such as guests' names, addresses, travel dates, and passport numbers were accessed by hackers. It's been more than a year since Marriott began the investigation. Yet it seems that the company is still uncertain of the cause of the breach. Conversely, another major breach, the Equifax data breach, was publicly announced in September 7th, 2017. By mid-September, the company revealed the cause of its massive breach and stated that criminals exploited the vulnerability of a website application. A series of interesting questions arise: how important is it for companies to quickly identify and fix errors? How does it impact consumers' behaviors? Are there any boundary conditions on such an effect? The current research sets out to answer these questions.

### **2. Literature Review**

Data breach is a type of online service failure (Goode et al., 2017). It can be considered as a violation of trust, and can affect consumer perception of service quality in the long term (Malhotra & Malhotra, 2011). When a service failure arises, customers are motivated to search for the cause of the problems/failures. Weiner (1979) categorizes the cause of failures into three dimensions: locus of control, stability, and controllability. The present study focuses on stability as the underlying psychological mechanism explaining the effect of data breach resolutions on consumers' perceptions and evaluations. Stability is related to uncertainty and

it concerns the perception that whether a service failure is either temporary or persistent, which influences customers' future expectations of similar events (Oliver, 1997). In the context of a data breach, if the company can quickly identify the cause and devote resources to resolve the issue (i.e. low error stability), consumers will perceive it as a one-time incident and be more willing to forgive the firm. On the other hand, if the cause of data breach is not identified and the problem is not fixed (i.e. high error stability), consumers may assume that they will likely to experience similar events in the future, and consequently, discontinue to purchase from the company (Goode et al., 2017). However, we argue that such an impact of error stability on consumers is moderated by relationship norms.

According to Heide and Wathne's (2006) framework, there are two types of relationship roles in the market – friend type and businessperson type. People make decisions differently based on relationship norms. When dealing with friends, people use logic of appropriateness, whereas when dealing with businessperson, people make decision guided by utility-maximizing considerations under logic of consequences (Heide and Wathne, 2006). Communal relationships are usually based on friendship while exchange relationships are regarded as impersonal (Wan et al., 2011). Prior research suggest that strong relationships magnify the consumers' negative responses to the failure and heightened their expectation of recovery efforts (Pizzutti dos Santos & Basso, 2012). As such, high error stability would lead to more negative consequences. In contrast, for exchange relationship norm, consumers tend to see service failures merely as unfilled business contracts and react less negatively when errors cannot be fixed. When companies are able to quickly detect and fixed the errors, consumers will simply perceive that their exchange partners fulfilled their obligations, which does not necessarily lead to a more positive evaluation of the firm (Tsai et al., 2014). Thus, consumers' intentions to spread positive word-of-mouth would be similar regardless of relationship norms.

As such, we formulate H1 and H2 as follows:

*H1. When communal norms are salient, consumers will be more likely to spread positive word-of-mouth in the condition of low (vs. high) error stability.*

*H2. When exchange norms are salient, consumers' likelihood to spread positive word-of-mouth will be similar regardless of the condition of error stability.*

### **3. Methodology**

A scenario-based experiment with a 2 (Error Stability: high vs. low) x 2 (Relationship Norms: exchange vs. communal) design was employed to test the hypotheses. The manipulation of relationship norms was adapted from Aggarwal (2004) whereas the manipulation of error stability was adapted from Wei et al. (2017). Two hundred and fifteen adult participants were recruited from Amazon Mechanical Turk. Participants' intention to spread positive WOM was measured as our DV (adopted from Wei et al., 2017; Cronbach's  $\alpha = .929$ ). Perceived severity of the data breach was measured as a covariate (adapted from Wei et al., 2017; Cronbach's  $\alpha = .880$ ). All items were measured on a 7 points Likert scale. Manipulation checks on Error Stability and Relationship Norms were performed. Results indicated that our manipulations were successful.

#### 4. Results

An ANCOVA analysis was conducted and the results indicated that there is a significant interaction effect of Relationship Norms and Errors Stability on participants' intention to spread positive WOM ( $F = 3.95, p < .05$ ). Planned contrasts showed that for those participants in the Communal condition, low Error Stability (vs. high) led to a more positive effect on their WOM intentions ( $M_{\text{high}} = 4.92, M_{\text{low}} = 5.78, t = 3.73, p < .001$ ). For the ones in the Exchange condition, the difference between low Error Stability and high Error Stability was not significant ( $M_{\text{high}} = 5.04, M_{\text{low}} = 5.18, t = .55, p = .58$ ).

#### 5. Discussion and Conclusion

Findings of this study demonstrated that when guests perceive themselves in a Communal relationship with a hotel, low error stability (vs. high) had a more positive effect on their positive WOM intention, whereas when guests perceive themselves in an Exchange relationship with a hotel, error stability had no significant impact on their intention to spread positive word-of-mouth post the hotel's reaction to a data breach. This finding brought up an interesting insight. For guests in a Communal relationship with a hotel, they likely perceive themselves as one of a collective group built upon friendship (Wan et al., 2011), thus holding a higher expectation for what they receive, following the logic of appropriateness as coined by Heide and Wathne (2006). In the event of a data breach, these guests may place more weights on how properly the hotel would handle it. For guests in an Exchange relationship with a hotel, they tend to perceive the hotel as a businessperson and are less emotionally engaged because such exchange relationships are impersonal according to Wan et al. (2011). In the event of a data breach, these guests may express more understanding from a business perspective because their decision making is guided by utility-maximizing considerations under logic of consequences (Heide & Wathne, 2006). How the hotel reacts to the data breach makes no difference in people's likelihood to spread positive word-of-mouth because what has been damaged has already been done; the consequences are still. Taken together, these findings offered empirical support that the reasoning of "people make decisions differently based on the relationship norms" is also applicable to a consumer-business context post a service error.

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## **In the post COVID-19 era, will Chinese outbound tourists still luxuriously buy or consume rationally?**

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### **Abstract:**

Although the huge spending power of Chinese outbound tourists has attracted attention worldwide, it is still worth exploring whether this trend of luxury buying will continue in the post COVID-19 era. This study finds that rational consumption will become the choice of most outbound tourists after the epidemic. The establishment of mental account will be helpful for rational consumption, but “crazy” or rational consumption is also affected by income level, travel companion, construction style, perceived value, etc.

**Keywords:** Chinese outbound tourists, Tourist consumption, Luxury shopping

### **1. Introduction**

Since the opening of outbound tourism, China has developed rapidly in this market. Now days, travel outbound is no longer the privilege of a minority of Chinese people. Since 2013, the number of outbound tourists in China has been steadily ranked first in the world, and the outbound tourism expenditure also ranked first in the world in 2014. The increasing popularity of outbound tourism has failed to alleviate the phenomenon of high consumption. Although the "crazy buying" behavior of Chinese tourists has caused widespread concern, it is difficult to explain the mechanism behind the phenomenon only focusing on the rapid growth of tourists' luxury consumption and disposable income (Zhang, Zhou & Luo, 2018). The outbreak of the COVID-19 in 2020 has hit the global tourism industry severely. Restricted by the epidemic prevention and control measures in China and other countries, China's outbound tourism and expenditure have been significantly reduced. In the post-epidemic era, whether China's outbound tourists' consumption will continue to maintain the momentum of "luxury buying" or tend to be rational spending, this study will introduce the mental accounting theory to survey and analyze.

### **2. Literature Review**

Shopping is an important tourism activity and an essential part of the travel experience (Kozak, & Metin, 2016). On the other hand, shopping has been the main purpose of tourism, and shopping tourism is a unique form of tourism (Choi, Heo, & Law, 2016). Shopping accounts for a large proportion of tourist spending (Lloyd et al., 2011). For example, in Hong Kong, tourists may spend more than 50% of their budget buying (Law & Au, 2000), and their shopping expenses are related to their socio demographic characteristics and tourism attributes.

Chinese tourists with a brand complex are known for their super "purchasing power" and pursuit of luxury products (Xu & McGehee, 2011). Chinese citizens' overseas consumption behavior is prominently manifested as intensive shopping and lack of rational consumption

concepts (Feng, 2006). Income gap, institutional factors (Li & Chen, 2011), economic reasons, poverty complex, lack of spiritual beliefs, and unusual situations of outbound tourism (Wang & Qi, 2006) have led to the emergence of high overseas consumption of Chinese tourists, resulting in conspicuous consumption. Liu Junqing and Li Wen (2011) believe that high overseas consumption is dominated by the high-level domestic tourist consumer groups in China. As the degree of openness increases, this irrational consumption will naturally disappear.

Thaler (1985) believes that in addition to accounting accounts, people also have a mental account system that is completely different from the calculation rules of accounting accounts. Bounded rational people use it to simplify their financial decisions. Mental accounts regulate people's consumption behavior through mental budget (Heath, Chip, Soll, Jack & B, 1996), and people will set corresponding budgets for different consumption. When people enter the buying decision stage, they will open a mental account and close it after completing the consumption (Thaler, 2008). This provides a theoretical basis for the classification analysis of tourists' consumption mental accounts in overseas tourism activities.

### 3. Methodology

This study predicts the consumption trends of outbound tourists in the post COVID-19 era through in-depth interviews with mainland Chinese outbound tourists. The respondents were selected according to the demographic characteristics, including those who have outbound tourism experience and those who have not (but have plans for) outbound tourism until the data was saturated, and the interview data was coded using NVivo 11 software.

### 4. Results

Most respondents stated that in the post COVID-19 era, they would set up mental accounts for themselves and tend to consume rationally in their outbound travel, but this is affected by income level, travel companion, construction style and value perception, and the consumption mental account of the first outbound tourists is different with the tourists who have had outbound tourism experience.

### 5. Discussion and Conclusion

This study is to explore China outbound tourists' consumption style based on mental account theory, which is a new research perspective, provides more targeted suggestions for the marketing and management of China outbound tourism. However, mental accounts may not reflect the impulsive consumption of tourists. In the future, more studies may be needed to pay attention to the craziness and rationality of Chinese outbound tourists' consumption.

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## **The effect of aesthetics on customers' behavioral intentions in restaurants**

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### **Abstract:**

The power of aesthetics in a restaurant is crucial in the experience economy and was rarely discussed in the previous study. This study explores the effect of aesthetics on customers' behavioral intentions in restaurants through Stimulus-Organism-Response (SOR) model with 125 valid responses and PLS\_SEM technique. The result found that aesthetics can strongly affect the customers' aesthetic emotion- pleasantness and then affect their behavioral intention. Further details are discussed in the articles.

**Keywords:** aesthetics, aesthetic emotion, everyday aesthetics, Stimulus-Organism-Response (SOR) model

### **1. Introduction**

After the experience economy launched by Pine II and Gilmore (2011), experience has become a crucial strategy for most of the organizations. One of the four realms for experience and also is well-known for being emphasized to the contemporary customers is aesthetics (Kalnins & Stroock, 2011; Reimann, Zaichkowsky, Neuhaus, Bender, & Weber, 2010; Rozendaal & Schifferstein, 2010). Oh, Fiore, & Jeoung (2007) mentioned that only the aesthetic dimension could significantly influence customers' memory that is one of the most crucial consequences that practitioners should concern. Especially, while the aesthetics started integrating into daily life, the dining behavior became like an art behavior (Saito, 2010).

When we discuss aesthetics, not only the object but also the subjects should be considered. Restaurant stimuli encompass both tangible and intangible elements, such as service (Jang & Namkung, 2009), and those may influence customers' emotions, such as pleasure (Ladhari, Brun, & Morales, 2008; Loureiro, Almeida, & Rita, 2013). Blijlevens et al. (2017) note that aesthetic pleasure/ pleasant is crucial for the subjects. Jang and Namkung (2009) raised the influence of the perceived qualities in restaurants on emotions and behavioral intentions and with the Stimulus-Organism-Response (SOR) model (Mehrabian & Russell, 1974). Although the previous study started to notice that the stimulations are essential for customers; however, rare previous studies adopted an aesthetic perspective that considers not only the objects but also the subjects and should be considered as a crucial element for the era of the experience economy.

SOR model mentioned that the stimulation of environments could affect individuals' inner reactions and behavior furtherly (Mehrabian & Russell, 1974). The process that the stimulus variables affect the organism (O) and, in turn, carry the inner influences in the response (R) is to the restaurant. Moreover, one of the environmental descriptions is pleasant that echoes one of the most common feelings after aesthetic stimulation (Rozendaal & Schifferstein, 2010). In addition, using an organism that developed for the aesthetic aspect may be more appropriate

for this study. The pleasantness scale developed for aesthetics (Rozendaal & Schifferstein, 2010), especially for the organism section. Finally, the individual's organism affects the behavioral response (Donovan & Rossiter, 1982). Previous studies mentioned that pleasantness produces a response, such as behavioral intention and willingness to pay more (Dedeoglu et al., 2018; Lin, 2016). And, behavioral intentions is one of the most frequent consequence that be used in the experience-related study (Tsai, Hsu, & Chen, 2020). Therefore, based on the SOR model, the authors assumed two hypotheses as below:

H1: Aesthetic stimulations significantly affects pleasantness.

H2: Pleasantness significantly affects behavioral intentions.

## 2. Methodology

The study adopted a purposive sampling and recruited the research participants from the online Taiwanese forums and online clusters with the titles that emphasized in gourmet, food and beverage, and Michelin. The instrument that the researchers adopted includes four sections. First, the aesthetic stimulations that include four dimensions, environment, food and beverage, employee, customer, and 24 items (Horng & Hsu, 2019). The second variable- pleasantness has seven sub-dimensions, sociality, aesthetics, comfort, agency, association, vitality, and progression with 24 items (Rozendaal & Schifferstein, 2010). The last variable is the behavioral intentions that have three items (Cronin, Brady, & Hult, 2000). The Cronbach's  $\alpha$  values from .88 to .96. A 7-point Likert scale ranging from 1 "strongly disagree" to 7 "strongly agree" was adopted for research participants to rate in the study. Finally, demographics were asked, including gender, age, and educational status.

This study adopted the Partial Least Square SEM (PLS-SEM) launched by Wold (1975) originally is one kind of technic of SEM that the basis is component-based. The analyzed goal of the technic is to identify the key driver in a model (Hair, Ringle, & Sarstedt, 2011). The number of participants in this study achieved a sufficient level for the PLS\_SEM (Marcoulides & Saunders, 2006); therefore, this study used utilized the SmartPLS software v3.2.9 to analyze the data.

## 3. Results

The authors received 125 (98%) valid responses. The demographic results showed about 70% of participants were female; around 88% of participants have degrees above college; 45% were between 21 to 30 years old, and 22% were between 41 to 30 years old.

Composite reliability (CR) values of aesthetic stimulation, pleasantness, and behavioral intentions are .92, .96, and .97 respectively; AVE values of the three variables are between .74-.93 (Cohen, 1988); and both of the indexes of model fits that include SRMR (0.066), and NFI (0.902). The result shows the model has good reliability and validity and good model fit and explanation power (Hu & Bentler, 1998; Lohmöller, 2013).

The result of the path coefficients presents in table 1. The aesthetic stimulations positively affect pleasantness ( $\beta=.83$ ,  $p<0.001$ ) that supported hypothesis 1. Furthermore, pleasantness positively affects behavioral intentions ( $\beta=.58$ ,  $p<0.001$ ) supported hypothesis 2. As shown in Fig. 1, aesthetic stimulations can explain 69% of the pleasantness. Also, 33% of behavioral intentions can be explained by aesthetic stimulations, and pleasantness and these results present a sound effect (Chin, 1998).

Table 1. The results of hypothesis

Hypothesis path	Coefficient	t-values	Result
H1: ASàPL	.76	16.68***	Supported
H2: PLàBI	.55	10.48***	Supported

$p^{***} < .001$ ; AS: Aesthetic Stimulations; PL: Pleasantness; BI: Behavioural Intentions



Figure 1. The result of the research model

#### 4. Discussion and Conclusion

According to the findings, the study indicates that aesthetics can positively and strongly affect the customers' pleasantness and then affect their behavioral intentions with the SOR model. The study utilized the more precise aesthetic emotion-pleasantness as the organism to evaluate the aesthetic stimulation that fixed the gap of the previous studies. Moreover, the practitioners should pay more attention to the holistic elements in a restaurant that delivers information to customers' entire senses and then triggers their emotion and intention.

Future studies can be suggested to explore more variables under the organism section to understand the power of aesthetic stimulations, such as cognitive or experience aspects. Moreover, the responses step still open for more variables to explore the outcome after the process of aesthetic effect in a restaurant.

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## **Food waste in vegetarian restaurant: An exploration of consumer perceptions in China**

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### **Abstract:**

Previous studies usually take restaurant consumers as a whole to study food waste, however, different consumer groups have different consumption characteristics. Culture and environment can make some different behaviors in special space. This study adopts both ethnography and interview to make an exploratory analysis of the current situation of food waste in vegetarian restaurants. By comparing the dining behaviors and attitudes of vegetarians and non-vegetarians, the real influencing factors of food waste were explored in China.

**Keywords:** Chinese food culture, Eating out, Food waste, Moral values, Beliefs and behaviours

### **1. Introduction**

The restaurant industry is a major waste producer of food and other resources, leading to significant greenhouse gas (GHG) emissions, resource waste and business costs (Martin-Rios, Demen-Meier, Gossling, & Cornuz, 2018). With the proportion of eating out rising steadily in many countries, global concern about restaurant waste is also on the rise (Elitzak & Okrent, 2018; Food Standards Agency, 2019). Increasing a plant-based diet could bring huge environmental benefits and has become a focus for mitigating environmental change (Turner-McGrievy, 2016). Vegetarianism is increasingly being positioned as a means to improve public health and reduce human impact on the environment (Dinu, Abbate, Gensini, Casini, & Sofi, 2017).

Vegetarianism has a long history in Chinese culture. Traditionally, both Chinese Buddhism and Taoism/Taoism advocated the concept of not taking life (human and non-human) and not eating meat (CAO, D., 2018). In recent years, with the revival of traditional vegetarianism and the influence of western dietary ethics, there has been a great revival of vegetarian culture and vegetarian restaurants in China. Food and eating habits are central to the Chinese way of life and part of the Chinese national spirit (Chang, K. C., 1977). To be sure, Chinese attitudes toward food waste are a combination of physical, economic, religious as well as artistic and philosophical thinking (Sterckx, R., 2011).

With more and more Chinese eating out as a way of life, food waste shifts from the home to restaurants in recent years. There have been few studies on vegetarianism and food waste in China. The purpose of this paper is to explore the influence of traditional Chinese food culture and values on food-related environmental beliefs and behaviors. More specifically, determine the role of different dietary values, such as vegetarian and non-vegetarian, in related food waste. How restaurants can create a vegetarian ethic, and how consumers can reshape the restaurant will be discussed.

## 2. Literature Review

The issue of how to reduce food waste has been receiving increasing attention (Reisch, L., Eberle, U., & Lorek, S., 2013). People as atomized consumers should be reconsidered to promote more sustainable lifestyles (Prothero, A., Dobscha, S., Freund, J., Kilbourne, W. E., Luchs, M. G., Ozanne, L. K., & Thøgersen, J., 2011). In contemporary China, ethical consumption has become a fashionable consumption trend. Some recent academic research has focused on ethical consumer behavior and consumer responses to corporate social responsibility (Deng, 2012), but the daily consumption of food is neglected.

In this study, attitude towards waste reduction is defined as individuals' feelings on waste reduction behaviors during dining out at restaurants based on prior literature (Whitmarsh, L. E., Haggart, P., & Thomas, M., 2018). Personal norm on waste reduction refers to an interchangeably used moral norm to reduce waste when eating out drawing upon previous research, while the social norm on waste reduction describes an imperative concept in explaining individuals' eco-friendly decision formation and behavior to reduce waste at restaurants (Han, H., Hwang, J., Lee, M. J., & Kim, J., 2019). Consumer value, attitude, and norms with respect to the environment play critical roles in waste reduction behavior.

In the West, there are different types of vegetarians, for instance, lacto ovo vegetarian (eggs and dairy products, but no meat), lacto vegetarian (dairy products, but no eggs or meat), ovo vegetarian (eggs, but no dairy products or meat), pescatarian (fish, eggs, and dairy products, but no non-fish meat), and vegan (no animal products of any kind, including eggs, dairy products, and honey). In contrast, there are many types of vegetarians in China, different from those in the West, although all are called *su* (vegetarian) (CAO, D., 2018). The consumers in vegetarian restaurants may be semivegetarians, vegetarians of various kinds, vegans and others. Non-religious consumers also see their ethical eating as an expression of the traditional Chinese morality of self-discipline and thrift (High, 2012). Though frugality is an important social norm in Chinese society, few scholars have made a detailed discussion on the connection between the concept of vegetarianism and food waste in sustainable consumption in China.

## 3. Methodology

The survey was informed by the results of ethnography and interviews with consumers. Reflect on the implications of traditional food values of Confucianism and Taoism with the development history of China, in terms of waste generation and waste management in vegetarian restaurants. All of the recorded interviews were transcribed in Chinese and then translated into English. Both of the researcher's diaries and the transcriptions of the interviews were analyzed with Nvivo 8, a software for qualitative data analysis, which allows for a rigorous coding process.

## 4. Results

Results from ethnography discussions revealed a broad array of beliefs and behaviors related to the connection between food and waste. The interview confirmed these results and revealed that in the vegetarian restaurant, most of the food waste occurred by non-vegetarians, and vegetarians may also have food waste. The concept of "blessing" in Chinese culture makes people reluctant to waste. Food education in China has changed in the present and in the past. The connection between food, food production and the social environment shapes the unique beliefs and behaviors of Chinese food culture.

## 5. Discussion and Conclusion

### 5.1 Discussion and Conclusion

The restaurant's eaters always perform the traditional Chinese virtues, or other social moralities, through their ethical eating. The vegetarian restaurant can provide an ethical environment and generates ethics among the humans encountered during the eating experience; likewise, the restaurant is shaped and reshaped as an ethical food space about reduce waste through the expression of the consumers' social identities and "self-other" relations. The practices of ethical eating in the restaurant are influenced by the mingling of traditional and modern, and the connection between Eastern traditional food concepts and Western environmental ideas.

### 5.2 Limitations of this study

Since the impact of COVID-19, apart from the self-ethnographic diary materials, telephone interview is the other way to conduct the survey. It will be better if the field study is added to supplement the research results.

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## **Customer responses to robot vs. human employees' apologies**

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### **Abstract:**

Despite the ever-growing presence of service robots in the hospitality industry, understanding of customer responses to robot vs. human employees' apologies in a failed service encounter remains unclear. This study is proposed to fill this gap by examining a joint effect of apology, service agent type, and customer age in shaping hotel check-in experience. Managers are advised to consider their target customers' age in delivering apologies of robot and human employees following service failure.

**Keywords:** service technology, service robot, service failure

### **1. Introduction**

Service robots permeate in airports, hotels (e.g., Marriott), and restaurants (e.g., Hai Di Lao Hotpot) (Fan et al., 2020). Sometimes, robots get inquiries incorrectly, providing irrelevant information. However, there is dearth of literature comparing customer responses to apologies made by robot vs. human employees following service failure. To address this omission, this study illustrates an interaction between apology and service agent type in shaping hotel check-in experience (Study 1). It further suggests customer age as a boundary condition for such an interaction (Study 2).

### **2. Literature Review**

When service failure occurs, the golden rule is to apologize to customers immediately (even when service failure results from factors out of service providers' control such as unavailable menu item due to virus outbreak). Apology is an interactive component of justice perceptions that involve human-to-human encounters (Wirtz & Mattila, 2004). Apology reflects an individual's empathy, a prosocial emotion that entails perspective-taking (Howell et al., 2012; Zaki, 2014).

However, robots are not perceived as having emotions, including empathy and thus apologies made by robot (vs. human) employees might not sound authentic. Robots' apologies might sound rather mechanical or artificial. Consequently, we predict that customers' revisit intention increases when human employees make an apology (vs. no apology) following service failure. Conversely, such an increase in revisit intention is attenuated for robot employees:

Hypothesis 1. There will be an interaction between apology and service agent type (human vs. robot) on revisit intention following service failure. Specifically, Revisit intention will be higher

with an apology (vs. no apology) of a human service agent. Such a difference in revisit intention will be lessened with a robot service agent.

This study proposes that customer age further moderates the interaction between apology and service agent type. Converging evidence suggests that older people are less comfortable adopting and using technology devices (Barnard et al., 2013). This follows that they are less fluent in interacting with service robots than their younger counterparts. Such discomfort may lead them to be attentive to communication cues with service robots. Consequently, we predict that their dissatisfaction increases in the absence (vs. presence) of a robot employee's apology. Conversely, for younger people, discomfort may not arise during interactions with service robots as they are accustomed to such interactions (Barnard et al., 2013). Younger people's comfort in engaging with robots may ameliorate potential negative effects stemming from the absence of robots' apologies:

Hypothesis 2. There will be an interaction between apology, service agent type, and customer age on customer dissatisfaction. Specifically, For older customers, dissatisfaction will be lower with apology (vs. no apology) of a robot service agent. For younger customers, such a difference in dissatisfaction will be attenuated with a robot service agent.

### **3. Methodology**

#### *3.1 Study 1*

A 2 (apology: absent vs. present) by 2 (service agent: human vs. non-humanoid robot) between-subjects, experimental design was used. Participants ( $n=193$ ) were recruited from Amazon Mechanical Turk (MTurk). Converging evidence shows that data from MTurk are as reliable as data from other sources such as undergraduate students (Buhrmester et al., 2018). Participants were randomly assigned to one of the four conditions and asked to imagine themselves in a hypothetical hotel check-in experience. Service agent was manipulated with photos. In the apology condition, the service agent said, "(I am sorry that) I am not able to find your room reservation. (Let me see what I can do to solve this problem.) Please provide your reservation number." The words in parentheses didn't appear in the no apology condition. Eventually, the service agent was able to locate the customer's reservation, issuing room keys.

Participants indicated their intention to revisit the hotel with two items (e.g., "I would consider this hotel as my first choice compared to other hotels";  $r = 0.82$ ,  $p < .01$ ; Kim et al., 2009). Manipulation of service agent type was assessed with one item ("In the scenario, I think the service was delivered by 1=a robot, 7=a human."). Manipulation of apology was assessed with one item ("In the scenario, I think the service agent apologized for the failed service.") Scenario realism was measured with two items (e.g., "The scenario was realistic";  $r = 0.65$ ,  $p < .01$ ;  $M_{\text{study1}} = 5.70$ ;  $M_{\text{study2}} = 5.73$ ). All items were measured on a 7-point scale and our results showed that manipulations were deemed effective.

### 3.2 Study 2

A 2 (apology) by 3 (agent type: human vs. humanoid robot vs. non-humanoid robot) by 2 (customer age), between-subjects, quasi-experimental design was adopted. Apology and agent type were manipulated as Study 1, whereas customer age was measured. Participants ( $n = 235$ ) were recruited from MTurk. Scenarios were the same as Study 1. After reading the scenario, participants indicated dissatisfaction with three items (e.g., “I would feel unhappy about this check-in experience”;  $\alpha = 0.89$ ; Fan et al., 2020). Manipulations of agent type and apology and scenario realism were assessed as Study 1 and our results demonstrated the effectiveness of such manipulations. At the end of survey, demographic questions were asked.

## 4. Results

### 4.1 Study 1

To test H1, a two-way ANOVA was run. The interaction between apology and agent type was significant ( $F(1, 189) = 4.37, p < .05$ ). An analysis of simple effects showed that when a service agent was human, revisit intention was higher with apology (vs. no apology) ( $M_{\text{apology}} = 5.02, M_{\text{no apology}} = 3.65, F(1, 189) = 12.82, p < .01$ ). When a service agent was robot, revisit intention was not different across apology and no apology conditions ( $M_{\text{apology}} = 4.42, M_{\text{no apology}} = 4.02, F(1, 189) = 2.61, p > .1$ ). Thus, H1 is supported.

### 4.2 Study 2

To test H2, a series of regression models was run via PROCESS (Model 3; Hayes, 2017). As H2 entails comparisons between human and robot agents, the Helmert contrast codes were used (Hayes and Montoya, 2017). Specifically, Contrast code 1 was human (-2/3), humanoid robot (1/3), and non-humanoid robot (1/3). Contrast code 2 was used to control for differences between humanoid robot (-1/2) and non-humanoid robot (1/2), and human was coded with 0.

As a result, the three-way interaction between apology, Contrast code 1, and age was significant (Coefficient = 0.10,  $t(226) = 2.21, 95\% \text{ C.I. excluding zero from } 0.01 \text{ to } 0.19$ ). A spotlight analysis showed that for the group 1 SD higher than the mean age (46 years old), when a service agent was robot, dissatisfaction was lower with apology (vs. no apology) (Effect = 1.18,  $t(226) = 2.71$ ). For the group 1 SD lower than the mean age (26 years old), when a service agent was robot, such a difference in dissatisfaction was attenuated (Effect = 0.00,  $t(226) = -0.01$ ). In sum, H2 is supported.

## 5. Discussion and Conclusion

Findings from this study contribute to the hospitality literature by investigating an interactive element of service recovery that compare robot vs. human employees. More importantly, the present study advances our understanding of how customer characteristics (i.e., age) influence encounter satisfaction following a failed service by robot and human employees. Hospitality managers need to take customers' age into account in training their employees and programming their robot languages to deliver apologies appropriately.

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Full references are available upon request.

## **Customer acceptance of contactless service in the hotel industry**

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### **Abstract:**

In response to customers' expectation for social distance and sanitation elicited by the COVID-19 pandemic, there has been a boost of the contactless service implement in the hotel industry. This paper proposes a model of customer acceptance of contactless service that encompasses six antecedents – concern for crisis events (COVID-19), service performance, individual tendency, social influence, experience value, and perceived risk/trust. This study makes theoretical and managerial contributions to the fields of technology and hospitality.

**Keywords:** Contactless Service, Technology Acceptance, IoT technology; Smart hotel, Robotic service; COVID-19

### **1. Introduction**

COVID-19 has caused fundamental and enduring changes to the hospitality industry (Hao, Xiao, & Chon, 2020). One of the most significant changes is customers' concern for social distance, hygiene, health, and sustainability (Valle, 2020). The hospitality industry has to leverage state-of-the-art technologies to meet customers' renewed expectations. As a consequence, contactless service has emerged in the hospitality industry to create the safest possible experience for both guests and staff while maintain high-quality service. Contactless service is designed to avoid the human-to-human contact among hotel guests, employees, visitors and external service providers, reduce touching surfaces or objects in a public area that are frequently touched by people, and minimize customers' stay in public areas.

The Chinese mainland was the first region affected by the devastating influence of COVID-19. In response to the pandemic, Chinese leading hotel firms have applied contactless elements in the service encounter (All-China Federation of Industry and Commerce, 2020; Hao et al., 2020). For instance, Huazhu requested its more than 5,700 hotels to reinforce the implementation of contactless services during the pandemic, including remote check-in, self-check-in and check-out, face-recognition payment and access to elevator and room, smart home device, robot delivery, etc (Yunji Technology, 2020). According to statistics in March 2020, during the epidemic, the self-check-in equipment "Hua Shopkeeper" has served more than 15,000 guests and the robot has delivered more than 24,000 items (Yunji Technology, 2020).

## 2. Literature Review

### 2.1 The COVID-19 Pandemic and the Contactless Service

The COVID-19 pandemic has stimulated the adoption of contactless service in the hospitality industry (Min, 2020). Human-to-human contact will be replaced by ‘robot receptionists, facial scan check-ins, voice guest control, robot delivery, robot concierge assistants and other contactless services’. Zeng, Chen, and Lew (2020) found out the deployment of robots, AI and human-robot interaction in the hospitality industry has reduced the human contact and combated the spread of COVID-19 by delivering food and items, sterilizing public facilities and spaces, detecting body temperature, creating a sense of security, and comforting customers during the difficult time. Serrano and Kazda (2020, p. 8) anticipated the acceleration of the implementation of biometrics and contactless technologies in the airline industry. ‘Airports are working tirelessly to implement contactless technologies across all passenger touchpoints aiming to ensure that minimum passenger contact is required with aviation staff and airport surface.’ Based on this, we propose:

**H1:** The concern of COVID-19 pandemic has significant positive effect on hotel guests’ usage intention of contactless service.

### 2.2 Customer Acceptance of Technology in the Hospitality Industry

Build on the technology acceptance model (TAM), we systematically reviewed and synthesized antecedents that influence customer acceptance of technology in the hospitality industry.

Firstly, service performance is the most fundamental determinants that influence customers’ perception and usage intention of the technology. The *perceived usefulness* and *perceived ease of use* have been identified as the core determinants for TAM (Assaker, 2020; Dieck, Jung, Kim, & Moon, 2017; Huang, Chang, Yu, & Chen, 2019; J. Kim, 2016; T. G. Kim, Lee, & Law, 2008; Kwon, Bae, & Blum, 2013; Lee, 2016; Morosan, 2012; Ozturk, 2016). In addition, good *customization* can meet the specific demand of different customers (Lee, 2016). Desirable *facilitating conditions* also smoothen the service experience (Venkatesh, Thong, & Xu, 2012). Therefore, we propose:

**H2:** The service performance has significant positive effect on hotel guests’ usage intention of contactless service.

Secondly, individual tendency represents customers’ capability and emotional tendency to accept the new technology. Customers possess various *self-efficacy* to learn the new technology (Assaker, 2020; Ozturk, 2016) and different *innovativeness* to embrace the technological advances (Morosan, 2012; Sun, Lee, Law, & Hyun, 2020). Whereas some customers are more *optimistic* towards new changes (Sun et al., 2020), and even developed *habit* to rely on one specific technology (Venkatesh et al., 2012), other customers may raise serious *privacy concern* for data collection, unauthorized secondary use, improper access, and errors (Hsu & Lin, 2016). We propose:

**H3:** The individual tendency has significant positive effect on hotel guests’ usage intention of contactless service.

Thirdly, social influence suggests customers’ inclination to be influenced by the surrounding environment and social trends. Customers with a stronger *subjective norm* (J. Kim, 2016; Lee, 2016) tend to be affected by *social influence* easily (Venkatesh et al., 2012). In a similar vein, customers’ with higher *susceptibility to consumption influence* and *susceptibility to SNS*

*influence* demonstrate more desire to accept new technology (Tussyadiah, Kausar, & Soesilo, 2018). We propose:

**H4:** The social influence has significant positive effect on hotel guests' usage intention of contactless service.

Fourthly, customers' perceived value derived from their prior experience with new technology also affects their technology acceptance. The interaction with new technology in service encounter can generate entertaining, educational, escapist, esthetics *experience* (Huang et al., 2019). This experience may *benefit* customer functionally, hedonically cognitively, socially (Dieck et al., 2017; Nambisan & Baron, 2007) and add to functional, emotional, social, and epistemic *value* (T. G. Kim et al., 2008; Zhang, Zhang, & Lu, 2019). We propose:

**H5:** The experience value has significant positive effect on hotel guests' usage intention of contactless service.

Fifthly, customers' perceived *risk* of bringing in the new technology in daily life may hinder their intention to adopt new technology (Lee, 2016; Ozturk, 2016). However, the *trust* in the performance, process, purpose of the new technology (Assaker, 2020; Dieck et al., 2017; J. Kim, 2016; Lee, 2016; Park, 2020) boosts their confidence to embrace new technology. Hence we propose H6a and H6b, and the conceptual model in Figure 1.

**H6a:** The perceived risk has significant negative effect on hotel guests' usage intention of contactless service.

**H6b:** Trust has significant positive effect on hotel guests' usage intention of contactless service.

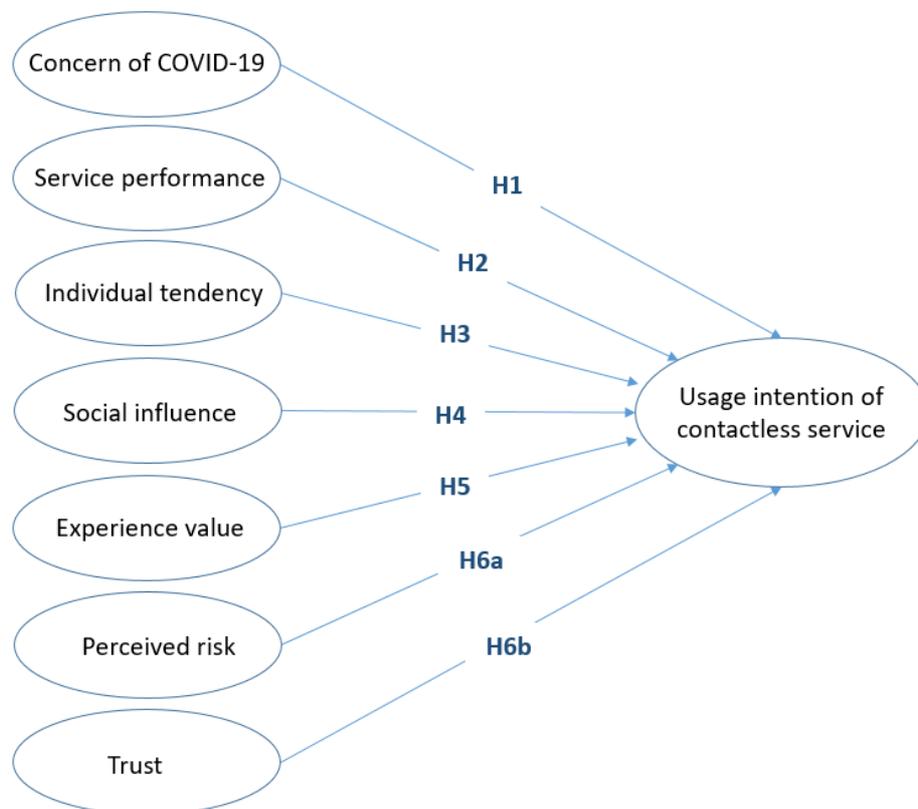


Fig. 1. Proposed conceptual model.

### **3. Methodology**

We developed a questionnaire based on studies on the COVID-19 impact on contactless service and a systematic review of customer's technology acceptance in the hospitality industry. This questionnaire contains 40 constructs reflecting six antecedents that affect customers' acceptance of contactless service. Five questions were asked to measure the acceptance of contactless service (e.g., I intend to continue using contactless service in the future; I will always try to use contactless service in my daily life.), which followed by a stem: to what extent do you agree with the statement? A 5-point Likert scale is applied ranging from 1 = strongly disagree, to 5 = strongly agree. In addition, we collected information about travel frequency, travel motivation, travel accompany, the scale of usually visited hotel, familiarity with usually visited hotel, familiarity with contactless service in hotels, and socio-demographic information.

We invite four scholars in the area of hospitality and technology and three general managers who have introduced the contactless service in their firms to examine the questionnaire. The major functionality of the expert panel is to deduce the duplication of constructs and/or items, avoid ambiguity, enhance readability, and thus ensure the content validity of the survey. As a result, the questionnaire has been revised and shortened into approximate 20 minutes.

The survey is conducted online via Amazon Mechanical Turk and Wenjuanxing, targeting customers who experienced contactless service in hotels during the past six months. Socio-demographic variance plays an important role in influencing customers' acceptance of technology (Assaker, 2020; J. Kim, 2016). In order to compare the difference of usage intention between various customer segments, especially the familiarity of contactless service, we recruited 200 participants from mainland China and 200 participants from western culture countries such as the US, the UK, and Australia. To begin with, participants watch a two-minute video introduction about contactless service in hotels, as well as five photos illustrating core service scenarios of contactless technology. Then the participants are invited to fill in the questionnaire.

### **4. Discussion and Conclusion**

This study aims to explore customers' acceptance of contactless service in hotels. We develop a model of customer acceptance of contactless service in the hospitality industry. This model examines the impact of six antecedents on customers' acceptance for contactless service. Findings from this study are expected to shed light on future studies on technology acceptance and post-pandemic consumptive behaviour in the hospitality industry. Further, this study guides hotel practitioners to develop a contactless service that meets customers' expectation.

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## Artificial intelligence and hotel marketing: A case study

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### Abstract:

Artificial intelligence is playing a significant role not only in marketing generally, but also specifically in hospitality marketing. Marketing departments are at the forefront of the adoption of AI in the hospitality industry. In this extended abstract we explore the potential of combining artificial intelligence and business intelligence in hotel marketing and discuss its effectiveness.

**Keywords:** Artificial intelligence, hotel marketing, information and communications technologies, customer experience, customer loyalty, hospitality, education

### 1. Introduction

Artificial intelligence (AI) has extensive applications across marketing. Voice processing technologies, text processing technologies, image recognition and processing, decision-making and autonomous robots and vehicles each have found a place in marketing in services and manufacturing (Bhattacharjee, 2019; Devang, Chintan, Gunjan, & Krupa, 2019; Jarek & Mazurek, 2019; Kumar, Rajan, Venkatesan, & Lecinski, 2019; Wirth, 2018). Not surprisingly then, AI impacts each area of the ‘marketing mix’ (Kotler, Burton, Deans, Brown, & Armstrong, 2012):

**Table 1: The impact of AI on the marketing mix** (Jarek & Mazurek, 2019)

<i>PRODUCT</i>	<i>PRICE</i>	<i>PROMOTION (BRAND)</i>	<i>PLACE (SALES &amp; DISTRIBUTION)</i>
<ul style="list-style-type: none"> <li>• New product development</li> <li>• Hyper-personalisation</li> <li>• Automatic recommendations</li> <li>• Creating additional value</li> <li>• Additional solutions beyond product category</li> </ul>	<ul style="list-style-type: none"> <li>• Price management and dynamic price matching to customer profile</li> </ul>	<ul style="list-style-type: none"> <li>• Creating a unique experience</li> <li>• Personalised communication</li> <li>• Creating the ‘wow’ factor and offering benefits</li> <li>• Elimination of the process of learning product categories</li> <li>• Positive impact on the customer</li> <li>• Minimised disappointment</li> </ul>	<ul style="list-style-type: none"> <li>• Convenient shopping</li> <li>• Faster and simpler sales process</li> <li>• 24/7 customer service (chatbot)</li> <li>• Purchase automation</li> <li>• Service-free shops</li> <li>• Consultant-less customer support</li> <li>• New distribution channels</li> <li>• Merchandising automation</li> </ul>

Hence, AI has a two-way impact on marketing benefiting not just the consumer, but the marketing profession too. AI offers consumers more convenient and quicker shopping, new consumer experiences and heightens the consumer-brand relationship. For marketing teams, AI eliminates laborious and time-consuming activities, improves analysis in creative and strategic activities leading improved competitive advantage, design innovations, developing new competences in marketing staff, and the development of new marketing ‘ecosystems’ (Bhattacharjee, 2019; Devang et al., 2019; Jarek & Mazurek, 2019; Kumar et al., 2019; Wirth, 2018).

In this extended abstract, we further explore the potential of AI in hotel industry marketing, before offering up a short case study indicating its effectiveness.

## **2. Literature review: AI in hospitality industry marketing**

The present authors have previously identified how cloud-based AI systems are enabling a wave of responsive, customer-centred improvement across hospitality through enabling process optimisation (Smallman & Ryan, 2019). Out of these processes, marketing is at the forefront of the adoption of AI in hospitality:

- Competitive intelligence, by drawing upon and analysing a whole range of data (Antonio, Almeida, Nunes, Batista, & Ribeiro, 2018; Claveria, Monte, & Torra, 2015; Kirilenko, Stepchenkova, Kim, & Li, 2018; Rita, Rita, & Oliveira, 2018; Salguero, Gámez, Fernández, & Palomo, 2019);
- Booking and staff interaction, by deploying ‘chatbots’ to deliver a personalised experience and ‘capture’ visitors to social media sites, rather than relying purely on aggregator sites (Rita et al., 2018; Salazar, 2018);
- Occupancy and rate optimisation, by developing highly nuanced and ‘tuned’ analysis of occupancy and rate data developed through data mining (Claveria et al., 2015; Rita et al., 2018);
- Revenue optimisation (Millauer & Vellekoop, 2019);
- Personalisation, by tailoring experiences to match a guest’s preferences (Kirilenko et al., 2018; Sánchez-Medina, Naranjo-Barrera, Alonso, & Rufo Torres, 2018), notably through reward programs; and
- Reputation risk management, by better managing reviews and social media posts (Aula, 2010; Hirsch, 2018; Munnukka & Järvi, 2014; Rodríguez-Díaz, Rodríguez-Díaz, Rodríguez-Voltes, & Rodríguez-Voltes, 2018).

It is perhaps not surprising that important hotel performance indicators relate strongly to the AI applications listed above. Occupancy, average daily rate, revenue available per room, advertising return on investment and online rating are each strongly represented in the applications outlined. Yet, research demonstrates that the key performance indicators that occur most frequently in practice and in the literature are occupancy and rate optimisation, followed closely by revenue optimisation (Pneumatikoudi & Stavrinoudis, 2016). Indeed, customer satisfaction is the only commonly used non-financial performance indicator in the sector.

What sort of benefits can be expected from the use of AI in managing the processes that are evaluated through these indicators?

### **3. Methodology**

A case study of the relationship between Traff1k Digital and the Accor Group was undertaken to assess the outcomes of using AI to increase direct bookings with Accor hotels across Australia.

### **4. Results**

Traff1k Digital<sup>1</sup> is a digital marketing agency based in Australia and New Zealand. They comprise marketers, designers, developers, writers and strategists. Their aim is to help clients build a consistent digital presence on the Internet to accelerate the development of their business online and offline. They are one of many such agencies but offer examples of what can be achieved through the use of artificially intelligent systems in social media marketing.

Using organic search engine marketing and search engine optimisation, paid search, landing page optimisation and dynamic local search they employ algorithms and search techniques that are synonymous with artificial intelligence and business intelligence, which in Traff1k Digital's case they refer to as 'digital intelligence.'

Traff1k Digital has enjoyed considerable success with leading brands across the hotel sector, and most notably with the Accor Group. Traff1k Digital was engaged by the Accor Group to increase direct bookings with individual hotel properties across Australia. The aim was to reduce online agency overheads, improving revenue yield for each hotel through reducing commissions. Through the application of various techniques by Traff1k Digital, Accor saw a 148 per cent increase in traffic on their websites and a 70 per cent increase in revenue.

Sofitel is part of the Accor Group. Their Noosa Pacific Resort lies on Australia's Sunshine Coast to the north of Brisbane, Queensland. Traff1k Digital were brought in after Sofitel took over the resort from Sheraton. Artificially intelligent and business intelligent systems were developed, focusing on improving direct bookings and search engine rankings. Across 2018-2019, the resort saw a 97 per cent increase in average revenue growth, a 31 per cent increase in room nights and a 38 per cent increase in room bookings.

Traff1k Digital has enjoyed similar success with other members of the Accor Group. How so? Multiple factors are monitored on a daily basis to determine trends, demand and rankings. This enables AI experts to make tactical adjustments to web page strategies, as part of wider, longer term marketing strategy. Humans could undertake this analysis, but not with the speed of artificially intelligent systems drawing on business intelligence.

### **5. Discussion and Conclusion**

The challenge these types of results pose for the hotel sector is not truly technological. Hotels of all different sizes can find AI applications to support them. The challenge is, as we have previously reported, educating hotel staff in the use of these systems (Smallman & Ryan, 2019). At present, conventional approaches to hospitality education usually compartmentalise technology, such as we are dealing with here, away from those training in the various hospitality disciplines. However, this compartmentalisation can only last so long. AI is increasingly being deployed directly in both services and manufacturing. Human intelligence, work life and AI are developing an ever more intertwined relationship across many disciplines,

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<sup>1</sup> Traff1k Digital is known to one of the present authors through an open-ended advisory arrangement. The information reported in this paper is based on publicly available information from Traff1k Digital's website. Traff1k Digital has not been involved in the development of this abstract.

notably medicine, leading to the application of what is termed ‘augmented intelligence’ in solving problems (Prentice, Lopes, & Wang, 2019; Rouse & Spohrer, 2018; Zheng et al., 2017).

AI is further enabling the development of supply chain and operations management to better cope with the increase in business that these outcomes deliver (Buhalis & Leung, 2018).

Taken together, the development of augmented intelligence with improved supply chain and operations management, is leading to the development of increasingly ‘smart hospitality’, whereby hospitality professionals and systems interconnect and interoperate to develop increasingly effective and efficient hospitality ‘eco systems’ (Buhalis & Leung, 2018). This marks the development of a new paradigm in hospitality and particularly hotel operations, with marketing at the very leading edge.

One of the limitations of this study is that it is based on one case study, albeit across a large hotel group. Therefore, it is important to observe the outcomes from replications of this study in other hotels.

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**Antecedents and consequences of cybersickness during HMD VR tour:  
Findings from a mixed-methods approach**

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**Abstract:**

VR travel has been an emerging trend in tourism industry, especially during the COVID-19 pandemic when consumers have limited mobility. Despite the growing body of work on VR tour, little is known about the negative experience of cybersickness during VR tour. The purpose of this study is to investigate the role of cybersickness on head-mounted display (HMD) VR travel experience and tourists' behavioral intentions. A mixed-methods approach was used to answer the research questions. Qualitative interviews with 10 respondents who had HMD VR tour experience before were conducted first to identify the items of cybersickness during VR tour and explore the impact of cybersickness on tourists. An online survey was then distributed, and structural equation modeling was used to test the proposed model. Results suggest that interaction effectively drive the cybersickness in HMD VR tour. 2. Cybersickness has strongly influence on behavior intention. It will influence decision making of customers. This study contributes to the literature by providing a conceptualization of cybersickness in VR tour, and identifying the important role of cybersickness in VR tour. This study also provides valuable implications on how to reduce cybersickness experience and improve VR tour experience to the VR tourism sector.

**Keywords:** HMD VR tour, virtual reality, cybersickness, sense of presence, mixed-method

## **Rethinking the existential authenticity for tourists in using virtual and augmented reality technologies**

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### **Abstract:**

The paper's purpose is to fill the gaps among virtual reality, augmented reality and existential authenticity, moreover, to explore the effectiveness on the existential authenticity while traveling in Augmented and Virtual reality tourism. Through depth semi-structural interview, content analysis and coding the data, we found three categories which are sensory system, interaction, technical level can affect the existential authenticity while using Virtual and Augmented reality technologies in tourism.

**Keywords:** Virtual reality; Augmented reality; Existential authenticity; Semi-structural interview

### **1. Introduction**

Existential authenticity actually divided into two aspects which are intrapersonal authenticity and interpersonal authenticity (Wang, 1999). Intrapersonal authenticity means the connection with self and Interpersonal authenticity means the connection with others. Fu (2019) has proved the intrapersonal and interpersonal has the effectiveness with the tourists' choice while they travelling the tourism destination. In previous research, most studies involve too simple existential authenticity empirical research. Brown et al. (2013) proved that existential authenticity can be affected by tourism objects. Wang (1999) found the existential authenticity has the connection with the destination image, and heritage tourism. In current studies, they mainly explained the core relationships among authenticity, customer behavior, tourist loyalty, destination image and so on. Few researches have been undertaken in the relationship among existential authenticity. Virtual reality and augmented reality.

Especially for heritage tourism, cause of Covid-19 pandemic, the tourists cannot leave their site and to travel to destination tourism, which will induce the loss of heritage tourism. Heritage tourism is famous for its culture, human, specialty and so on. Adding to AR and VR technologies can provide the tourists more convenient guide and achievable knowledge about destination image (Brown et al.,2012; Mody et al.,2019). In the regard, VR and AR were seen as the potential and have been proved tool to attract the tourists and stimulate the economic recovery at the moment. As the another key research object, existential authenticity as three main part of authenticity has amply researched in heritage tourism (Belhassen et al.,2008; Wang,1999; Dueholm et al.,2014; Yi et al.,2016;Fu,2019).Researches proved that existential authenticity in heritage tourism can make the tourists' experience more genuine and provide the feelings of self-actualization, happiness, relaxation and so on(Yi et al.,2017; Wang,1999). Therefore, applying in Augmented reality and Virtual reality are meaningful for tourism industry, especially in enhancing the tourists' existential authenticity.

To fill this gap, the study of this paper will explore the factors to affect the existential authenticity while tourists using virtual or augmented technologies in tourism.

## **2. Literature review**

### *2.1 Virtual reality in heritage tourism*

In recent years, virtual reality as important information technologies have been amply applied in heritage tourism (Chang,2018; Benckendorff et al.,2017). VR technologies through providing the 3D models, pictures, self-perception, dreamed site and other stimulated factors to fulfill the tourists' requirements and has been defined a connection with the computer-based and people perceptions (Schuemie et al.,2001; Diemer et al.,2015), which can provide the immersive 3D simulated environment to make the sense of real-world. In modern society, people who have much pressure or want to release the negative emotions and they will choose the virtual augmented reality as the platform to relax and search for liberation (Benckendorff et al.,2017).Virtual reality allow them to perceive the vivid, visual and colorful world through 3D models, and sound conducting create the new games, interactions, amusement and so on. In current studies, virtual reality actually divided into two types which are mobile VR or called 3D stimulated reality, 3D stimulated device is widely used in mobile-based platform, and current users main use VR applications based on html5 such as some WeChat application refer to tourism aspects (Wirth et al.,2017; Diemer et al.,2015). Through mobile-based virtual reality can provide 3D images, interactively, interestingly and innovative aspects for tourists and enhance the experience in heritage tourism. Other one called 360 videos virtual reality or also can be called tethered device that through computer-based platform to design and reconstruct the internal and external feelings for tourists (Diemer et al.,2015).

### *2.2 Augmented reality in heritage tourism*

Immersive information technologies refer to virtual reality and augmented reality have been researched in heritage tourism for many years (Bimber & Raskar,2005; Chuang et al.,2010). Augmented reality in heritage tourism have been a new debate in recent years. Kounavis et al (2012) thought AR technologies can through overlying the virtual environment to help tourists the objects both in virtual and real feelings while they in travel. AR through providing 2D/3D images, models, sound, touch, and technologies support, can make the tourists feel the depth experience (Hariharan et al.,2015). The early studies about AR technologies in heritage tourism such as some functions like Gps-based, IQ scanning and so on (Feiner et al.,1997). These functionalists enrich tourism methods and not only limited in traditional tourism. Besides that, AR also support tourists enable the virtual world such as dreamed destination, dreamed girls or boys translate into the real world become the possibilities (Bimber & Raskar,2005). Amount enterprises have ventured these AR technologies into the productions such as AR glasses, AR games and AR maps (Feiner et al.,1997; Hariharan et al.,2015). These procedures can stimulate the development of heritage tourism and attract more potential tourists who are interested in advanced technologies. Tourism industry seems to be the best choice for augmented reality application, Jung and Tom (2017) proposed a new model to incorporate the AR factors including quality, risks, and other some factors which can help tourism mangers more set the strategical planning to bring in AR equipment to the heritage tourism. Some studies have proved scientific AR model can help managers attract the tourists and control risks (Bimber & Raskar,2005). Besides that, in recent years, AR also provided interactions, sound equipment, irritative adventure to enrich the AR products' contents (Chisholm et al.,2020). These new functionalists attract more and more tourists to experience heritage tourism.

### *2.3 Existential authenticity in heritage tourism*

Existential authenticity actually divided into two aspects which are intrapersonal authenticity and interpersonal authenticity (Wang,1999). Intrapersonal authenticity was amply defined to being true with tourists' themselves, which refer to the tourists' self-identity, self-satisfaction, self-realization and make the tourists' bodily feel more authenticity and relaxation (Steiner et al.,2006; Wang,1999; Xu et al., 2014).In heritage tourism, bodily feelings such the sound, tactility, vision will meet the tourists' requirements refer to self-actualization, self-making(Steiner et al.,2006). Some studies refer to intrapersonal authenticity thought from psychology and sociology aspects, the perception in intrapersonal authenticity connect the tourists' thoughts and feelings will make heritage tourism become more real and colorful such as some food, Spa, Sport experience with themselves (Lu et al.,2015; Yi et al.,2017; Kim et al.,2007). Intrapersonal authenticity is also thought a self-searching, adventure, exploratory and stimulated authenticity, which make the tourists achieve the perception that only one person to search unknown journey, acquire knowledge and fight for the last boss in experience games (Fu, 2019; Yi et al.,2018). In other words, if the heritage tourism can meet with tourists' perception including exploratory, stimulated, unknown and other aspects in promotional videos or the design of tourism equipment, the tourists who are interested in this aspect will be attracted to experience the journey, meanwhile the intrapersonal authenticity will be increased by advanced technologies such as adding in VR or AR products. In this regard, VR and AR products can provide the genuine, simulated, unknown, and excellent journey including real or virtual environment site and interactions to meet the tourists' intrapersonal authenticity. Different from intrapersonal authenticity, interpersonal authenticity more stresses on connections not only in themselves, but also with their relatives, friends and other people and through interactions, together cooperate with partners make the authenticity become more authenticity and colorful (Wang,1999; Steiner et al.,2006).

## **3. Methodology**

### *3.1 Date collection*

The exploratory study used the qualitative research approach. Data collected from depth semi-structured interview base on experts who major in AR/VR industries and tourists who experienced this AR/VR products. Through semi-structured interview, we collect some information about experts' and tourists' attitudes of using VR or AR products in tourism and some factors they thought can affect existential authenticity in AR/VR tourism.

### *3.2 Date analysis*

The content analysis of respondents' answers was applied in this study, and coding induced followed the principle of grounded theory (Glasser & Strauss, 1967). The process refers to opening code, selective coding and theory coding. There were amply applied in the qualitative data dealing and induce the categories. To compare and code the data, the computer software for qualitative research tool Nvivo 12 was applied in this data analysis of this study. This tool can help scholars to analyze identify relationships among data, coding the data and induce the theoretic categories. In this research, three categories coding results were derived from the experts and tourists who experienced AR/VR products. And in the outcome showing, we will use EP(X) represents expert participants, such as the first expert participant will be showed in EP1, in the same way, TP(X) means the number of tourist participant like first tourists will showed in TP1.

#### 4. Results

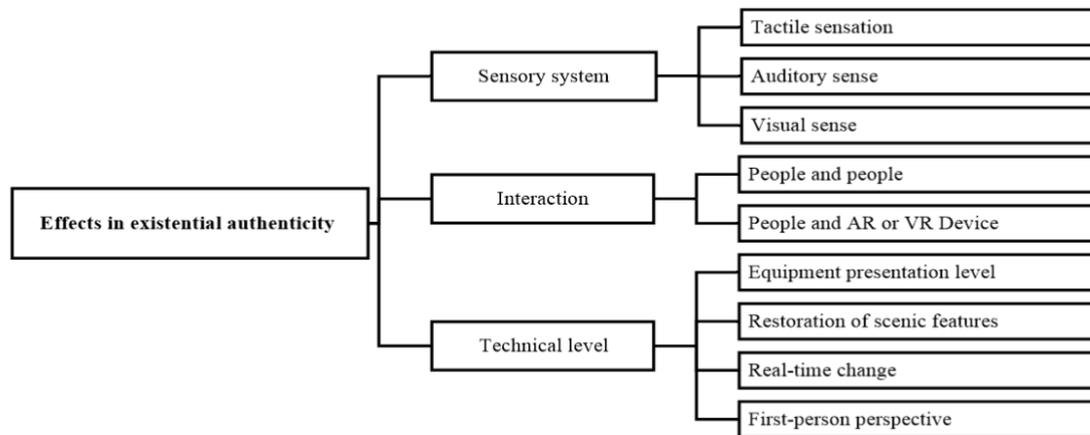
The demographic information of respondents collecting from depth semi-structured interview. Most experts and tourists came from mainland China. The ages range from 18 years old to 50 years old. Over 80% respondents own the college degrees and over 50% respondents' income over 5000 RMB.

Table 1 Demographic information of the respondents

Gender	Male	30.8%
	Female	69.2%
Income (RMB)	5000 or below	46.1%
	5001-8000	11.5%
	8001-15000	15.3%
	15001 or above	27.1%
Education	High school or below	11.5%
	College/University	30.8%
	Postgraduate	57.7%
Age group	18-25	61.5%
	26-30	7.6%
	31-40	19.2%
	41-50	11.7%
	51 or above	0

Using depth semi-structured interview and content analysis, the effectiveness of existential authenticity was induced into three categories base on grounded theory which are sensory system, interaction and technology levels. Date in each category was classified into several sub-categories (refer to Figure 1). The outcome of this study matched previous studies which they thought existential authenticity can be affected by unknown areas, perceived feelings and some activities where experiencing with themselves or other people (Wang, 1999; Lu et al.,2015; Yi et al.,2017). Moreover, this study complemented new categories which can affect the existential authenticity traveling in AR or VR tourism.

Figure 1: Effects of existential authenticity of traveling in Augmented and Virtual reality tourism



#### 4.1 Sensory system

Almost every respondent thought using AR or VR products in tourism, the feelings in sensory system will be affected by AR/VR technology, meanwhile existential authenticity also was affected and changed base on the change of sensory system. In this regard, the changes in sensory main reflected in three categories through grounded coding which are Tactile sensation, Auditory sense and Visual sense.

In Tactile sensation:

*EP4: Tactile sense can be provided through third-party tools. For example, in my picture, the person has gone to the beach, and I feel I am in the reality. I mean that there are some tools like this can provide this place, and its tactile vision has reached the sense of reality, which must be stronger.*

*EP7: If I want to experience a glider, a project like this, I may actually be in a VR glider device to experience. Therefore, I think the future experience. In addition to visual and auditory sense, has more tactile sense. A combination of various senses will enhance my sense of reality. There are other senses of touch. To judge whether it is a true reflection of the destination.*

TP9, TP10, TP11, TP14, TP17 support their views.

Besides the tactile sensation regard, many respondents thought Auditory sense all affect the existential authenticity while using AR/VR products. They thought the presentation base on AR/VR technology is different from traditional approach to show the destination. Immersion and impact are more intense than other promotional videos in tourism.

*EP7: The sound of traffic, or the sound details that you can capture in the scene, for example, for a concert like ours, if the equipment of your voice, these details can be handled very well, and my visual effect is very good. Of course, it will also be very shocking and make me feel more real.*

*TP19: It looks good. And then compare the pictures you find on the Internet, again with some physical sensations, some auditory comparison base on some features, and then decide whether it reflects the tourist attractions.*

*TP10, TP12, TP13, TP19 and TP22 all thought these views.*

The last aspect in sensory system refers to visual sensation, in this regard, respondents thought

its effect is the most important and the intense feeling is first point to affect the existential authenticity.

*EP3: Visual impact is very strong and better than VR movies, almost 100 times to 10,000 times per minutes. When we do some interactive games such as the force of the gun, we will deliberately bullets, and the enemy's bullets to our lens in the visual experience of the past. This way will give me the feelings that the bullet is real or lifelike turn*

*TP10: That kind of 3D animation produced by the water screen movie or like some exciting clips, after those clips produced, may give you that kind of visual experience and visual impact will be better than some real physical actors to perform. This kind of visual impact will be better and feel right. In some of the better tourist attractions, especially pay attention to some cultural or scenic publicity, this feeling may be more attractive to you.*

TP14, TP16, TP22 and TP26 support this point.

#### 4.2 Interaction

Interaction as an important indicator to reflect the status of tourists traveling in destination, which can reflect the degrees of popularity in amusement, especially in newest information technology like Augmented reality and Virtual reality technology in tourism. In this research, we found many of tourists thought interaction can enhance the existential authenticity while using AR/VR products in tourism. Researches identified interaction refers to two aspects which are interaction between people and people, and interaction between people with AR/VR devices in tourism. In first regard, people with people interaction, tourists thought that make them relaxed and feel more real in tourism.

*EP1: Interactivity. I think this one is very important, because the tourism industry itself is relatively special. Most people travel in groups. They want to go out with their families and friends, which can enhance the real feelings.*

*EP6: This kind of interaction between people and people. In addition to enjoying the beautiful scenery, it is more about sharing with people based on this interactive aspect. That let me feel the real reflection of the tourist destination*

EP7, TP9, TP15, TP19, TP23 and TP25 support this view.

In other aspect refer to interaction of people with AR/VR devices, tourists also thought can enhance the existential authenticity in AR/VR tourism.

*EP6: If you go to Disneyland or something like that, it's going to have a lot of games, but now maybe there's a product where it just does a full 360, and it tells you that this is a game where it can only see and then it can only walk inside, but some games you can't play, like there's a ball, there's a roller coaster. Therefore, I think I have to add all of these. And then there are characters who talk to you and so on. This interactivity is restored in the game, and there are some scenarios. And these feelings can affect my real feelings.*

*TP10: In VR experience, for example, they have a group that can complete a certain task, and what we feelings is the happiness between the group and the device and more feel more real.*

TP13, TP14, TP17, TP21, TP22 and TP25 all support this view.

#### 4.3 Technical level

In this research, we found most respondents all stress on important point-Technical level.

Experts in AR/VR said the exploration and design main base on the abilities of technical level, if the more technical level shows, the more the effect shown better. For the tourists' angles, they main through the show of AR/VR technology to experience the tourism. Therefore, they all thought the Technical level is important for their feelings in tourism especially in affecting existential authenticity. Meanwhile, we use coding data, and we found four categories which are Equipment presentation level. Restoration of scenic features, Real-time change and First-person perspective can affect the existential authenticity in AR/VR tourism.

In Equipment presentation level:

*EP4: Like with the screen and the same sentence, which belongs to the hardware. Software means that we are going to play a video, and it certainly means that there is a video production. You make a video through first vision, and the software is a video. Through the hardware to play out, the real effect of destination is decided by hardware and software.*

*EP6: At present, the resolution of the product is not high, including every time you move its refresh rate is not high. If adding a very large team to make it may be very good, generally small companies are false. The experience is particularly bad.*

*EP3, EP7, TP10, TP16, TP22, TP23, TP24 and TP26 all support this view.*

In Restoration of scenic features, many tourists thought the degrees of restoration of destination image can help them whether reflecting the image and further to affect the existential authenticity in tourism.

*TP10: Like this kind of animation, these pay more attention to some real scenes of some restoration and somebody experience. For example, there are amusement parks like these stimulation points and motion-sensing game halls, which, I think it can highlight its characteristics and highlight the concept of zero distance between VR and you, so that you can feel the happiness and real through this game.*

*TP14: The technical requirements will be higher and the feelings of the mountain, the visual impact, the technical aspects, the visual aspects will make you feel more real.*

*EP3, EP7, TP8, TP9, TP10, TP11, TP12, TP13, TP15, TP16, TP17, TP18, TP20, TP21, TP22 and TP25 all support in restoration of scenic spot can affect the tourists' existential authenticity.*

In Real-time change, tourist thought AR/VR tourism cannot show the real-time change in the destination, which will affect the existential authenticity in tourism.

*TP16: A very important point is its real-time, because it cannot show real-time characteristics and show the most beautiful day in the season or a scene, and then people may have a psychological gap.*

*TP22: In VR and AR, because we know the real scene, it may make an adjustment according to the exhibition arrangement or some circumstances. However, in the process of implementing browsing of AR and VR, we may browse a scene in a certain process before, but it has not been updated timely.*

TP17 also support this view.

In First-person perspective, many tourists thought when they immersive in first-person perspective to experience, the feelings of authenticity will be more real.

*EP3: Imaging you were a boy and a girl placed in front of you. She will tell you to stand in your VR visual perspective of the whole and tell you come and I will take you. The Palace Museum to see, I took your hand. Then we shoot pictures of the girl's hand to the camera. First*

*to touch with you, then you can follow it straight on the lens along with it. Visitors take a VR glasses, it is not only the scenery and adding little story. This way will make them feel more real and It's like I'm in the scene*

*EP4: If the first-person perspective is in VR or AR, the authenticity must be more than that. The content design is more colorful, and it would be better to attract human eyes and make you feel more real.*

EP5, EP7, TP13, TP14, TP16 and TP17 support this view.

## **5. Discussion and implications**

This research identified the effect of existential authenticity in Augmented reality and Virtual reality tourism while tourists traveling in tourism destination. Through using depth semi-structured interview, content analysis, coding data base on grounded analysis, three categories which are Sensory system, Interaction and Technical level are induced and can affect the existential authenticity in AR/VR tourism. Sensory system data is collected and induced base on sub-category which are Tactile sensation, Auditory sense and Visual sense. Interaction data is induced through two sub-category which are people and people and people and AR or VR device. The last category-Technical level refers to four sub-categories which are Equipment presentation level, Restoration of scenic features, Real-time change and First-person perspective. The outcome of this research proved prior literatures and proved new categories for future research.

The results of this study provided the practical implications refer to new categories for managers who major in AR/VR operation to rethink the importance of existential authenticity and how to improve the tourists' experience in AR/VR tourism. First of all, three categories refer to Sensory system, Interaction and Technical level can be applied into the improvement and redesign of products. Second, the outcome of this study enriched the content refer to effect of existential authenticity especially in information technology research. Furthermore, this paper developed new scales refer to effect of existential authenticity in future research base on grounded analysis. However, future researches need to further examine the relationships among existential authenticity, Sensory system, Interaction and Technical level by using quantitative research.

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## **The influence of cultural distance on tourism demand in Hong Kong: A study of key source markets**

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### **Abstract:**

If physical distance affects leisure travel, then cultural distance should have a similar or even stronger decaying effect. This is because culture encapsulates management of risk perception, uncertainty, individualism, and order. International tourism is expected to promote cultural exchange and cohesion, as the interplay of differences is what sets the world moving. Nevertheless, the differences have often led to cultural friction and cultural shocks. Cultural diversity affects the inflow of tourists to destinations as markets continue to be globalized with destinations seeking growth opportunities to become leading tourism destinations. This manifests in the choices and behaviour of international tourists. This study contributes to the literature by examining 1. Differences in the profile of visitors to Hong Kong, based on cultural distance, 2. The differences in activities undertaken by different cultural cohorts and, 3. The effect of cultural distance on travel demand and characteristics. The study makes use of six long-haul and five short-haul markets from visitor profile report generated by the Hong Kong Tourism Board (2019). It was found that there is a decaying effect with respect to tourism demand and cultural distance. Differences realized in the socio-demographic profiles, travel characteristics and behaviours among culturally similar and culturally dissimilar markets are further explained in the paper.

### **1. Introduction**

One main expectation of international tourism is to promote cultural exchange and cohesion (Reisinger, *International Tourism: Cultures and Behavior*, 2009). However, this has empirically been determined to lead to cultural friction and shocks (Yang, Liu, & Li, 2019) which reduces tourist flow and activities. Alternative factors may affect the inflow of tourists to destinations as markets continue to be globalized (Sousa & Bradley, 2006) with destinations seeking growth opportunities to become leading tourism destinations. This reflects in the decisions and behaviour of international tourists. The behaviour of tourists and their travel characteristics including expenditure are as important to destinations as the attractions they possess. Research on attractions, psychographics, travel and tourist behaviour has received much attention in recent times (McKercher B. , 2016; Bao & Mckercher, 2008; Dewson, Eccles, Tackey, & Jackson, 2000). In effect, the behaviour of tourists in destinations has been studied widely.

The interplay of differences is what sets the world moving. Therefore, differences in cultures may influence the characteristics and behaviour of visitors (Reisinger, *International Tourism: Cultures and Behavior*, 2009). International travel has long been noted to be affected by a myriad of factors (Lepp & Gibson, 2003) together with the cultural background of tourists (Ibrahim, 1991). The empirical indication that cultural distance affects leisure travel has been

one of the least focused areas of research (Ahn & Mckercher, 2015). Pizam and Jeong (1996) acknowledge that national culture affects touristic behaviour but in which circumstances the changes occur and for which behaviour still stands unanswered. This is due to the focus on spatial interactions when testing the theory of distance decay. If it is anticipated that physical distance affects leisure travel, then cultural distance should have a similar or even stronger decaying effect. This is because culture encapsulates management of risk perception, uncertainty, individualism, and order (Hofstede, 2001).

Cultural distance (CD) is noted to have complex effects on global tourism. It functions as a two-sided coin, where on one side, the differences form part of the primary motivations for international tourism (Lui, Li, Cárdenas, & Yang, 2018) while on the other, it is a challenge to international tourism in the context of language and other cultural conflicts which may negatively influence the choice of destination (Yang & Wong, 2012; Ng, Lee, & Soutar, 2009). CD is one of the recognized concepts in the field of tourism which presents philosophical thinking and has some influence on the tourism sector. However, it has largely been ignored (Li, 2014) This study investigates the effect of cultural distance on demand for the tourism offerings of Hong Kong. It contributes to the literature by examining 1. Differences in the profile of visitors to Hong Kong-based on cultural distance, 2. The differences in activities undertaken by different cultural cohorts and, 3. The effect of cultural distance on travel demand and characteristics. The study makes use of six long-haul and five short-haul markets from visitor profile report generated by the Hong Kong Tourism Board (2019).

## 2. Literature Review

### 2.1 *Distance Decay and Tourism*

Distance can be conceptualized in many ways. Though it generally represents how far apart two points are from each other, different disciplines measure distance in different ways. It may be measured as the distance travelled (Dewson, Eccles, Tackey, & Jackson, 2000), geodesic distance (Hsin-Yu, 2006), market distance, or cultural distance (Yang & Wong, 2012; Shenkar, 2001) among other measurements. It is therefore not a concept exclusive to a specific area of study (McKercher B. , 2008a). Indeed, as “everything is related to everything else, but near things are more related than distant things” (Tobler, 2004; 1970), physical distance, the social and cultural distance between a market and a destination will affect the movement of leisure tourists.

Distance decay theory, the first law of geography, establishes the foundation for the argument that the demand for tourism decays as distance increases (Hooper, 2015; McKercher B. , 2008b). This reflects the notion that nearby areas generate more arrivals than distant areas or that tourists may regularly visit sites that are in close proximity than distant destinations with similar attractions and activities (Yan, 2016; McKercher & Lew, 2003; Wall, 2000). Studies have shown that cost of travel, availability of time, and travel budget and ability to engage with different cultures influence travel demand (Lui, Li, Cárdenas, & Yang, 2018; Yan, 2016) and that the volume of active tourism demand reduces as the physical distance between the source market and destination increases. Though distance decay and its impact have been widely investigated, it is argued that it has not been extensively applied within the tourism context (Hooper, 2015; McKercher & Lew, 2003; McKercher, Chan, & Lam, 2008). From the perspective of source markets, researchers posit that physical distance has an impact on tourism demand (Ahn & Mckercher, 2015). Yan also argues in line with McKercher and Lew that in tourism, the peak of travel occurs within a certain distance from a source market. Usually within 1000km radius (Yan, 2016; McKercher & Lew, 2003). It should also be noted that culture may

have an impact on the demand for tourism as a result of interaction between people from different cultures.

## 2.2 Cultural Distance

Undeniably, cultural distance (CD) is an important concept that helps in the understanding of diversity in human society. It is one of the main issues that affect interrelationships among humans. As differences are the key drivers setting the world in motion (Lui, Li, Cárdenas, & Yang, 2018), usually evident in language, religion, values, and family structure among others, the CD is often used as the measure of national differences (Clark & Pugh, 2001).

Cultural distance is defined as the measure of the extent to which the culture of one country is different from the culture of another (Cheng & Leung, 2013; Ng, Lee, & Soutar, 2009; Suanet & Van de Vijver, 2009; Shenkar, 2001). Others also refer to it as shared norms, rituals and traditions that collectively program the mind, making it possible to distinguish between groups (Crotts, 2004; Litvin, Crotts, & Hefner, 2004). With the evidence of cultural shock, that come into play when two distinctive cultures meet, the study of cultural distance is very important in the tourism context (Ng, Lee, & Soutar, 2009). Tourists, as well as locals, from different cultural backgrounds, may interpret activities, services, the pace of life, etiquette, intimacy and humour among others differently which increases their risk perception when they travel to places which are less familiar (Ng, Lee, & Soutar, 2009; Lepp & Gibson, 2003). In line with this, it is argued for example that the similarity of cultures between two countries, will increase the likelihood of international travels between them (Ahn & Mckercher, 2015; Crotts, 2004). Hence, the research question: Does cultural distance have a decaying effect on tourism demand?

## 2.3 Measuring Cultural Distance

Cultural distance is usually measured at the national level to determine the differences between two or more countries (Clark & Pugh, 2001). Out of the number of constructs developed to measure differences in culture among groups, cultural distance has been used in discussions for decades (Kluckhohn, 1951) but according to (Ng, Lee, and Soutar (2009), the use of quantitative measures for cultural distance determination begun in the 1980s based on the Hofstede's (1980) cultural dimensions. He later proposed an additional two dimensions (Hofstede, 2001; 1991) which are extensively explained in literature and therefore need not be repeated in detail:

1. *Individualism -collectivism* is the extent to which an individual is related to a group or society. It is measured on a scale of 0-100 where countries with values close to 0 are most collectivist and values close to 100 are the most individualized countries and expressed as individualism scores (IDV). Visitors from high IDV countries visit culturally similar destinations while those from collectivist countries visit culturally distinctive destinations (Jackson, 2000).
2. *Power distance* is the degree to which persons who are less powerful in society recognize and admit that power exists but it is unequally distributed. It is measured by the Power Distance Index (PDI) on a scale of 0-100. Countries with values close to 100 have high power distance while those with values closer to 0 have low power distance.
3. *Masculinity-femininity* relates to how individuals in countries approach and deal with emotions and socially defined roles for the masculine and the feminine. This dimension is also

measured on a 0-100 scale where lower values denote most feminine while high values are related to masculinity.

4. *Long Term versus Short Term Orientation* is related to how society fosters either pragmatic virtues or preservation of societal values in all situations. Its measure is denoted by Long term Orientation Index (LTO) on a scale of 0-100 with long term orientation represented by values close to 0 and short term, close to 100.

5. *Uncertainty Avoidance dimension* represents the degree to which affiliates of a national society are threatened by unknown situations. There are two extremes that are measured on a scale of 0-100. Countries with values close to 100 are described as uncertainty avoidance countries while countries with values close to 0 are uncertainty acceptance countries. Visitors with low UAI usually travel to culturally dissimilar destinations while the other group do not (Lepp & Gibson, 2003).

6. *Indulgence-Restraint* is measured by the indulgence-restraint index (IVR) also on a 0-100 scale. It depicts the feelings of subjective happiness and control of peoples own lives or otherwise. It is the most recent addition to the dimensions, explaining that on the indulgence side, people feel happier and healthier than on the restraint side (see (Hofstede, 2001).

Altogether, the dimensions give a bigger and clearer insight into the cultural characteristics than single or a couple of dimensions combined.

#### 2.4 Distance and Tourist Behaviour

According to Yang, Liu, & Li (2019) CD has a partial effect on tourists' attitudes towards international destinations. In relation to the theory of reasoned action and theory of planned behaviour, if a tourist feels uncomfortable with the cultural differences between his home country and intended destination, the propensity to travel will reduce and the opposite will be true because tourists are generally rational (Ajzen, 1991; Fishbein, 1967). Yet, some tourists have the interest in travelling to destinations with wide differences in culture in order to consume exotic cultural attributes (rather than leisure) that pull them towards the destination (Kim, Cheng, & O'Leary, 2007). With this, Yang, Liu, and Li (2019) argue to support Ng, Lee, and Soutar's (2009) similarity-attraction hypothesis that only a small proportion of tourists will travel to culturally dissimilar destinations (usually long -haul). Other studies also suggest a mixed outcome (Yang & Wong, 2012). This also brings up the question that seeks whether CD has a negative relationship with travel demand.

Culturally proximate markets are usually interested in hedonistic activities while culturally distant markets are more into cultural and other intangible attributes (Suh & McAvoy, 2005). In addition, it is noted that as distance decays, travel composition and behaviour change (Crotts, 2004) such that culturally similar markets engage in different activities for a different experience from the distant counterparts (McKercher, 2008b). Culturally distant tourists prefer to visit cultural and heritage site as compared to a culturally similar market. CD has a negative effect on tourists' service satisfaction such that cultural similarity is positively associated with tourists' perceived satisfaction (Leung, Woo, & Ly, 2013; Reisinger & Lindsay, 2003). Hence, the question: will similar cultures rate satisfaction relatively higher than distinctive markets?

### 3. Methodology

This study considers inbound tourist flows to Hong Kong and uses descriptive research design with a quantitative approach. The study uses secondary data to analyse the vacation overnight segment in the 2018 visitor profile, of the Hong Kong Tourism Board, which gives information on 26 source markets, and a compendium of statistical tables, containing information on departure from source markets by the World Tourism Organization. A total of eleven major source markets including the USA, Canada, Australia, Taiwan, and New Zealand (Hong Kong Tourism Board, 2019) were used in this study. China, the largest source market to Hong Kong, was excluded from the study. This is because tourists from China have several transport modes to Hong Kong, offering them more options than other tourists from other markets who use mainly air transport (McKercher B. , 2008b). This is supported by Ahn and Mckercher, who avowed “that it is impossible to distinguish the impact of physical distance from a cultural distance” (2015, p. 101) when visitors are from a border town to a destination.

The cultural distance was calculated using the Composit Cultural Distance Index formulae by Kogut and Singh (1988). The formulae have been criticised by scholars such as Kandogan (2011) and Shenkar (2001) that it is no more relevant following the addition of more cultural indices. Others also argue that single dimensions are the best. Notably, the use of uncertainty avoidance (Crotts, 2004), and long term orientation (Manrai & Manrai, 2011) have been argued as the best dimensions for measuring cultural distance. Other researchers (Lord, Putrevu, & Shi, 2008) argue that a single dimension cannot give a true picture. Therefore, they used three out of the six cultural dimensions by Hofstede (2001). The potential effects of other cultural variables are deemed very necessary in measuring the national culture and cultural distance. Consequently, Kogut and Singh’s (1988) formula was improved by using all six dimensions for this study which widen the scope of the composite index.

$$CD_a = \sum_{k=1}^6 \left( \frac{(X_{ka} - Y_{kb})}{V_k} \right) / 6$$

Where  $CD_a$  is the composite cultural distance index of the country (a) from Hong Kong,  $X_{ka}$  refers to the index of the dimension  $k$  of country a, while  $Y_{kb}$  is the index of dimension  $k$  of Hong Kong and  $V_k$  denoting the variance of the  $k^{th}$  dimension of all countries. Descriptive statistics and Kruskal Wilas Test of differences were applied to determine effects that CD has on visitor profile, trip characteristics, behaviour and satisfaction. The markets were categorized according to the cultural distance (very similar, fairly similar, dissimilar, and very dissimilar) to Hong Kong.

## 4. Results

### 4.1 Cultural and physical distance

This section presents the results of the study based on secondary data. It was observed that long-haul markets recorded higher Cultural distance Index (CDI) than the short-haul markets. Indonesia recorded the lowest CDI (0.402) making it the most culturally similar market while Australia was the most culturally distinctive market (3.416) (Table 1). From the table, the most culturally similar after Indonesia was Singapore (0.508) and New Zealand the second most culturally dissimilar (3.230). Therefore, short-haul markets form culturally similar markets

while the long-haul markets form culturally distinctive markets. This is in line with the assertion of Yang, Liu, and Li, (2019), Yang and Wong (2012), and Ng, Lee, and Soutar (2009) that markets that are in close proximity are usually similar in culture.

**Table 1: Distance from Hong Kong**

	Category	Source market	CDI	PDist (km)
Short-haul markets	<i>Very similar</i>	Indonesia	0.402	3105.67
		Singapore	0.508	2565.34
	<i>Fairly similar</i>	Taiwan	1.324	719.57
		Thailand	1.369	1472.64
		South Korea	1.839	1977.05
Long-haul markets	<i>Dissimilar</i>	France	2.314	9820.76
		Canada	2.496	12548.51
		UK	2.752	9577.36
	<i>Very dissimilar</i>	USA	3.096	12410.38
		New Zealand	3.230	9438.64
		Australia	3.416	5566.17

*PDI=Power distance; IDV= Individualism; Mas= Masculinity; UAI= Uncertainty*

*Avoidance; LTO= Long term Orientation; IvR= Indulgence; CDI=Cultural Distance Index; PDist= Physical Distance*

From Figures 1 and 2, it is interesting to note that both cultural and physical distances have decay curves. However, when the countries are ordered in physical distance, the decay curve is clearer where Hong Kong attracts a relatively higher percentage of tourists from the closest country and less percentage from distant countries. On the other hand, cultural distance displays a distance decay curve with a secondary peak rising at the end (Figure 2). This shows that cultural distance on its own may not be a very strong determinant of decay though it tells a story of one as Hong Kong attracts relatively high percentage from culturally similar markets and falls as the cultural distance increases. It, however, begins to rise again as the cultural distance widens. This graphically displays distance decay theory by (Bull, 1991) in the case of culture.

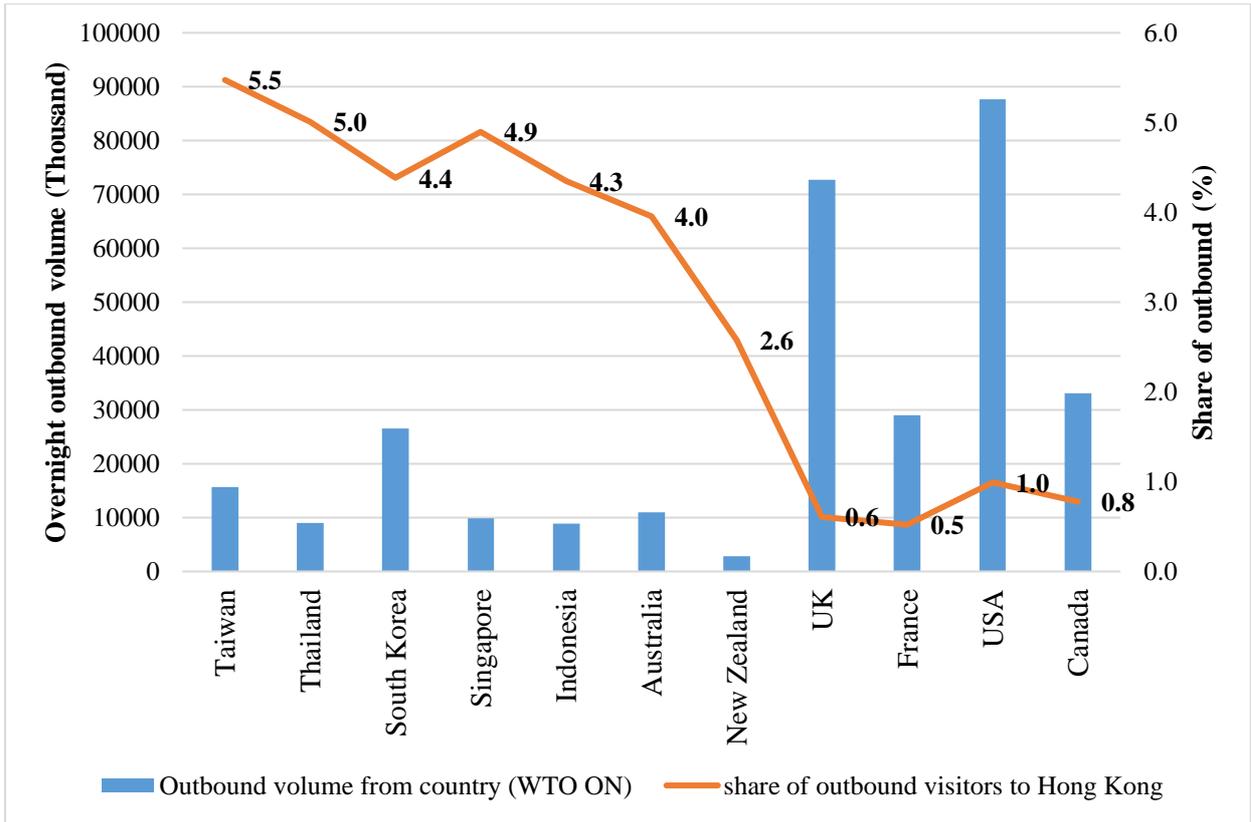


Figure 1: Physical distance decay

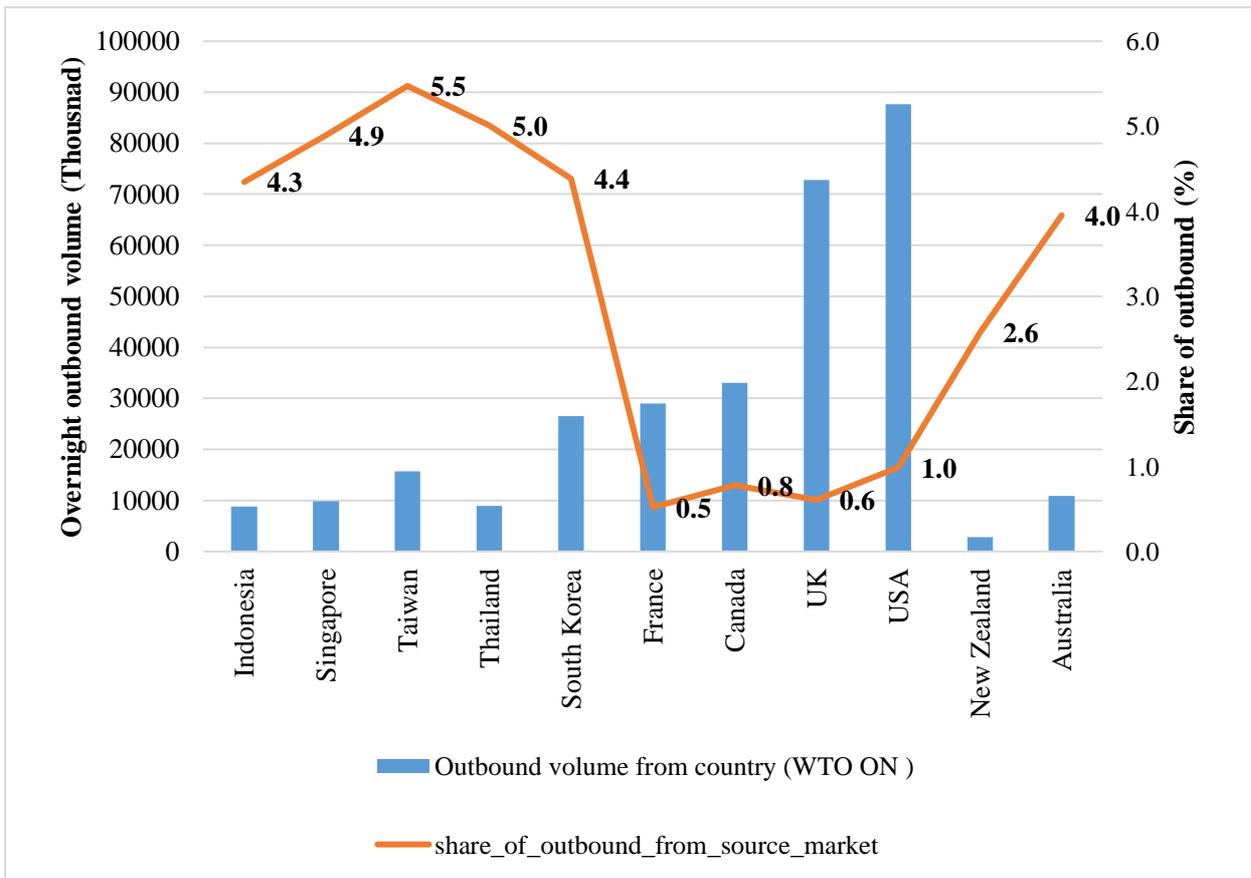
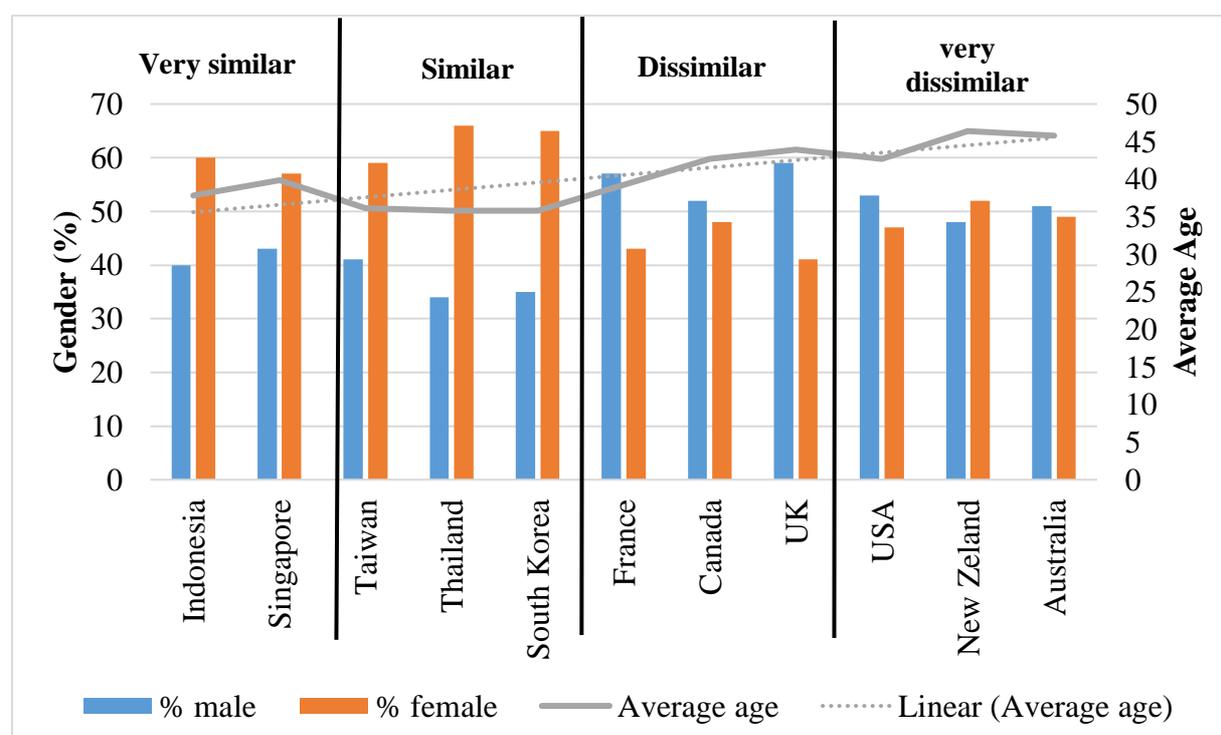


Figure 2: Cultural distance decay

#### 4.2 Visitor profile

To analyze the effect that cultural distance has on visitor characteristics, gender, age, and the occupational characteristics are compared across the various divisions of cultural distance. Figure 3 shows the distribution of average age and gender across different distance categories. It is realized that as the cultural distance increases, more males are drawn to Hong Kong with a significant difference (Kruskal Wallis  $H = 8.891$ ,  $df = 3$ ;  $p = 0.031$ ). There is a significantly higher proportion of females coming from markets that are culturally similar to Hong Kong at 95% confidence level. On the other hand, the proportion of male visitors is relatively higher than female in culturally distinct source markets except for New Zealand. The average age of visitors increases as the cultural distance increase with Indonesia (most culturally similar) reporting an average of about 38 years while Australia (most culturally dissimilar) reported an average age of 46 years. A Kruskal-Wallis test showed that there was a statistically significant difference in average age among of visitors from different source markets ( $H = 9.107$ ,  $df = 3$ ;  $p = 0.028$ ), with a mean rank cultural distance score of 7.30 for markets with very similar culture with Hong Kong, 5.50 for fairly similar culture, 10.20 for culturally dissimilar and 15.38 for very dissimilar culture.

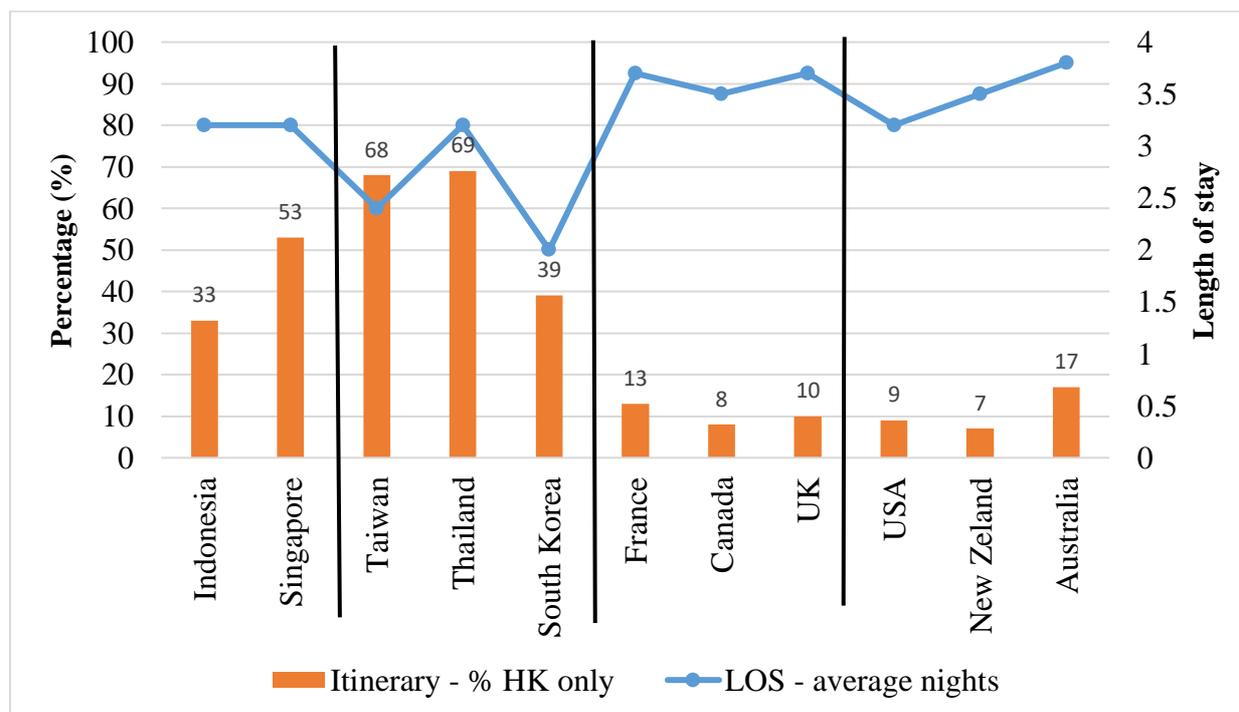


**Figure 3: Gender and average of overnight vacation visitors**

#### 4.3 Trip characteristics of visitors to Hong Kong

This section discusses the effect cultural distance has on the trip characteristics of visitors from different source markets. Figure 5 gives a summary of the length of stay and travel party of the visitors to Hong Kong. Figure 6 shows a gradual rise in the length of stay of visitors to Hong Kong as cultural distance increases. A significant difference was noted between groups as revealed by the Kruskal Wallis H test, ( $H = 10.223$ ,  $df = 3$ ;  $p = 0.017$ ). The difference is between a very similar culture and dissimilar culture. Overall, the visitors spent an average of approximately 3 nights in Hong Kong with a minimum of 2 nights (South Korea) and a

maximum of approximately 4 nights by Australian visitors. The average length of stay is generally shorter among culturally similar markets than the culturally dissimilar markets. Though culturally dissimilar markets stay relatively longer than culturally similar markets, Hong Kong serves as a secondary destination or a transit point to culturally dissimilar markets as shown in Figure 4 (Kruskal Wallis  $H = 11.280$ ,  $df = 3$ ;  $p = 0.010$ ). Tourists with multi-destination itinerary, who are predominantly from culturally dissimilar markets mostly visit destinations near Hong Kong such as Macao and Mainland China.



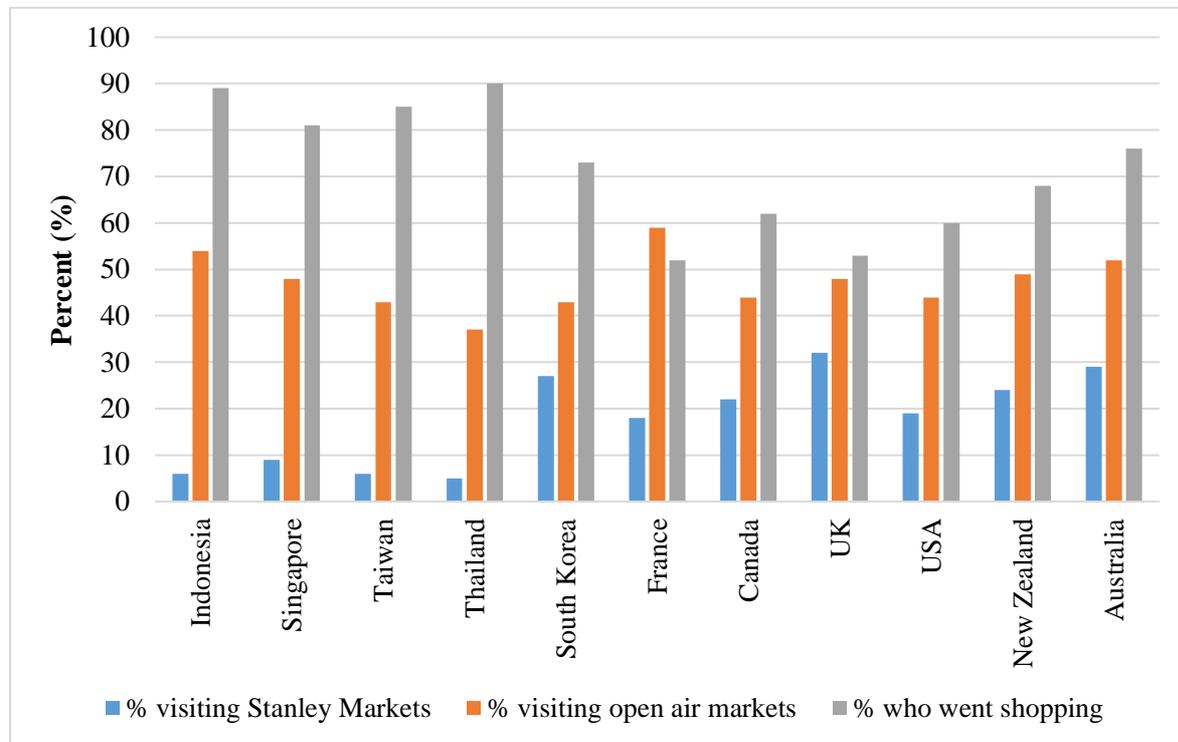
**Figure 4: Average length of stay and travel itinerary of visitors to Hong Kong**

Again, the propensity of visitors to participate in day tours in Hong Kong does not change with differences in culture (Kruskal Wallis  $H = 0.306$ ,  $df = 3$ ;  $p = 0.959$ ). Though participating in guided tours reduces the anxiety and bridge the gap between cultures (Bao & Mckercher, 2008), it was not a popular practice among culturally dissimilar markets. Interestingly, Hong Kong attracts a higher share of first-time visitors from culturally dissimilar markets who hardly ever participate in day tours and mostly do not use guided tour services. The tourists with dissimilar cultures have a higher tendency to travel alone compared with culturally similar markets (Kruskal Wallis  $H = 12.411$ ,  $df = 3$ ;  $p = 0.006$ ). This is in line with (Jackson, 2000).

#### 4.4 Travel Behaviour in Hong Kong

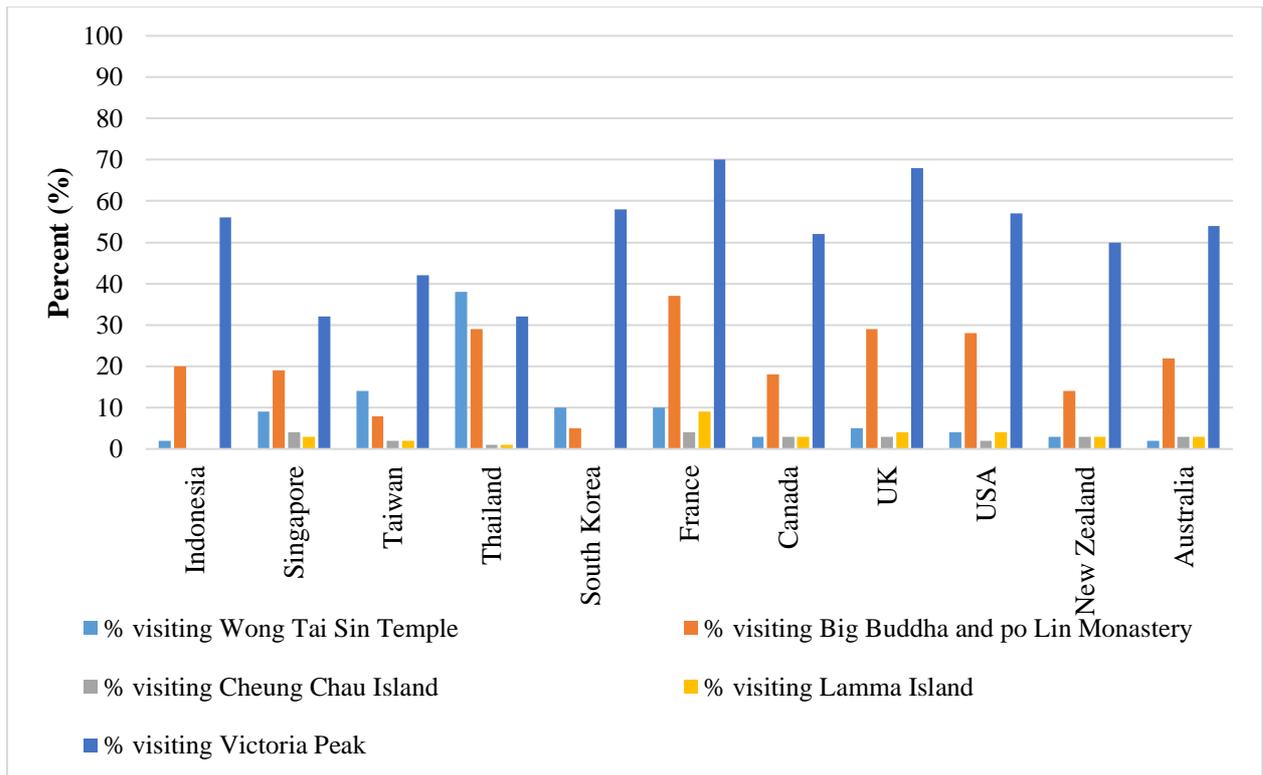
This section compares activities tourists engage in, the attraction they visit, and satisfaction levels, among other indicators. Figure 7 shows the popular activities that tourists from different cultural backgrounds engage in while in Hong Kong. In Figure 7, it is seen that shopping is a common activity across different cultural markets. It also shows that relatively higher proportion of culturally dissimilar markets visited Stanley Markets than similar markets where a significant difference was realized among the cultural groupings (Kruskal Wallis  $H = 7.727$ ,  $df = 3$ ;  $p = 0.052$ ) but same cannot be said about Open Air Markets since as many culturally

similar as culturally different tourists visit the place (Kruskal Wallis  $H= 4.307$ ,  $df= 3$ ;  $p= 0.230$ ). In general, a significant difference was found in shopping activities among different cultural markets (Kruskal Wallis  $H= 9.774$ ,  $df= 3$ ;  $p= 0.021$ ). Further analysis revealed that the differences were between very similar and dissimilar cultures as well as between very similar and very dissimilar cultures.



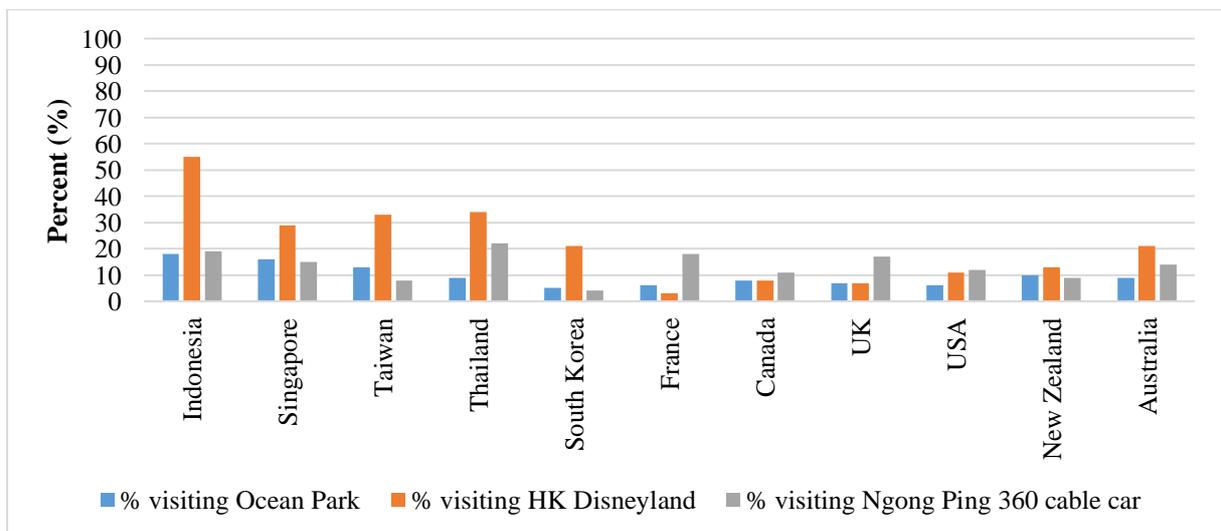
**Figure 5: Travel activities**

In relation to visiting attractions, culturally specific differences were noticed in a visit to popular cultural and natural sites. Though Victoria Peak was a popular attraction among the tourists, no significant difference was noted between the groups (Kruskal Wallis  $H= 7.209$ ,  $df= 3$ ;  $p= 0.066$ ). Similarly, there was no difference in visits to the Wong TaiSin Temple (Kruskal Wallis  $H= 4.550$ ,  $df= 3$ ;  $p= 0.208$ ), and Cheung Chu island. It is, however, interesting to note that culturally dissimilar visitors had a higher propensity to visit Big Buddha and Po Lin Monastery (Kruskal Wallis  $H= 7.975$ ,  $df= 3$ ;  $p= 0.047$ ), and Lamma Island (Kruskal Wallis  $H= 12.058$ ,  $df= 3$ ;  $p= 0.007$ ) than the culturally similar markets.



**Figure 6: Visitors to cultural and natural sites**

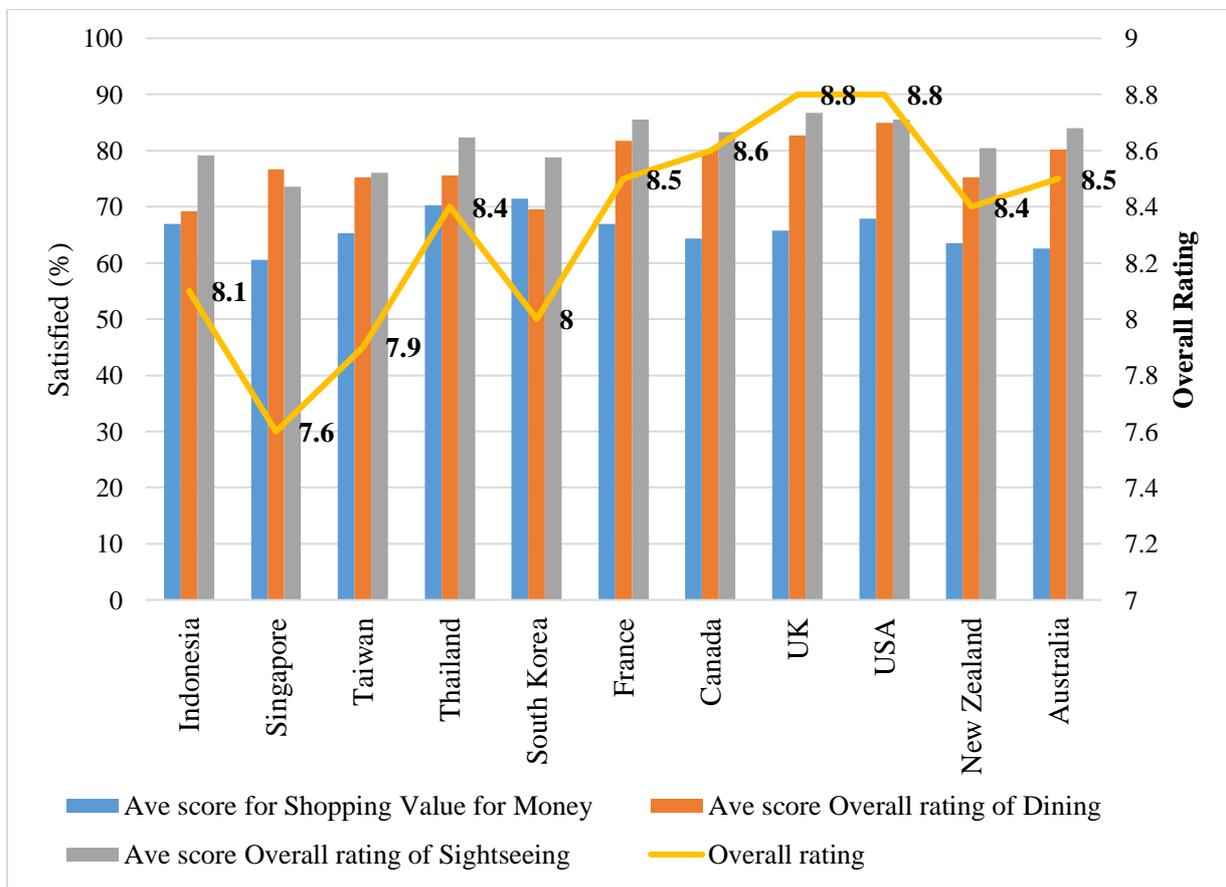
With regards to entertainment-related or leisure attractions, very popular entertainment sites and attractions were examined, and it was revealed that culturally similar markets have the highest rate of visit entertainment-related attractions than culturally dissimilar markets. A significant difference was found to exist between groups with respect to Ocean park (Kruskal Wallis  $H= 7.991$ ,  $df= 3$ ;  $p= 0.046$ ) and Disneyland (Kruskal Wallis  $H= 12.253$ ,  $df= 3$ ;  $p= 0.007$ ) (Figure 9). However, there were as many culturally similar visitors as culturally dissimilar visitors at other leisure attractions including the Symphony of Lights, Avenue of Stars, Golden Bauhinia, and the Ngong Pin 360 Cable Car.



**Figure 7: Parks and entertainment site**

#### 4.5 Visitor satisfaction

There seems to be an effect of cultural distance on the satisfaction derived by visitors to Hong Kong. Visitors from culturally dissimilar source markets are noted to rate overall satisfaction of their vacation in Hong Kong twice as high as visitors from markets with a very similar culture and markets with a fairly similar culture to Hong Kong (Kruskal Wallis  $H= 8.430$ ,  $df= 3$ ;  $p= 0.038$ ). Singaporeans had the lowest rating of 7.6 while US and UK visitors were the most satisfied (8.8). Specifically, visitors from culturally dissimilar markets have higher propensity to be satisfied with shopping value for money (Kruskal Wallis  $H= 8.796$ ,  $df= 3$ ;  $p= 0.032$ ) and dining (Kruskal Wallis  $H= 11.671$ ,  $df= 3$ ;  $p= 0.009$ ), than visitors from markets that are very similar and fairly similar to Hong Kong in terms of culture (Figure 8). On the other hand, though the level of satisfaction seems to rise with cultural distance, there is no significant difference between the satisfaction of visitors from different cultural markets in relation to sightseeing. This corroborates with the assertion by (Lord, Putrevu, & Shi, 2008) that culture has the potential to influence the vacation experience of vacationers.



**Figure 8: Visitor satisfaction**

### 5. Discussion and Conclusion

This study sought to determine the decaying effect of cultural distance on travel demand. The effect of cultural distance on the demand for Hong Kong as a leisure destination was tested using 11 major source markets (both long and short-haul). The effects were tested by comparing proportions of tourists from different cultural distance groupings (very similar,

fairly similar, dissimilar and very dissimilar cultures) to Hong Kong. Few differences were realized among the cohorts (both within groups and between groups).

Culturally distinctive markets were made up of long-haul markets. This could be because countries that are close to one another tend to share more similarities and as the distance between them grows wider, the similarities grow thinner. This is in obedience to the first law of geography and in this case, closer countries will be more related than distant countries. Therefore, it is not surprising that culturally similar markets are short-haul markets.

The culture of Hong Kong has a decaying effect on demand of selected source markets and expresses that tourism demand varies inversely with cultural distance. This may be attributed to the rationality of tourists where tourists might go for comparable attractions presented in a destination with smaller cultural to their origin than Hong Kong. Therefore, will go to a familiar place. Again, it is noted that all markets with high outbound percentage speak a similar language. This will make visitors from such countries feel more comfortable and enjoy travelling to such destinations as language is noted to contribute to Cultural Distance.

Differences were realized in the socio-demographic profiles, travel characteristics and behaviours among culturally similar and culturally dissimilar markets. Visitors from culturally dissimilar markets are generally older, and more likely to be retired males. Culturally distinctive visitors usually engage in lone travel and stay for a relatively long period. They recognize Hong Kong as one of their multiple destinations and engage in visiting natural and cultural attractions. Notably, visitors to the Big Buddha and Po Lim Monastery, and Stanley market were less interested in hedonistic activities. This reflects the notion that the greater the CD, the more aspirational a tourist is likely to be, the older he is, with more discretionary income, seeking to explore multiple destinations and learn cultural heritage through long trips. Alternatively, culturally similar visitors are mainly repeat-visitors who have Hong Kong as their only destination and engage in entertaining and pleasure-driven activities including visits to theme parks (Ocean Park and Disneyland), and shopping. It is clear that (cultural) distance decay, is affecting the markets of Hong Kong. The trip characteristics of visitors change as the distance increases. This is because distance decay affects people with lower discretionary income and time so are more sensitive to travel cost and length of stay. Again, in the case of high UAI where visitors make shorter trips to a single destination while lower UAI is more inclined to longer trips with multiple destinations, significantly different patterns emerged in travel behaviour. This again establishes the effect that CD has on travel demand.

The study suggests that CD plays a key role in shaping the demand for tourism, determine trip characteristics and tourist behaviour as do the physical distance. Tourist profile changes as CD increases. Again, trip characteristics and tourist behaviour are also affected by CD. Therefore, the HKTB should segment and do target marketing where value for cultural integration and aspiration motives will be advertised to culturally distinctive (long-haul) markets while pleasure-oriented adverts will be targeted at the culturally similar (short-haul) markets. This will help to maximize and maintain competitiveness.

Though this study has revealed the effect that cultural distance has on leisure travel demand, it has some limitations. First, it employed limited data which did not allow for rigorous statistical analysis. Second, the study was not able to ascertain some reasons for tourist behaviour. For instance, the Big Buddha and Po Lim Monastery are purposely for performing traditional rituals and rites observed by cultures similar to Hong Kong yet culturally distinctive markets were dominant. Future studies can establish the reason for such popularity among dissimilar cultures. Further investigation can dwell on the findings of this study to conduct a longitudinal study to determine whether the effect of cultural distance on tourism demand of Hong Kong will change over time. Again, this paper did not consider the effect of the multiple crises (social

unrest and CoVID-19) as it uses data before the happenings. As situations have changed, it would be important to find the combined effect of crises especially the COVID-19 (as Hong Kong was the first country to be affected by the virus before the global pandemic) and distance decay on tourism demand in Hong Kong.

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## **A multilevel study on green equity**

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### **Abstract:**

This study extends the customer equity paradigm to propose a green induced tourist equity model. Drawing on the attitude literature of subliminal persuasion and priming, we argue that the environment performance of the source market plays a pivotal role in inadvertently stimulate tourists to visit and hence, greater revisit desire for the destination. We develop multilevel models to test individual-level direct effects leading from green equity to destination loyalty through value equity, brand equity, and relationship equity germane to a destination, and then tested cross-level moderating effect emanating from source-market's environmental performance to the proposed direct relationships.

**Keywords:** green equity, tourist equity, loyalty, energy efficiency, carbon emission, subliminal persuasion

### **1. Introduction**

Greening has often been accentuated to bring a constellation of positive impacts to tourists (Han, Yu, Kim, & Kim, 2018; Xu, Huang, & Whitmarsh, 2020), service providers (Collins & Cooper, 2017; Jones, Hillier, & Comfort, 2016; Rosenbaum & Wong, 2015), and hosting destinations (Corte & Aria, 2016; Fok & Law, 2018). For example, implementation of greening and energy-efficient practices has beneficial impacts on tourism development, such as enhancing the comfort of tourist experience, improving the aesthetic value of destinations, and more (Cingoski & Petrevska, 2018). There is no doubt that ecological initiatives could galvanize tourists to react favorably to greening providers and destinations. Greening also facilitates lower operation costs and helps reconcile “risks spoiling the equilibrium of local ecosystems, causing the degradation of the environmental beauty in the long term” (Satta, Spinelli, & Parola, 2019, p. 267). Yet, there is still limited understanding about how destinations' greening programs could ultimately foster favorable tourist responses to functional, symbolic, and relational benefits that comprise the three drivers of customer equity: value, brand, and relationship equities (Lee & Park, 2019; Vogel, Evanschitzky, & Ramaseshan, 2008).

While a large body of the literature has discussed various mechanisms of specific greening practices that could render powerful forces that influence tourists' attitudes, perceptions, and behaviors (Han, et al., 2018; Wolf, Ainsworth, & Crowley, 2017; Wong, Wan, & Qi, 2015), these prior studies have largely relied on individual dispositions, ignoring the broader environmental context that gives shape to their cognitions and actual behaviors. As such, with a few exceptions (Xu, et al., 2020), sustainable tourism investigations thus far have focused merely on tourists' in-destination perceptions and behaviors, without taking consideration of the environmental influence from the source market. This dearth of sustainable research has prevented the field from using the systems thinking/theory tradition (Senge, 1994) to embark on synthesizing the linkage between source and destination markets.

This study addresses the above knowledge gaps by investigating the following questions: (1) What is the role of a destination's greening program (i.e., green equity) in tourist equity? (2) How do a source market's environmental conditions subsequently influence tourists' greening dispositions while they sojourn in a foreign place? In answering these questions, we developed a multilevel green-induced tourist equity model to underscore a process in which a destination's greening practices ultimately influence tourist revisit propensity through tourist equity that is underpinned by value, brand, and relationship travel appeals. It also highlights a subliminal priming mechanism in which destination greening helps activate tourists' unconscious choices that are embedded within as a natural habitat based on the source market environment cues (i.e., regional ecological performance) (Cooper & Cooper, 2002; Karremans, Stroebe, & Claus, 2006). The key contributions of this study lie in articulation of the green-induced tourist equity model as well as theorizing and examining the linkage between source and host destinations pertinent to sustainable development. This study is a rather unique multilevel inquiry in the sustainable tourism literature, as it opens a new avenue of research on how unconscious beliefs that are embedded in a place of origin could ultimately play a role in guiding destination evaluations and choices.

## **2. Literature Review**

### *2.1 Green Initiatives in the Tourism Context*

Green marketing is a marketing strategy to design, promote, price, and distribute products that are not harmful to the environment (Rahman, 2015; Rosenbaum & Wong, 2015). Growing environmental concerns have impelled the tourism industry to embark on more sustainable tourism practices (Satta, et al., 2019; Wolf, et al., 2017). In the context of tourism, green marketing has been implemented by reducing the operating costs of tourism facilities (through measures such as water saving and energy saving) as well as to create value for tourists (Knezevic Cvelbar, Grün, & Dolnicar, 2020). The main purpose of implementing greening has been to respond to ecological concern through minimizing environmental harm from tourism activities and ensuring the quality of the natural environment is diminished or jeopardized (Han, et al., 2018). The tourism industry, including hotels, has been a pioneer in implementing green initiatives. These green endeavors can be regarded as hotels' intangible assets, which can improve the corporate image, gain a competitive advantage, and enhance market attractiveness (Gupta, Dash, & Mishra, 2019; Tanford & Malek, 2015).

In recent years, there is a growing attention towards sustainability and ecological concerns from the tourist's point of view. Thus, the tourism industry has been gradually responding to environmental concern of tourists and societies with respect to tourism facility operations and management through green marketing (Erdogan & Baris, 2007; Mensah, 2006; Merli, Preziosi, Acampora, Lucchetti, & Ali, 2019). For example, there is a sustainable certification initiative

called “Green Tourism Business Scheme” in Western England, which has played a crucial role in helping businesses raise environmental awareness, protect sensitive environment areas, reduce water consumption and improve waste management (Jarvis, Weeden, & Simcock, 2010). Green initiatives have become a non-negligible factor in attracting tourists (Han & Yoon, 2015). Several studies have reported a positive relationship between an individual’s perception of green initiatives and behavioral responses (Gao, Mattila, & Lee, 2016; Han, et al., 2018), such as satisfaction (Gao & Mattila, 2014; Martínez García de Leaniz, Herrero Crespo, & Gómez López, 2018; Xu & Gursoy, 2015), loyalty, and willingness to pay a premium price (Teng, Horng, Hu, Chien, & Shen, 2012; Wong, et al., 2015). Considering the role of green initiatives in marketing, their adoption can be seen as a rational strategy to improve tourists’ appraisals of a destination and to instill confidence in them as well as favorable responses (Ham & Han, 2013; Yusof, Rahman, & Iranmanesh, 2015).

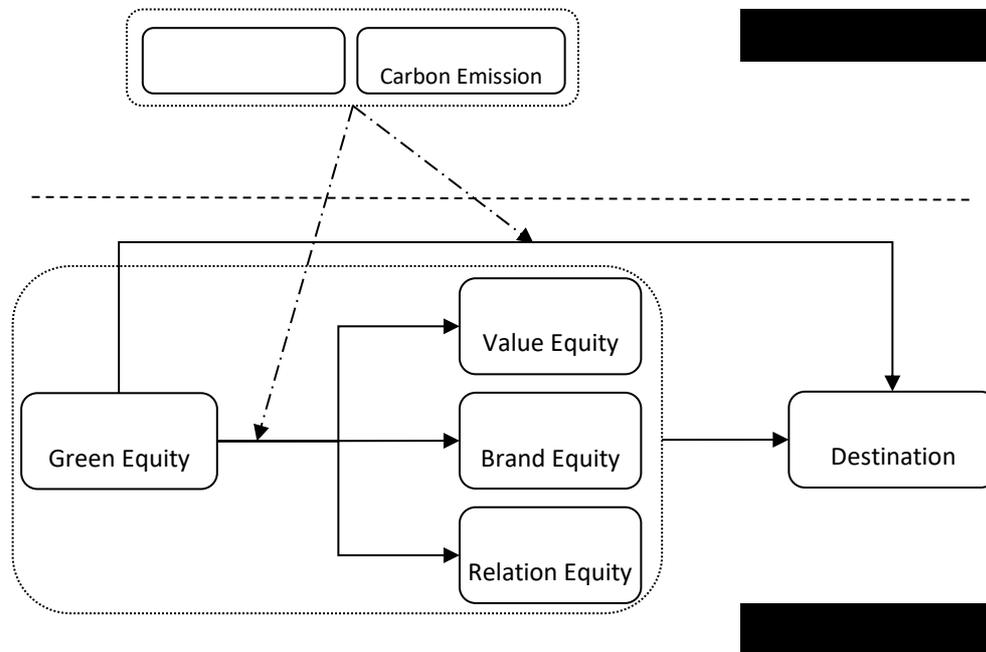
## *2.2 Conceptualization of the Multilevel Greened Tourist Equity Model*

The physical environment is a rich repertoire of stimuli that can influence people’s attitudes and behaviors consciously and unconsciously (Albarracín & Vargas, 2010). This premise has widely been acknowledged in various disciplines such as environmental psychology (Mehrabian & Russell, 1974; Palanica, Lyons, Cooper, Lee, & Fossat, 2019), management/marketing (Bitner, 1992; Menguc, Auh, Katsikeas, & Jung, 2016), and tourism and hospitality (Ji, Wong, Eves, & Leong, 2018; Wong, 2017) to conjecture how the environment could ultimately shape actors’ course of actions. The essence of this line of inquiry lies in following the systems thinking/theory paradigm (Senge, 1994) to investigate how human actors are predisposed to certain confined situations (i.e., person-in-situation). These situations could ultimately impel actors to follow suit with certain normative forces (Hirst, van Knippenberg, Chen, & Sacramento, 2011), such as being more ecologically cautious and in pursuit of more eco-friendly excursion experiences (e.g., consuming less and recycling). The present study draws on this tradition to highlight how the individual tourist’s green perceptions of a destination and the impacts of those perceptions on other destination attributes (e.g., tourist equity drivers and destination loyalty) are conditioned based on the source market’s environmental forces that ultimately give shape to the tourist’s predispositions.

We further draw on the attitude literature pertaining to subliminal priming and motivation (Cooper & Cooper, 2002; Wenke, Fleming, & Haggard, 2010) to argue that the environment performance (i.e., energy consumption and carbon emission) of the source market plays a pivotal role in inadvertently stimulating tourists to crave a greener destination to visit and hence, greater revisit desire for the place. In particular, subliminal persuasion and priming point to a phenomenon in which stimuli are undetected by the receiver yet render as an environmental influence on one’s attitudes, choices, and future behaviors inadvertently (Cooper & Cooper, 2002; Karremans, et al., 2006). Such a view provides the guiding light on why consumers and tourists alike are affected by the physical environment unconsciously. More importantly, Albarracín and Vargas (2010) note that “subliminal persuasion seems to be most effective when a related motive is already aroused” (p. 402). In other words, our proposed multilevel green-induced tourist equity model argues that perceived greening of a destination (i.e., green equity) evokes a higher level of tourist equity with elevated value, brand, and relational benefits that could ultimately improve a tourist’s propensity to revisit the place (i.e., destination loyalty intention) (see Figure 1). Yet, this chain of positive relationships is amplified for tourists whose source markets embark on greening endeavors to improve energy efficiency and reduce carbon emissions. That is, these initiatives could inadvertently emanate subliminal persuasions to

outbound tourists. We further elaborate on the conceptualization of tourist equity and the proposed model in the following sections.

**Figure 1: Research Framework: Green-Induced Tourist Equity**



Note  indicates moderating effect.

### 2.3 Green Equity as a Driver in the Tourist Equity Model

Although customers' perceptions of an organization's value equity, brand equity and relationship equity can directly influence their loyalty, most customers thoroughly evaluate a firm's marketing programs before considering their patronage options (Gao, Melero-Polo, & Sese, 2020; Ou, Verhoef, & Wiesel, 2017). As awareness of ecological issues continues to increase, destination authorities have devoted a substantial amount of efforts to carry out environment-friendly operations along with firms' green programs to build a better habitat for both residents and tourists (Martínez García de Leaniz, et al., 2018). Indeed, these greening effects have widely been reported in recent studies. For example, Chen (2016) stated that green perceived value was positively associated with users' green loyalty to public bicycles. Rosenbaum and Wong (2015) investigated guests' subjective appraisal of a hotel's green equity, along with value, brand and relationship equities, on guest loyalty. Their work showed that green equity plays a significant role in customers' overall assessment of a hotel's marketing programs. It further clarifies the role of green marketing programs in hotel management and shows how hotels can benefit from enhanced customer loyalty and decreased operating costs through the implementation of greening programs.

In this study, we propose the green tourist equity model by adding green equity as a driver of tourist loyalty, and reveal how green initiatives may influence other equity drivers that may ultimately impact tourist loyalty intentions. Green equity is described as the tourist's subjective

appraisal of green initiatives implemented by the tourism destination in response to environmental concerns such as energy saving, water reuse, pollution reduction, energy consumption reduction, and recycling (Trvst, 2020).

## *2.4 Hypotheses Development*

### *Tourist Equity Drivers*

The term *tourist equity* was conceptualized based on customer equity. Customer/tourist equity serves as an institution's (i.e., a firm's or a destination's) key strategic initiative to achieve long-term marketing success, and it represents values generated from the institution's current and potential customers/tourists by maintaining a prolonged relationship with them (Ou, et al., 2017). It is calculated as the total of the discounted lifetime value summed over the institution's current and potential clienteles (Rust, Lemon, & Zeithaml, 2004). Yet, it "remains a pipe dream for most firms" (Vogel, et al., 2008, p. 98) because it is difficult for all institutions to calculate customer/tourist equity correctly by obtaining accurate customer/tourist lifetime value measures. However, Vogel et al. (2008) pointed out another way to gauge customer equity through its underlying drivers – value equity, brand equity, and relationship equity – as a means to tout loyalty and expenditures. Drawing on this logic, this study conceptualizes tourist equity to entail these properties – value, brand, and relationship equities – as drivers for the success of destination marketing programs. In particular, it was acknowledged that customer equity drivers can promote relevant managerial outcomes, such as loyalty, sales, and profitability (Gao, et al., 2020). Lemon, Rust, and Zeithaml (2001) argued that it was important to reveal which driver is the most critical in customer/tourist equity and will be most effective in promoting loyalty behavior and ultimately increasing their expenditures. These three equity drivers are rather distinct, and they are further detailed in the sections that follow.

Value equity is customers'/tourists' perception of what is sacrificed and what is received during a marketplace exchange (Lemon, et al., 2001). The common attributes of value equity in the context of tourism are convenience, price, and quality of tourism products (Lemon, et al., 2001; Priporas, Stylos, Rahimi, & Vedanthachari, 2017). Brand equity is customers'/tourists' subjective appraisal towards the brand, which is beyond their objective assessment (Rust, et al., 2004; Rust, Zeithaml, & Lemon, 2000). Evaluation of brand equity often lies in consumer-based assessment (i.e., customer-based brand equity), which is a relative perception of a given brand in reference to other similar labels (San Martín, Herrero, & García de los Salmones, 2019). Relationship equity is the tendency of the customer to keep connection with a brand or tourism product (Ou, et al., 2017). The influencing factors of relationship equity in the context of tourism consists of tourists' tendency to know and to stay connected with the destination. Tourist equity is essential to enhance the competitive advantage of a touristic place or product (Lee & Park, 2019; Wong, 2013). Each of these may work interdependently as a conduit to enhance favorable tourists' responses as well as providing an appropriate strategy for destinations to respond to their changing needs.

### *The Relationship between Green Equity and Tourist Equity Drivers*

Green initiatives have become a key competitive advantage to firms, as they help improve product attractiveness through added eco-related benefits to the product value. Specifically, green marketing could improve product appeals by enhancing customer preferences (Han, 2015; Satta, et al., 2019). For example, Wong, Wan, and Qi (2015) empirically illustrated the role greening plays in tourist value creation in the context of food festivals. Destinations and service providers may leverage greening to improve cost control, increase attractiveness and

profitability, and ultimately foster stronger tourist interests and preferences (Martínez García de Leaniz, et al., 2018). In essence, destination greening renders a means to improve tourist perceptions of existing offerings, thus leading to an accentuated level of travel value (Gupta, et al., 2019; Satta, et al., 2019). Accordingly, the first hypothesis was proposed as follows:

**Hypothesis 1:** Green equity is positively related to value equity.

With increasing environmental awareness, green practices of tourism destination are considered as an effective way to improve the brand appeal of the place (Fok & Law, 2018). The purpose of implementing green initiatives is to improve marketing competitiveness by elevating the image and reputation of tourism destinations, and ultimately building a strong connection with tourists (Fok & Law, 2018; Wong, et al., 2015). As such, DMOs around the globe have embarked on development of sustainable tourism (Corte & Aria, 2016; Wolf, et al., 2017) with a constellation of green practices implemented, mainly involving the 4Rs: **R**ecycling paper, metals, and plastics; **R**educing and reusing waste water; using **R**enewable energy through building solar panels; and **R**educing energy consumption through LEDs and other energy-saving instruments (Trvst, 2020); along with other ecological measures (Collins & Cooper, 2017; Satta, et al., 2019).

Utility of these green marketing programs contributes to adding tremendous brand benefits to an institution (e.g., tourism products or destinations) and their stakeholders (Koller, Floh, & Zauner, 2011). As such, environmental efforts are often demonstrated by the literature to emanate positive influence not only on the institution's branding (Chen, 2010; Misra & Panda Rajeev, 2017), but also on building a better connection with these stakeholders (e.g., customers) (Tanford & Malek, 2015; Wong, Wan, Huang, & Qi, 2020). In other words, an institution's greening initiatives (i.e., green equity) render a powerful conduit in facilitating the institution to attain a higher level of brand equity and relationship equity.

Take the lodging industry as an example. Eco-friendly hotel brands can improve customers' favorable impression towards them, which can ultimately arouse guests' brand preference and brand loyalty (Liu, Wong, Shi, Chu, & Brock, 2014). Rosenbaum and Wong's (2015) work on hotel greening programs point to the importance of eco-friendly practices, such as reducing energy consumption and using recyclable water, in the lodging industry as a means to enhance a hotel brand's image and quality, leading to a greater desire to repatronize the property through a stronger relational bond. The underlying logic may resonate with the premise of social identity theory (Löhndorf & Diamantopoulos, 2014), which posits a situation in which a social actor's greening goal is activated by a service provider's green initiatives to better categorize himself/herself as a part of (or in association with) the focal brand. We believe that destinations that embark on such green marketing initiatives would also benefit by improving destination brand equity and relationship equity. Accordingly, the following hypotheses were proposed:

**Hypothesis 2:** Green equity is positively related to brand equity.

**Hypothesis 3:** Green equity is positively related to relationship equity.

### ***The Relationship between Green Equity and Destination Loyalty Intention***

Destination loyalty intention is defined as the propensity of a tourist to revisit a place (Oppermann, 2000); it is an important indicator to measure the relationship between tourists and a tourism locale (Yuksel, Yuksel, & Bilim, 2010). The relationship between greening and loyalty behaviors has been acknowledged in prior studies (e.g., Yusof, et al., 2015). The body of literature has revealed that green practices are an effective way to enhance satisfaction and loyalty, and that they can serve as a main driving force for profitability and revenue growth of

the providers (Gao, et al., 2016; Kassinis & Soteriou, 2015). Taking the lodging business as an example again, it was identified that guests are more likely to patronize hotels with environment-friendly facilities, which further leads to increased propensity to staying in corresponding hotels in future trips (Han & Yoon, 2015). In sum, guests who are more eager to stay in eco-friendly hotels are more willing to pay extra and to provide positive word of mouth (Han, Hwang, Kim, & Jung, 2015). This phenomenon is also prevalent in other tourism products (Tolkes & Butzmann, 2018; Wong, et al., 2015). Taken together, there is ample evidence to suggest a linkage between green practices of a tourism product or destination and revisit intention of tourists (Gao, et al., 2016; Kassinis & Soteriou, 2015), despite most prior efforts germane to product-based experience. Here, we believe that a similar relationship is warranted in the context of a destination because it subsumes a wide array of tourism products; hence, the following hypothesis was proposed:

**Hypothesis 4:** Green equity is positively related to destination loyalty intention.

### *The Relationship between Tourist Equity Drivers and Destination Loyalty Intention*

Loyalty intention is demonstrated by maintaining existing tourists through strengthening their tie with the hosting destination (Mao & Zhang, 2014). In the increasingly competitive market, efforts are made to recognize the role of customer equity as a major predictor of favorable touristic behaviors. Although prior research on the linkage between customer equity drivers and loyalty are primarily germane to the marketing discipline (Ou, et al., 2017), recent tourism/hospitality literature has broadened its scope to cover travel-related phenomena. In particular, the linkage has been investigated primarily in tourism product related services such as restaurants (Hyun, 2009), casinos (Wong, 2013), retail stores (Yoon & Oh, 2016), and hotels (Lee & Park, 2019) with emphasis on customers' perceived loyalty to the particular service providers.

Yet, the tenet of the present research rests on tourist equity that conceptualizes value, brand, and relationship equity as a means to engender greater desire to revisit the host destination. A destination's marketing programs often serve as a conduit in building value propositions, developing favorable destination brand image and preference, and increasing relationship with tourists (including loyalty and affinity marketing programs) (Murphy, Prichard, & Smith, 2000; Ritchie & Geoffrey, 2010). That said, tourists perceptions of destination attributes such as functional benefits (i.e., travel value) (Bajs, 2015; Gallarza & Saura, 2006), symbolic benefits (i.e., destination brand equity) (Nam, Ekinci, & Whyatt, 2011; San Martín, et al., 2019), and relational benefits (Lam & Wong, 2020) have been noted in the body of literature to influence tourists' loyalty intentions and behaviors by enticing them and fulfilling their needs. Accordingly, the following hypotheses were proposed:

**Hypothesis 5:** Tourist equity (value equity, brand equity, and relationship equity) is positively related to destination loyalty intention.

### *The Moderating Role of Source Market Environmental Performance*

Environmental performance can be seen as individual's appraisal of the effect of environment-friendly initiatives. Performance of an ecosystem is crucial in tourism marketing, as there are growing environmental concerns that threaten humanity and the travel industry. Tourists consider environmental performance not only for their place of origin but also tourism destinations, especially when evaluating and selecting their place of choice (Mensah, 2006). Generally, tourists tend to seek eco-friendly places that can reconcile their ecological worries

and malaise, while instilling their confidence in compliance with green measures (e.g., waste treatment measures, energy efficiency, usage of renewable energy sources, greenhouse gas emissions) (Cingoski & Petrevska, 2018; Yusof, et al., 2015). In this study, environmental performance, such as energy efficiency and carbon emissions, render environmental cues embedded within the source market. Energy efficiency is reflected by introducing new energy initiatives to reduce operating costs, and by creating eco-friendly facilities to protect the environment (Cingoski & Petrevska, 2018). Energy-efficient practices achieve environmental protection by reducing harmful emissions (e.g., carbon dioxide, methane, nitrous oxide, etc.) that provoke global warming and climate change (Cingoski & Petrevska, 2018). In particular, carbon emissions may be even more alarming in recent years, as they have been acknowledged as a major factor that contributes to global warming. It was predicted that transport-related CO<sub>2</sub> emissions caused by tourism activity will increase 25% from 1,597 million tones in 2016 to 1,998 million tones by 2030. Moreover, tourism-related transport emissions represented 22% of all transport emissions in 2016 and will maintain a similar level in 2030 (UNWTO, 2019).

In general, a clean and well-preserved environment is considered as a main precondition for residents' well-being and livability (Wang, Wang, Li, & Yang, 2020). Thus, source markets that act on preserving the environment with endeavors to improve energy efficiency and lower carbon emission measures eventually transform into normative forces that "can trigger the activation of unconscious goals... [so] that even goal-directed behavior often takes place outside conscious awareness and... goals can be automatically activated by a multitude of environmental cues" (Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005, p. 198). In other words, cues available from the source market's eco-achievement and greening initiatives may be consciously or unconsciously perceived, which intrigues people to pursue greening goals even when they travel to a foreign place (Wong, et al., 2020). In this study, we focused on theorizing the influence of environmental cues as unconscious and mindless stimuli, because we operationalized environmental performance (i.e., regional energy efficiency and carbon emission) at the macro level that often exists without being noticed, rather than at the individual level where a tourist could consciously perceive the stimuli.

Drawing from the above assertions, with special emphasis on subliminal priming and persuasion, tourists originating from relatively environmentally friendly source markets may unconsciously place greater importance on green practices (e.g., more energy efficiency and lower carbon emissions) (Parkinson & Haggard, 2014). Such an embedded motive for, and placing of importance on, place greening should reinforce the ecological efforts enacted by the tourism destination. Here subliminal priming renders as a motivational force that activates tourists' innate goals (Cooper & Cooper, 2002) to green and to protect the mother Earth (Wang, et al., 2020). In other words, there should be an interaction of both the host market's green equity and the source market's environmental performance that could jointly affect tourists' perceptions of the value, brand, relationship, and loyalty merits of the destination.

This logic is congruent with empirical results from the literature on subliminal influence that shows that "the behavioral effects of a subliminal prime seem to be contingent on a preexisting motivation to engage in these behaviors" (Albarracin & Vargas, 2010, p. 402). Hence, we argue that being green could better promote the value of a place, enhance the place's brand image and quality, and facilitate a stronger bond between the tourist and the destination, especially for tourists who are subliminally motivated by an embedded sphere of a healthy environment from their own habitat. In other words, drawing on subliminal persuasion and priming literature, we could say that the environmental performance of the source market should not directly affect a tourist's perceptions and behaviors; rather, its impact should be triggered based upon the tourist's encounter of a preexisting stimulus (i.e., greening of a destination) (Albarracin & Vargas, 2010; Wenke, et al., 2010). However, the moderating effect of environmental

performance could work both ways. On one hand, poor environmental performance of the source market could render a latent subliminal motive that impels tourists to seek greener places, perhaps for escapism and relaxation (Xu & Chan, 2010). On the other hand, superior performance of the source market's environment could reflect a subliminal motive commensurate with a normative force that intrigues the tourist to seek similar destination environmental appeals (Han & Hwang, 2015). Accordingly, the following hypotheses were postulated:

**Hypothesis 6:** Source market environmental performance moderates the relationship between green equity and tourist equity (value, brand, and relation equities).

**Hypothesis 7:** Source market environmental performance moderates the relationship between green equity and destination loyalty.

### 3. Methodology

#### 3.1 Sample

Data collected for this study came from two sources. The first data source was obtained from the literature (Wang, Wang, Zhang, & Dang, 2019; Zhao, Guo, & Zhao, 2019) in respect to regional environmental performance of the source market (more details are presented below). The second data source was based on a survey that was conducted on April, 2019 with inbound tourists visiting Macau, China. The destination was selected because the government has made an earnest endeavor to promote sustainable tourism with efforts in recycling paper, metal, and plastic; reducing and reusing waste water; and using renewable energy through building solar panels; as well as reducing energy consumptions through LED and other energy-reduction instruments. These initiatives were prevalent in the city and manifested through flyers and green facilities that are vividly available in major tourism attractions. Hence, respondents of the study were intercepted at major attractions. They were greeted with the objective of the study and informed about the green initiatives that the city has undergone. A person-administered approach was employed to assist tourists to complete the survey questionnaire. This approach helped to address questions raised by the respondents if they lacked knowledge about the measures and the city's greening program. To improve representation of the study, a systematic sampling method was used with a skip interview of three. Respondents who were unclear about the green initiatives of the city were excluded from the interview. The questionnaire was first developed in English and then back-translated to Chinese with assistance from three bilinguals. A pilot test with eight subjects was conducted in order to improve the readability and clarity of the instrument.

The survey contained a total of 428 respondents, which reflects a response rate of 53.5%. Of these tourists, 46.4% were from mainland China, and the rest from other regions such as Hong Kong (13.5%), Taiwan (8.4%), Singapore (4.9%), Europe (9.1%), and more; 50.7% were males; 50.6% received a bachelor's degree of high education, while 25.8% received a high school graduate degree; 39.0% were between the age of 21 and 30, 31.8% were between the age of 31 and 40. On average, they stayed in the city for three days. These demographic characteristics were generally in line with the profile of inbound tourists in the city (Wong, Xu, Tan, & Wen, 2019).

### 3.2 Measures

As mentioned above, two sources of data were combined in order to perform the data analytics required. The first data sources were imported from the literature on China's regional *energy efficiency* (Zhao, et al., 2019) and *carbon emission performance* (measures emission efficiency) (Wang, et al., 2019) as proxy for environmental performance at the source market (i.e, province). According to Zhao et al. (2019), energy efficiency was assessed based on adjusted values obtained from exterior environmental factors on provincial energy efficiencies to eliminate the influences of exterior environmental factors; hence it provides a reliable measure of "real" energy performance of a region. Accordingly, higher values reflect better energy performance and efficiency in terms of energy consumption per capita of a particular locale. Wang et al.'s (2019) measure of carbon emission performance was used to assess regional efficiency of carbon emissions with higher values reflecting better efficiency in carbon emissions per capita within a region.

The second data source contains individual-level variables of interest, including green equity, value equity, brand equity, relationship equity, destination loyalty and demographic characteristics. Each item of the multi-item scale was evaluated using a 7-point Likert anchor ranging from 1 (strongly disagree) to 7 (strongly agree). *Green equity* was a four-item measure adopted from Rosenbaum and Wong (2015). The scale measures a destination's green initiatives from a tourist perspective with respect to four areas: energy saving, water reuse, pollution reduction, and recycling. Cornbach's alpha ( $\alpha$ ), used to assess consistency of the scale, was adequate with  $\alpha = .93$ .

*Value equity* was adopted from Rust et al. (2004) and Rosenbaum and Wong (2010) with respect to three aspects of value proposition: convenience, price, and quality, of the destination. The 10-item scale was fairly reliable with  $\alpha = .87$ . *Brand equity* was a three-item scale adopted from Rust et al. (2004). The scale assesses tourists' awareness, image, and quality of a destination brand; and it exercises adequate reliability with  $\alpha = .81$ . *Relationship equity* was a three-item scale adopted from Vogel et al. (2008). The scale assessed tourists' tendency to know and to stay connected with the destination; it's reliability is  $\alpha = .70$ . *Destination loyalty intention* assesses tourist propensity to express positive word of mouth and revisit the destination. It was evaluated using a two-item scale adopted from the literature (Wong, et al., 2019). The scale is consistent, with  $\alpha = .71$ . Overall, all five scales of interest exhibited adequate scale validity, with factor loadings significant at the .001 level ( $t \geq 12.37$ ), average variance extract (AVE)  $\geq .53$ , square root of each AVE  $>$  correlations of the corresponding construct,  $\alpha \geq .70$ , and composite reliability  $\geq .70$ . The measurement model of the five multi-item scale produced adequate model fit:  $\chi^2_{(177)} = 500.10$ , comparative fit index (CFI) = .97, root mean square error of approximation (RMSEA) = .06, and standardized root mean square residual (SRMR) = .09.

Common method variance (CMV) poses a threat to the integrity and reliability of the results. Following the recommendation from the literature (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we first utilized two different data sources to mitigate the issue. Then we diagnosed CMV based on the marker variable method by partialling out a theoretically unrelated marker variable: satisfaction with cultural attraction, which is four-item scale adopted from Hui, Wan, and Ho (2007). Inclusion of the variable does not affect the results, suggesting that CMV is not a limitation. Multicollinearity was assessed through the variance inflation factor (VIF), and results indicate that all VIFs are below 2.0, suggesting that multicollinearity does not affect the reliability of the results.

#### 4. Results

Table 1 presents descriptive statistics and zero-order correlation of the scales of interest. In general, results from Pearson-correlation analysis suggest that regional environmental performance has a moderate negative relationship to green equity ( $r_{\text{carbon emission performance} - \text{green equity}} = -.13, p < .10$ ) and relationship equity ( $r_{\text{carbon emission performance/energy efficiency} - \text{green equity}} = -.12, p < .10$ ). We then tested the individual-level hypothesized relationships in a structural equation model using LISREL 8.80. Results from Model 1 show that green equity is a significant predictor for value equity ( $b = .33, p < .001$ ), brand equity ( $b = .27, p < .001$ ), and relationship equity ( $b = .21, p < .001$ ). In turn, value, brand, and relationship equities ( $b \geq .29, p < .001$ ) are significant predictors for destination loyalty, supporting Hypotheses 1, 2, 3, and 5 (see Table 2). However, results from Model 2 reveal that green equity does not have a direct relationship with loyalty intention, thus Hypothesis 4 is not supported. We further assessed partial mediation using the Sobel test with results showing that  $Z \geq 3.69$  ( $p < .001$ ), indicating that value, brand, and relationship equities significantly mediate the green equity – destination loyalty relationships. We validated the mediation through Hayes' PROCESS procedure with a bootstrapping sample of 5,000. Results reveal significant indirect effect for brand equity ( $b = .09, p < .001, CI = .05$  to  $.14$ ), relationship equity ( $b = .05, p < .001, CI = .02$  to  $.09$ ), but not for value equity ( $b = .01, ns., CI = -.02$  to  $.04$ ).

**Table 2. Results of Structural Equation Modeling Parameter Estimates**

<i>Main Effect</i>	<b>Model 1</b>				<b>Model 2</b>
	Value Equity	Brand Equity	Relationship Equity	Destination Loyalty	Destination Loyalty
Green equity	.33***	.27***	.21***		-.03
Value equity				.42***	.43***
Brand equity				.29***	.29***
Relationship equity				.45***	.45***
R <sup>2</sup>	.16	.06	.07	.69	.69

Note: \*\*\*  $p < .001$ .

Fit indices: CFI = .95, RMSEA = .08, SRMR = .09.

Next we examined the multilevel design of the proposed model using hierarchical linear modeling (HLM) through HLM 6.06. HLM assumes that the endogenous measures including value, brand, and relationship equities as well as destination loyalty vary among a higher level of constituents (e.g., regions). Hence, we first tested this assumption through analysis of variance (ANOVA) with source market as the independent variable and the four endogenous measures as the dependent variables. Results reveal significant differences among regions ( $F_{(30, 397)} \geq 1.69, p < .05$ ). Next we performed a series of HLMs to (re)assess the proposed relationships by taking the regional variance into account. Also, due to data availability from regional-level data, and to offer a finer control of extraneous influence from different cultures and economies persisting among countries, only regional data from China were used for the

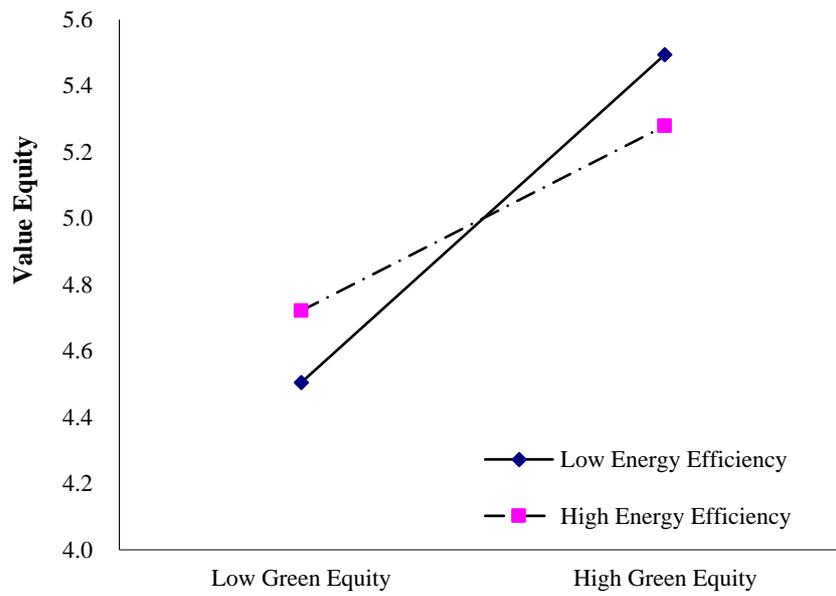
macro-level environmental performance measures. After cleaning the data, 21 dyadic datasets (i.e., regional and individual data) were created.

Results from Models 3 and 4 present evidence from a mediation model leading from green equity to destination loyalty through value, brand, and relationship equities; while results from Models 5 and 6 present further evidence for the mediation model by taking account of the two moderating factors: energy efficiency (EE) and carbon emission performance (CEP). Results from these models provide an internal validation for those presented in Models 1 and 2 discussed above. In particular, green equity is a significant predictor for value equity ( $b = .43$ ,  $p < .001$ ) and brand equity ( $b = .33$ ,  $p < .05$ ), but not for relationship equity ( $b = .11$ , *n.s.*). In turn, value equity ( $b = .15$ ,  $p < .05$ ), brand equity ( $b = .36$ ,  $p < .001$ ), and relationship equity ( $b = .11$ ,  $p < .10$ ) are significant predictors for loyalty, but green equity ( $b = .15$ , *n.s.*) is not. These results generally support Hypotheses 1, 2, and 5.

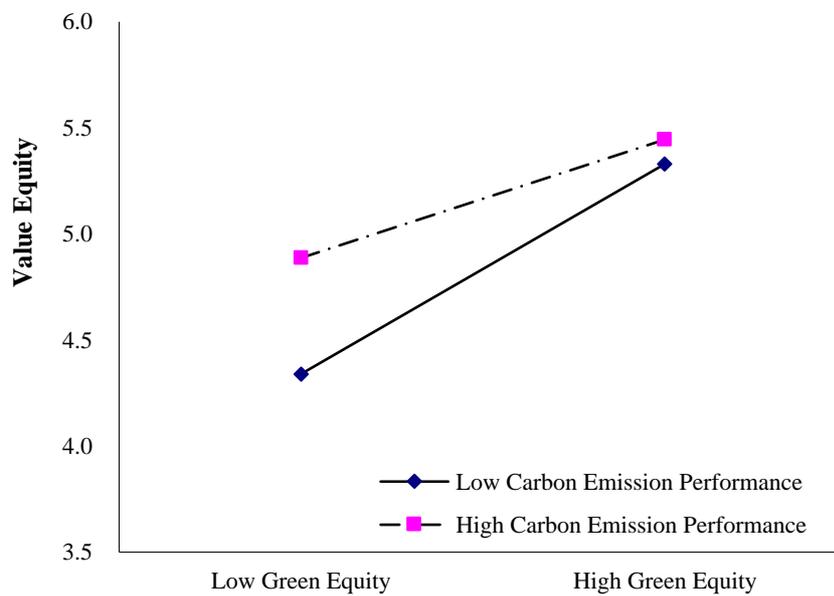
The moderation of regional EE and CEP was examined through modeling their impacts based on random intercept (i.e., cross-level direct effect) and random slope (i.e., cross-level moderating effect). Results from Models 5 and 6 indicate that EE and CEP do not exercise direct influence on the mediating and dependent measures except for the relationship between EE and relationship equity ( $b = -1.20$ ,  $p < .10$ ). The cross-level EE  $\times$  green equity ( $b = -1.69$ ,  $p < .01$ ) and CEP  $\times$  green equity ( $b = -.75$ ,  $p < .05$ ) interactions on value equity were significant, while the CEP  $\times$  green equity ( $b = 1.85$ ,  $p < .05$ ) interaction on brand equity was also significant; partially supporting Hypothesis 6, but not Hypothesis 7.

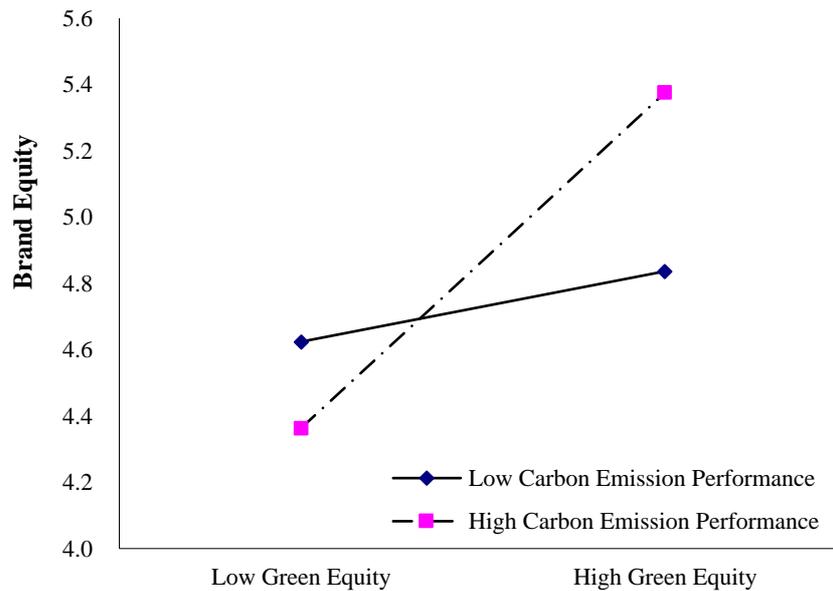
To graphically depict the cross-level moderating effect, we followed Aiken and West's (1991) simple slope approach by redefining the independent variable and the moderator into plus and minus one standard deviation from the mean and portraying the values in Excel. Figures 2 and 3 consistently illustrate that the effect of green equity on value equity is more salient for tourists from regions where environmental performance (i.e., EE and CEP) is low. Results may suggest that tourists residing in regions where environmental protection and hence, environmental performance are still relatively poor may subliminally influence them to crave greener places, where initiatives toward better energy consumption and environmental protection are of primary interest. Hence, a destination's green endeavors could help tourists from these source markets to better realize the valuation of their trips. Figure 4 illustrates that the effect of green equity on brand equity is more salient for tourists residing in high carbon emission performance regions. The result may hint at a congruency relationship between the source market's and the destination market's greening initiatives in improving the living environment (i.e., by reducing carbon emission); hence, being green helps to further promote the destination's brand image and quality, especially for those who perceive that the destination's greening endeavors are in line with their home regions.

**Figure 2. Cross-Level Green Equity × Energy Efficiency Interaction on Value Equity**



**Figure 3. Cross-Level Green Equity × Carbon Emission Efficiency Interaction on Value Equity**



**Figure 4. Cross-Level Green Equity × Carbon Emission Efficiency Interaction on Brand Equity**

## 5. Discussion and Conclusion

### 5.1 Discussion

The present inquiry is motivated by the extant research gaps on sustainable tourism with respect to a need to better understand an intricate linkage between source markets' and destination markets' environmental initiatives. In this study, we developed a multilevel model of green-induced tourist equity to test individual-level direct effects leading from green equity to destination loyalty intention through value equity, brand equity, and relationship equity germane to a tourism locale. We then tested the cross-level moderating effect emanating from the source market's environmental performance to the proposed direct relationships. Findings reveal that value and brand equity mediate the green equity – destination loyalty relationship. Moreover, the green equity – value/brand equity relationships are moderated by source market environmental performance. We close the article by recapping theoretical and practical implications that can further open a broader discourse on destination greening.

### 5.2 Theoretical Implications

This study contributes to the literature from three primary perspectives. First, this study conceptualizes green-induced tourist equity based upon the customer equity literature (Hyun, 2009; Lee & Park, 2019; Rust, et al., 2004) to describe tourist perceptions of a destination's greening efforts in delivering an elevated level of functional, symbolic, and relational benefits through value, brand, and relationship equities. On one hand, this new approach in assessing tourist equity helps foster a mediation impact of tourists' ecological concerns on their future behaviors. Such mediating effect of tourist equity is rather unique in the sustainable literature, as it illuminates that the linkage between greening and tourist behaviors is dependent upon a broad range of destination appeals that fall into three distinct pillars: value, brand, and relationship. More importantly, this study extends the empirical inquiry of customer equity to

the sustainable tourism research domain, juxtaposing greening along with tourist equity in gauging the impact of destination ecological initiatives on tourists.

Second, subliminal persuasion and priming are often used in communication and advertising research domains to articulate people's unconscious information processing, which gives rise to stimuli that inadvertently or mindlessly influence their attitudes, perceptions, and behaviors (Cooper & Cooper, 2002). In turn, people make unconscious choices that "are highly habitualized and based on attitudes that are automatically activated on the perception of a product [or situation]" (Dijksterhuis, et al., 2005, p. 194). In the present study, we illustrate such a subliminal motivational force that is inherited from the source market's environmental conditions. As the literature predicts, this force does not directly impact people but it enacts upon other factors and situations to activate this true power. This discovery is rather novel in the tourism literature, as it opens a new avenue of research on how unconscious beliefs that are embedded in a place of origin could ultimately play a role in guiding destination evaluations and choices. In turn, applications of subliminal persuasion in the current study broaden the theoretical understanding of the role of attitude at an aggregate level, and they also help strengthen the linkage between source market innate forces and tourists' evaluations as they traverse through a web of foreign encounters.

Third, while a wide array of efforts have been acknowledged in the academic literature that are germane to the sustainability research stream in illustrating the role of greening on hotels (Han & Yoon, 2015; Tanford & Malek, 2015), events (Andersson, Jutbring, & Lundberg, 2013; Wong, et al., 2015), other tourism products (Yoon & Oh, 2016), and destinations (Fok & Law, 2018; Xu, et al., 2020) from the tourist perspective, these initiatives are confined within the scope of individual-level analytics. This study contributes to the literature by bridging the micro and macro perspective of sustainable tourism and by integrating both individual-level and source market regional-level factors into a multilevel framework to better assess how source market environmental factors could ultimately influence tourists' greening perceptions and behavioral intentions during their excursions. The extension from mere micro-level or macro-level investigation to multilevel design is crucial to the social science inquiry tradition, as it takes into account the environmental situation that gives rise to tourist perceptions and behaviors. As such, it opens a new array of research opportunities not only to "reconcile the limitations of single-level analysis" (Wong, 2017, p. 809), but also to better gauge macro-level (i.e., source or destination market) "boundary conditions, contingencies, non-linearity, and contextual factors in order to gain a fuller understanding of the research problems at hand" (p. 812). In doing so, this study takes a systems thinking/theory tradition to offer a new approach in assessing the role of greening on destinations, taking account of individual tourist perceptions and innate ecological properties associated with his/her corresponding source market to portray an integrated model of how tourists' predispositions are indeed contingent upon the interaction of the source–host destination eco-forces.

### *5.3 Managerial Implications*

Sustainable tourism has been an important issue since the 1990s, and it aims to better gauge the sustainability of a place balanced between three pillars: social, economical, and environmental. Yet, destination ecological concerns have lead to greater attention on green practices, especially in recent years, due to increased global awareness and severity of global warming, water shortage, natural disasters (e.g., flooding and extreme weather), and excessive waste, among others. As such, destination greening is gaining traction due to the ever growing environmental concerns among tourists and other stakeholders. As Satta et al. (2019, p. 265) note, "Implementing 'greener' and more sustainable strategies by tourism-based companies

and destinations helps reflect the increasing environmental concerns influencing tourist behavior and consumption patterns.” Satta et al.’s contention certainly is reflected in the present investigation, with findings pointing to a mediated relationship leading from green equity to destination loyalty intention through the three tourist equity drivers. In other words, destinations that are perceived to lift up their obligations to protect the environment through recycling and waste reduction programs, for example, are recognized as more ideal places for sojourns. Such places are also seen as possessing greater travel value and more favorable branding appeal; hence they represent better places for tourists to connect to. Thus, the advent of tourist equity along with its three drivers could offer DMOs a key metric in gauging a destination’s competitiveness and the attractiveness of its marketing programs. In fact, applications for tourist equity can certainly go beyond sustainable tourism to other areas of investigation. In sum, we believe that tourist equity can become a rather popular tool to evaluate the effectiveness of destination marketing and competitiveness from the tourist perspective.

Green practices have largely permeated into our daily lives. Greening not only plays a salient role during our excursion in a foreign land, it is equally important to understand its impact on tourists at their common habitat: home. Although prior literature (e.g., Wong, et al., 2020; Xu, et al., 2020) has identified a spillover effect on pro-environmental behaviors and other greening perceptions, empirical evidence collated from the present study moves beyond the individual level to articulate a broader research context at the regional level. It showcases a phenomenon in which an origin market’s environmental performance inadvertently influences tourist outbound greening-induced value and brand perceptions. In particular, the green-value equity relationship is more acute for tourists originating from low environmental performance regions, while the opposite is observed for the green-brand equity relationship. These findings hint at how destination greening could render as travel values especially for tourists whose source markets possess poor ecological quality. That said, DMOs’ promotion of functional benefits of their greening initiatives could be more effective in markets that have inferior environmental conditions (e.g., northern parts of China where pollution is rather severe due to heavy reliance on manufacturing), perhaps as a means of personal restoration. On the other hand, DMOs’ advertising appeals to place branding could be more effective in markets that have superior ecological practices, as a destination’s green-induced branding appeals are more attractive for those who are also originating from regions that have superior environmental conditions.

#### *5.4 Limitations and Future Research Directions*

Findings of the study should be interpreted with the backdrop of their limitations. First, the study was conducted in China and hence, its generalizability is limited within a country-specific context. This limitation notwithstanding, the design of the study helps to control possible cultural and geo-political variations that may confound the results. Second, loyalty intention is a proxy for future revisit propensity, while actual revisit behavior may also be dependent on other factors that were not included in the present research. We encourage future research to assess the long-term effect of destination greening on tourist equity and other behavioral factors. This may require a longitudinal design with a continuous panel of cohorts and hence, it could also pose methodological challenges that inhibit execution of such a study.

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## **The rapidly changing tax-free shopping environment in Japan: An analysis of a major financial newspaper**

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### **Abstract:**

This study focused on the current situation of tax-free shopping in Japan. The number of retailers offering tax-free shopping options for inbound tourists is increasing, but the topic remains largely unexplored. To extend the understanding of the current situation and the historical development of the tax-free shopping environment in Japan, articles published in a major financial newspaper were analysed. The results indicated that public awareness of this topic is growing. Because this research project is ongoing, future research directions are also discussed.

**Keywords:** duty-free shopping, tax-free shopping, shopping tourism, newspaper, Japan

### **1. Introduction and Literature Review**

Tourism is becoming a key industry for Japan's continuous economic growth. In 2018, more than 30 million international tourists visited the country (Japan Tourism Agency [JTA], 2019a). Due to the development of inbound tourism, tourists' shopping activities are regarded as an important economic driver. For example, more than 1.6 trillion yen (approximately US\$15 billion) were spent on shopping in 2017, accounting for 37% of all consumption by international tourists (JTA, 2019a).

Shopping is seen as an important tourism activity, and most travellers engage in some form of shopping during their trips (Butler, 1991). Tax exemptions are widely believed to give destinations a competitive advantage over others (Timothy, 2005). However, as Dimanche (2003) noted, tax-free shopping was not well researched in the tourism literature until the early 2000s. In recent years, a growing number of studies have addressed this topic from different perspectives (e.g. Jin et al., 2020; Lin & Chen, 2013; Sohn & Lee, 2017); however, the majority of them have focused on duty-free shopping at airports and hotels. In contrast, the current study examined the broader tax-free shopping environment in Japan, including duty-free shopping (i.e. exemptions from consumption and other taxes such as liquor taxes, tobacco taxes and custom duties) and tax-free shopping (i.e. exemptions from consumption taxes only). Retailers at airports dominate the nation's duty-free shopping environment, but the number of urban retailers offering tax-free shopping has grown from 4,173 in April 2012 to 50,198 in April 2019 (JTA, 2019b). A further increase in the number of retail stores offering tax-free shopping is expected, especially in regional areas (JTA, 2016).

Despite the recent growth in the number of tax-free shopping retailers in Japan, there is limited research on the topic. As the initial phase of an ongoing study, this paper aimed to extend the understanding of this phenomenon, including its historical development in Japan, through an analysis of articles in a major financial newspaper.

## 2. Methodology

Nikkei Telecom 21, a database provided by Nikkei Inc., the publisher of Japan's largest financial newspaper *The Nikkei*, was used to extract its past newspaper articles. Articles in mass media publications, particularly newspapers, are viewed as useful sources to understand public opinions and perspectives (Macanamara, 2005; Pew Research Center, 2010). They are also beneficial for understanding topics over longer periods of time as they provide continuous, day-to-day coverage of topics (Machi & McEvoy, 2009). Financial newspapers in particular are regarded as ideal media to investigate industry-related topics, including those related to the retail industry (Damstra & Swert, 2020; Doyle, 2006). In fact, articles from *The Nikkei* have often been used when researchers have investigated tourism and industry-related topics in Japan (e.g. Nagai et al., 2019; Larke et al., 2016).

To extract newspaper articles, the keyword *menzei* ('tax-free' or 'duty-free' in Japanese) was used to identify articles with *menzei* in their headlines. To understand the historical development of tax-free shopping, a search was conducted of the morning edition of *The Nikkei* published from January 1975 (the earliest time point from which headlines and article abstracts could be extracted) to October 2019. Text mining software KH Coder 3.0, which has been applied extensively to analyse Japanese text, was used to perform a co-occurrence network analysis (e.g. Higuchi, 2017; van der Does & Kawano, 2020).

## 3. Results

In total, 547 articles were identified in the database, the oldest of which was published in February 1975. As seen in Figure 1, which shows the number of identified articles from the study period, the word *menzei* was first widely used in the late 1980s. Japan introduced a consumption tax in 1989, so the word appeared frequently in newspapers during the discussion on its introduction. Use of the word *menzei* became popular again in the 2010s. It often appeared with names of retail companies such as Lawson convenience stores and Takashimaya department stores as they joined the tax exemption programme and started to offer the tax-free shopping option to inbound tourists. This finding shows that, as Larke et al. (2016) suggested, many Japanese retailers recognised the importance of tax-free shopping for encouraging tourists to shop more at their stores around that time. Although the Japanese term *menzei* refers to both tax- and duty-free shopping, most articles published since 2015 were related to tax-free shopping for inbound tourists.

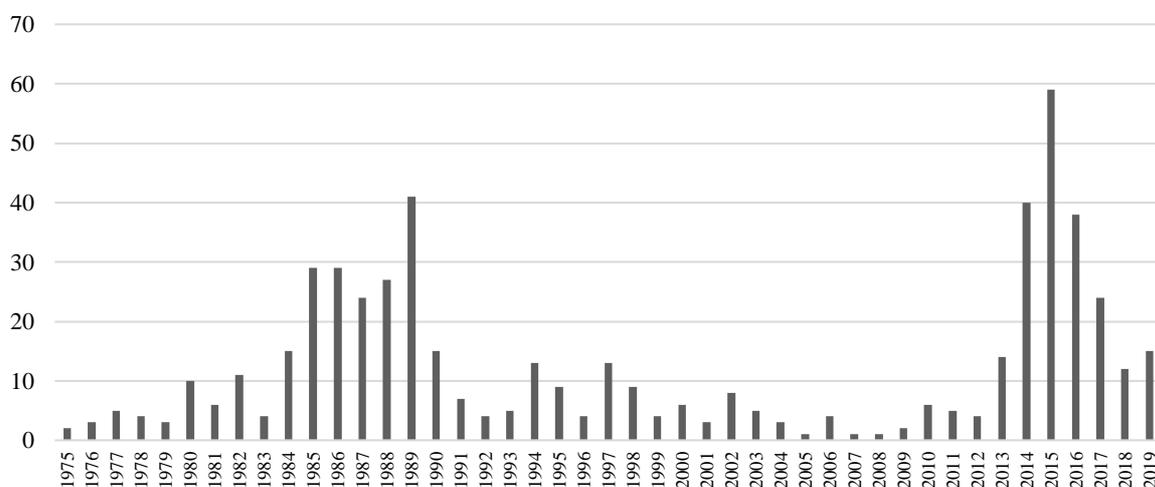


Figure 1. Number of newspaper articles that included *menzei* in their headlines

The co-occurrence network analysis was performed to examine the words used in relation to *menzei*. The articles were categorised into two groups. The first group included articles published between 1975 and 2002, while the articles published from 2003 (the year that the Japanese government launched a major tourism campaign to boost inbound tourism) to 2019 were included in the second group. Figure 2 shows the results of the analyses for both time periods.

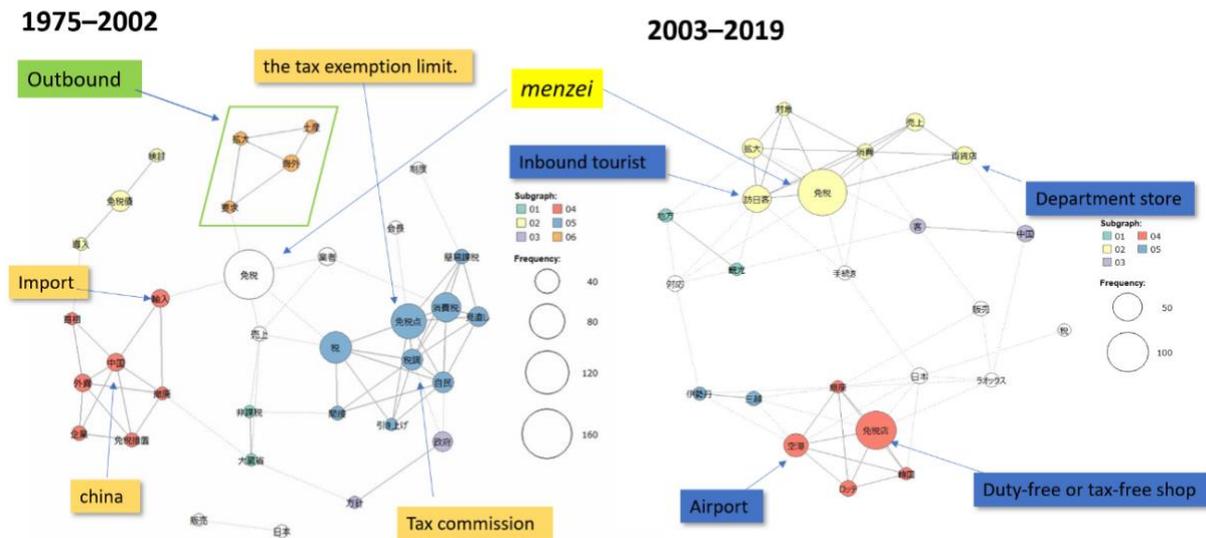


Figure 2. Co-occurrence network analysis results

The two co-occurrence networks showed different patterns of word use in the newspaper articles. A limited number of words related to tourism and shopping appeared in the first group; most of the words related to political and trade topics such as the debate on the introduction of the consumption tax. A small cluster, which included the words ‘overseas’ and ‘souvenirs’, was identified as being tourism-related, but outbound tourism was the main topic. In contrast, words related to tourism, especially inbound tourism, appeared frequently in the second group. The phrases ‘airport’ and ‘duty-free shop’ were often used together in the newspaper articles, while the words ‘inbound tourist’ and ‘department store’ were also often used. These results suggest that the word *menzei* appeared more frequently in the tourism context in *The Nikkei* as the number of inbound tourists increased.

#### 4. Conclusion

An analysis of the articles in a major Japanese financial newspaper was performed to extend the understanding of the current situation and historical development of tax-free shopping in Japan. The results showed that the word *menzei* has been used frequently in tourism contexts in recent years, indicating rising public awareness of the topic in Japan, especially among industry professionals as financial newspapers are often read by them (Davis, 2006; Nikkei Inc., 2020). As indicated, this project is in an early phase, so future research extending the scope to local newspapers is recommended to provide further insights into this topic. In

addition, collecting primary data through research activities such as interviews with retail managers could help develop an understanding of the current tax-free shopping environment and identify key related issues.

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## Destination selection attributes of long-stay tourism in rural China

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### Abstract:

Drawing upon the stimulus–organism–response model and residential mobility theory, we propose and test a model to understand the psychological needs of long-stay tourists and the relationships of these needs with visitors’ destination attributes and preferences. Using data collected from residents of three first-tier cities in China (Beijing, Shanghai, and Guangzhou), results reveal five destination selection themes: *familiarity*, *comfort*, *rurality*, *wellness*, and *publicity*. We also unveil the salience of each dimension through conjoint analysis. Our study enriches and extends the literature on long-stay tourism and tourists, especially within Chinese rural destinations.

**Keywords:** Rural, long-stay tourism, sojourn, tourist choice, mobility

### 1. Introduction

In the last decade, long-stay tourism has risen to prominence as a potential tool for rural communities seeking revitalization (Hedberg & Haandrikman, 2014). Relatively affluent or retired populations in urban areas may engage in long-stay tourism on their quest for a slower, more fulfilling life; through such tourism, these visitors often seek opportunities to enjoy idyllic life in rural areas (Carson & Carson, 2018). Long-stay tourism to rural areas is particularly intertwined with a search for idyllic locations, modern communities, and tranquil settings (Han, 2019). The metropolitan–rural mobility associated with long-stay tourism can also enhance connections between rural communities and major population, service, and political centers, thus facilitating development in rural regions (Woods, Flemmen, & Wollan, 2014). Many rural areas have launched long-stay tourism development projects in response to this growing market. Rural destination options for long-stay travelers have also expanded rapidly, rendering the market intensely competitive. It is therefore necessary to investigate the attributes of long-stay destinations that most strongly attract tourists. Relevant findings can help these destinations maintain a competitive advantage.

### 2. Literature Review

#### 2.1 Long-stay tourism

Long-stay tourism is a discretionary form of mobility, between temporary and permanent, where tourists pursue relaxation, learning and experiential opportunities, a particular climate and/or lifestyle, natural beauty, culture, and better life conditions (Benson & O’Reilly, 2009; Hongsranagon, 2006; Özyurt, Başaran, & Kantari, 2018). Situated in the grey area between short-term tourism and perpetual migration, long-stay tourism has been referred to as “residential tourism” (Alarcón, González, & Pérez, 2010), “second-home tourism” (Wong & Musa, 2015), “seasonal mobilities/migration” (Kou, Xu, & Hannam, 2017), and “lifestyle

migration” (Cohen, Duncan, & Thulemark, 2015) in related literature. Thus, long-stay tourism blurs the boundaries between everyday life and travel or ‘home’ and ‘away’ with a shifted focus from movement to lifestyle choices (Cohen et al., 2015). As shown in Table 1, attractive features include a location’s climate, slow pace of life, affordable cost of living, strong tourism infrastructure and services, healthcare facilities, access to markets and stores, friendly local people, and having family and friends in the destination. Two studies focusing on rural areas highlighted a rural lifestyle, local culture, and low costs as major components of destination attractiveness. Although long-stay travel is an important issue in tourism, current research has been mostly narrative with a focus on attributes; systematic studies that compare and summarize data on long-stay tourism remain limited. In addition, the trade-offs between attributes and dimensions in tourists’ decision making have been largely neglected.

**Table 1.**

Latest empirical research on long-stay destination attributes

Author(s)	Perspective	Research design	Attributes
Montezuma & McGarrigle, 2019	Lifestyle migration	Interview	Climate, quality of life, culture, amenities
Miyashita et al., 2017	Retirement migration	Survey ( $N = 237$ )	Low cost of living, short flight time, warm weather, availability of long-term visa
Wong, Musa, & Taha, 2017	Second-home tourism	Survey ( $N = 504$ )	Amenities and facilities, easy pace of life, cost, climate, environment, friendly local people
Mussalam & Tajeddini, 2016	Long-term holiday	Mixed methods	Tourism services; tourism infrastructure (access to destination, sports facilities, efficiency of transportation); tourism attractions (architecture, natural resources, culture, entertainment events & festivals); destination brand/reputation; past experience
Wong & Musa, 2015	Second-home retirement	Interview	Climate, healthcare facilities, good amenities and residential areas
Abdul-Aziz, Loh, & Jaafer, 2014	Retirement migration	Mixed methods	Climate, living environment, cost of living, pace of life, access to medical care, access to markets and stores, direct flights home, compatriots from same country in destination, friends and family in destination
Salazar & Zhang, 2013	Seasonal lifestyle tourism	Ethnographic fieldwork	Rural setting, local culture

## 2.2 Theoretical foundation

The SOR model (Mehrabian & Russell, 1974) is taken as the theoretical foundation of this study. This model suggests that a change in the environment is a stimulus (S) containing cues that combine to affect a living organism's internal evaluation (O), which elicits a reaction to the stimulus (e.g., approach or avoidance responses) (R) (Mehrabian & Russell, 1974). In the consumer behavior field, scholars have applied the S–O–R paradigm to explain how diverse environmental cues influence consumer decision making (Chang, Eckman, & Yan, 2011; Peng & Kim, 2014).

To analyze tourists' chosen long-stay destinations, it is critical to understand how moving affects tourists (Oishi, 2010). Prior research has shown that a mobile lifestyle evokes immediate psychological responses, such as anxiety, anticipated loneliness, uncertainty, excitement, conservative ideology, and conditional identification (Oishi & Talhelm, 2012). For instance, people contemplating a mobile lifestyle tend to use more anxiety-related words in their report compared to people who are considering a stable lifestyle (Oishi, Miao, Koo, Kisling, & Ratliff, 2012). Residential moves also alter people's social landscape (Eidse & Sichel, 2004). Given that it takes time to develop stable friendships, long-stay tourism can induce anxiety around concerns about social network disruption (Lun, Roth, Oishi, Kesebir, 2013). Conversely, moving to a brand-new environment may enrich people's lives; excitement and curiosity can be generated from aspects of long-stay trips such as a novel environment, family reunions, and new work and leisure opportunities (Abdul-Aziz et al., 2014).

Based on the literature, we propose the following model of long-stay destination preferences based on the psychological consequences of residential mobility under the SOR framework (Figure 1).

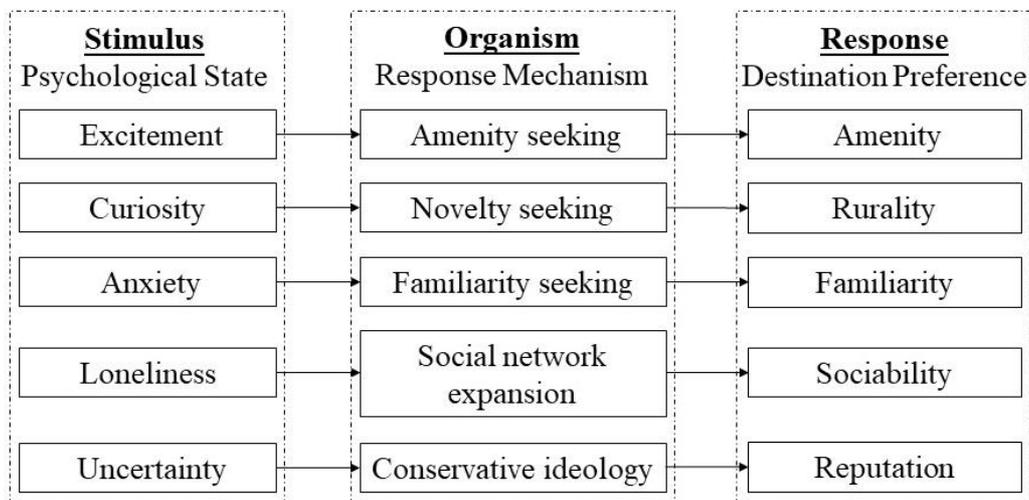


Fig. 1. Proposed theoretical framework

### 3. Methodology

#### 3.1 Data Collection

Two rounds of surveys were conducted to collect data. The first-round survey was intended to generate traits and identify attributes related to rural long-stay destinations. The initial survey was conducted by the online survey company ‘KuRunData’ on December 2–17, 2018. Several sampling criteria were set to recruit appropriate participants: (1) respondents were residents of one of three first-tier cities in mainland China (Beijing, Shanghai, or Guangzhou); (2) respondents were 40 years old or older; and (3) respondents’ individual monthly disposable income exceeded the lowest threshold of 5,000 RMB as a proxy of the average level as calculated by the Municipal Statistics Department of the three chosen cities.

The second-round survey with a conjoint experimental design was administered through an online self-completion questionnaire. The survey was conducted by the same survey company and followed the same criteria as the first-round survey; data from the second-round survey were collected July 6–20, 2019. Overall, 600 valid samples were obtained from a total of 34,183 respondents.

#### 3.2 Measurements

Through an exploratory factor analysis (EFA) based on first-round data, five constructs were obtained and used for conjoint analysis. Given the effort involved in answering conjoint questions, a bipolar setting was applied for these five attributes. Conjoint questions were designed using the SPSS conjoint module. First, 32 combinations (25) of levels for each attribute were produced via the full-profile approach. Then, an orthogonal design generated 12 profiles, consisting of 8 estimations and 4 holdouts. Each profile was described as a hypothetical rural long-stay destination.

## 4. Results

#### 4.1 Profile of respondents

Table 4 presents the demographic statistics of respondents from both survey rounds. Most respondents were employed (Round 1: 66.7%; Round 2: 64.2%) and earned a monthly disposable income above 8,000 RMB but not more than 20,000 RMB (Round 1: 77%; Round 2: 68.2%).

**Table 4.**  
Demographics of survey respondents

Demographic information	Percentage (%)	
	First-round survey	Second-round survey
Age		
40–49	34	34
50–59	33	33
60 and above	33	33

Gender		
Male	50	50
Female	50	50
Residential city		
Beijing	33.3	33.3
Shanghai	33.3	33.3
Guangzhou	33.3	33.3
Educational level		
High school and below	30.2	28.5
Diploma	25.8	26.8
Bachelor's degree	23.3	26.0
Master's degree and above	20.7	18.7
Monthly income (RMB)		
5,001–8,000	16.7	28.8
8,001–12,000	26.0	34.7
12,001–16,000	30.8	22.5
16,001–20,000	20.2	11.0
20,001 and above	6.3	3.0
Current job status		
Employed	66.7	64.2
Retired	33.3	35.8

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#### *4.2 Measurement refinement based on EFA*

To determine the underlying constructs, EFA was conducted with the 31 destination items measured on a 7-point Likert scale. The EFA results revealed five factors (Table 5) with eigenvalues higher than 1.0. These five factors explained 54.764% of the total variance, exceeding the minimum threshold of 50% (Hair, Black, Babin, & Anderson, 2009). All factors had Cronbach's  $\alpha$  values higher than 0.6.

A stepwise regression was performed next to evaluate the contributions of the five identified psychological attributes to respondents' decision making relative to other potential factors, such as demographic characteristics (e.g., age, gender, residential city, education, income, and job status), cost of living in the destination, travel expenses (Miyashita et al., 2017; Ono, 2008),

and past experiences in rural destinations (long-stay or residence) (Liu, Li, Cardenas, & Yang, 2018; Ye, Xiao, & Zhou, 2018). The results suggested that respondents' prospective intentions to stay in rural areas for a long time were predominantly driven by these five psychological attributes. By contrast, none of the remaining variables contributed significantly to respondents' intentions to engage in long stays in rural areas. As such, the five attributes identified in this study were deemed appropriate.

**Table 5.**

EFA results of rural long-stay destination choice preferences

Items	Mean	SD	Factor loading	Cronbach's $\alpha$
<i>Familiarity</i>				0.805
Friends and relatives in destination	4.89	1.585	0.771	
Long-stayers from same region in destination	4.94	1.541	0.770	
Visited destination before	4.95	1.516	0.768	
Travel distance to destination	5.13	1.381	0.652	
Chain stores (e.g., restaurants, shopping malls)	5.31	1.291	0.510	
<i>Comfort</i>				0.737
Overall hygiene and cleanliness	6.09	1.112	0.647	
Wi-Fi availability	5.76	1.178	0.638	
Quality of accommodations	5.99	1.093	0.626	
Mandarin Chinese use	5.78	1.145	0.575	
Friendliness of locals	5.99	1.155	0.508	
<i>Rurality</i>				0.793
Nostalgic rustic setting	5.78	1.069	0.680	
Special events and festivals	5.39	1.186	0.636	
Entertainment activities	5.44	1.211	0.564	
Slow lifestyle	5.81	1.102	0.495	
Tourism attractions (e.g., nature & scenery, cultural amenities)	5.91	1.117	0.478	
Long-stay tourism development in destination	5.55	1.137	0.502	
Natural pastoral view	5.97	1.068	0.451	

<i>Wellness</i>				0.758
Treatment of medical conditions	5.65	1.178	0.655	
Wellness services (e.g., sport facilities, elderly nursing facilities)	5.63	1.190	0.650	
Weather	5.85	1.147	0.561	
Fresh organic gastronomy	6.19	1.030	0.539	
Off-site medical treatment billing services	5.60	1.235	0.529	
<i>Publicity</i>				0.630
Comprehensive destination information	5.86	1.008	0.685	
Public transportation information	5.92	1.072	0.663	
Destination reputation	5.88	0.989	0.466	

#### 4.3. Preference identification based on conjoint analysis

A conjoint experimental survey with another online sample was conducted to reveal respondents' preferences for different destinations within the context of rural long-stay behavior. The part-worth utility (PU) was determined for each attribute, revealing the relative importance of each attribute level in terms of its contribution to the overall worth of a destination. Then, the relative importance values of attributes were calculated by determining the PU; results indicated the contribution of each attribute to respondents' preferences for rural long-stay destinations. Table 6 illustrates the results of conjoint analysis. Our findings were considered reliable according to the Pearson's  $R$  value (0.983,  $p < 0.001$ ). Kendall's Tau for the estimation (0.929,  $p < 0.05$ ) and holdout profiles (0.667,  $p < 0.1$ ) was computed to verify the utilities' internal reliability and validity. These results indicated that the data exhibited acceptable internal validity and that respondents answered consistently throughout their rating process. In terms of importance values, clearer differences emerged between the five attributes. Table 6 also shows the proportions of importance values for each attribute. "Comfort" (32.749%) was the most important, followed by "wellness" (23.915%). "Rurality" (18.622) and "publicity" (17.425%) demonstrated similar importance values (i.e., moderate). The "familiarity" attribute (7.289%) was evaluated as least important.

**Table 6.**

Part-Worth of Attributes

Theme	Level	Utility Estimate	Importance Value
Comfort	High	0.786	32.749
	Low	-0.786	
Wellness	High	0.574	23.915

	Low	-0.574	
Rurality	High	0.447	18.622
	Low	-0.447	
Publicity	High	0.418	17.425
	Low	-0.418	
Familiarity	High	0.175	7.289
	Low	-0.175	

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## 5. Discussion and Conclusion

Discuss your findings by comparing those of previous studies. Address academic and practical implications. Conclude with some directions for future research or practice, and any limitations of this study. This study represents the first research effort to systematically unearth rural destination selection attributes and their relative importance among long-stay tourists in China. Our work thus makes a timely contribution to the tourism literature. Based on our literature search, proposed framework, expert opinion, pilot study, and online survey, five themes (familiarity, comfort, rurality, wellness, and publicity) were identified through EFA, and 25 related items were retained. Empirical results were consistent with most dimensions proposed in our theoretical framework; the only exception was the newly identified dimension of wellness in lieu of the proposed dimension of sociality. These five dimensions were further evaluated for their relative importance using a different online sample through conjoint analysis.

Our findings offer several key implications for long-stay tourism development in Chinese rural areas. First, local governments, communities, enterprises, and residents should collaborate to provide more comfortable living environments, better amenities, and more convenient services to meet long-stay tourists' needs and attract more of these visitors. Long-stay tourists typically spend more money and time in their chosen destinations, becoming increasingly important stakeholders in local rural areas. Enhanced rural community environments will improve the wellness of current and future tourists in general while reinvigorating local life. Second, rural destinations must preserve rurality or authenticity as long-stay tourists seek urban-like comfort and rurality. All local stakeholders should make a concerted effort to maintain local rural settings, cultural amenities, special events and festivals, entertainment activities, and a slow lifestyle, which long-stay tourists expect. Third, local government and enterprises should work together to publicize rural destinations by offering more information and promotions through various media channels. By doing so, rural destinations can increase their visibility and solicit more long-stay tourists. Finally, local government should cooperate with other governments at different levels to advocate for the benefits of long-stay tourism on rural revitalization. Such efforts could include removing potential barriers to long-stay tourism by establishing a national medical system and developing a better local transportation system in rural areas.

As with any research of this nature, this study is subject to limitations that illuminate future research directions. First, our work focused on middle-aged and older respondents from three major cities in mainland China. The results of this study may be inappropriate for generalization to other samples. Future studies could extend the proposed model to different profiles, such as younger travelers and cross-national respondents. Second, our main data were

collected using online surveys in a cross-sectional manner, which may have introduced bias due to common method variance. Subsequent studies could apply other approaches, such as a longitudinal design, to confirm our findings. Third, our results revealed respondents' anticipated selections per se, but not their actual behavior. A comprehensive understanding of tourists' preferences for rural long-stay destinations may require further investigation. For example, a qualitative approach is recommended to understand why long-stay tourists are indifferent to interacting with locals in rural destinations. As we examined the attributes that may pull tourists to stay in rural areas for extended periods, follow-up studies could expand this research stream to explore how these elements influence tourists' actual destination experiences and relevant attributes' effects on local societies.

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## Understand the consumer behaviour of hotel robot use

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### **Abstract:**

Along with the recent development of artificial intelligence technology, robots have been gradually gaining increasing attention in hospitality. Although a number of studies have started investigating hotel robot, limited studies, if ever any, have thoroughly analysed consumer behaviour of their use of hotel robot. The present study identified consumer behaviour through analysing their operational commands of hotel robots. Empirical findings showed that the most common operational command by hotel guests is turning all lights on.

**Keywords:** Consumer behaviour, command analysis, hotel robot

### **1. Introduction**

At present, robots have been increasingly being applied to the service industry as Tung and Law (2017) identified research opportunities for human-robot interaction in hospitality and tourism. For example, Rodriguez-Lizundia, Marcos, Zalama, Gómez-García-Bermejo, and Gordaliza (2015) explored five dimensions to evaluate consumer experience in terms of human-robot interaction, including embody, emotion, people-oriented perception, security, and collaborative experience. Nevertheless, detailed consumer behaviour regarding the use of hotel robots are overlooked by previous studies. Thus, the present study takes the initiative to investigate consumer behaviour for using hotel robots. Specifically, the objectives of the present study are to analyse the usage time of hotel robot by hotel guests, to identify the commonly used operational commands of robots by hotel guests, and to provide detailed implications to hotels about consumer behaviour regarding their use of hotel robots, and future strategic decision-making directions. In the present study, hotel robot refers to humanoid small-scale robot which mainly assists hotel guests in fulfilling most of their needs during their stay in the hotel room.

### **2. Literature Review**

#### *2.1 Human-computer interaction*

Robot application is in essence regarded a kind of human-computer interaction. Recently, hotel robot adoption has been gaining increasing attention from academic researchers. Investigations relating to hotel robot application in hospitality mainly include robot service evaluation, robot application to hotels, the relationship between robots and employees, and consumer attitudes towards robots (Ivanov, Webster, & Berezina, 2017; Murphy, Gretzel, & Pesonen, 2019). In

the aspect of robot service evaluation, previous studies have mentioned the replacement of human labor by robot service, as well as the privacy concerns of consumers (Mende, Scott, van Doorn, Grewal, & Shanks, 2019; Murphy et al., 2019).

## 2.2 Application of robot to hotels

Regarding robot application to the hotel industry, Ivanov et al. (2017) reviewed the current robot service of the hotel and tourism industry, and discussed the potential applications of robots to tourism. In terms of the relationship between robots and hotel employees, although on the one hand, hotel robots may gradually replace human labor, job duties with creativity still largely depend on human being. Hence, Osawa et al. (2017a) and Osawa et al. (2017b) suggested that hotels should refine the functional division of labor, and reconstruct duties between hotel staff and robots to improve the efficiency of hotel operation. In terms of consumer attitudes towards robots, Ivanov, Webster, and Seyyedi (2018) investigated the attitudes of consumers toward the application of robots to hotels and found that the attitudes of consumers are mainly depending on their past experiences and their perceived advantages that robot can bring to hotels. In summary, most previous studies discussed the applications of robot to hotels and their potentiality from either the perspective of hotel employees or consumers. Nonetheless, an in-depth understanding of consumer behaviour for the use of hotel robot is absent to some extent. Thus, the present study investigated consumer behaviour for the use of hotel robot throughly.

## 3. Methodology

Data were collected recently from 88 hotels in 23 cities in China. Data contained 745,528 orders from 789 hotel robots. Through analysing robot operational commands used by hotel guests, hotel robot usage time was identified, and the commonly used operational commands by hotel guest was recognized.

## 4. Results

### 4.1 Overall hotel robot usage time

Figure 1 indicates the overall hotel robot usage time by hotel guests. Results showed that after hotel guests had checked in (i.e., 14:00), the frequency of the use of hotel robot started to increase. In addition, findings revealed that the frequency of using hotel robot is the highest at 22:00. In the next morning, after hotel guests got up, they started to use the function of hotel robot again. Overall, functions that hotel robot provided attracted hotel guests to use.

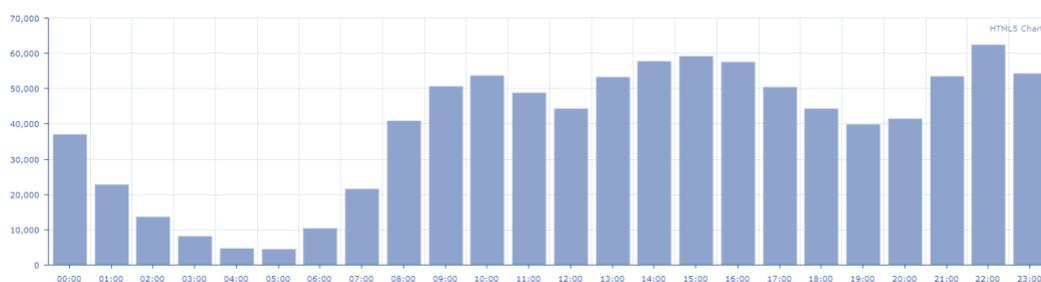


Figure 1. Overall hotel robot usage time

4.2 Hotel robot usage time (Weekdays/Weekends)

Figure 2 shows the usage of robot by hotel guest on weekdays and weekends. Overall, findings revealed that the frequency of the use of hotel robot on weekdays is higher than that of weekends. Nevertheless, the frequency of the use of hotel robots on weekends is higher than weekdays at a few time points. That is to say, 0:00, 1:00, 12:00, and 16:00, respectively, which reflect the behavioural differences of hotel guests on weekdays and weekends.

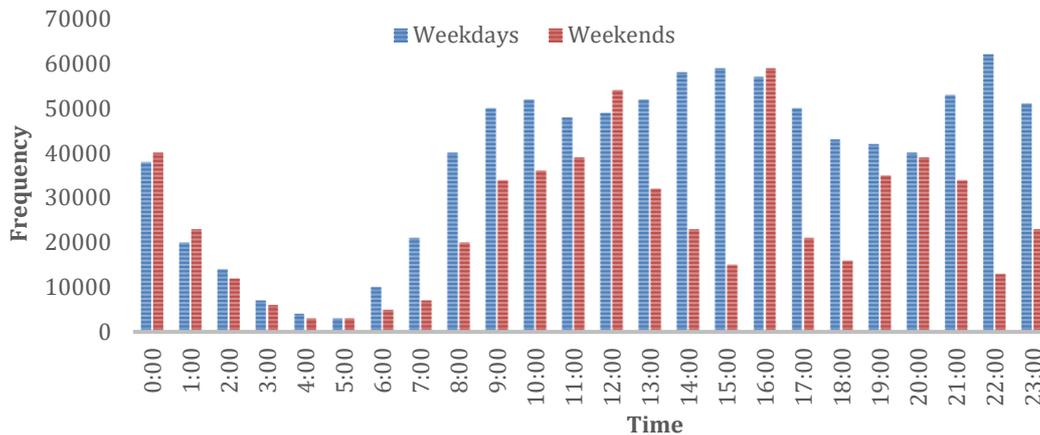


Figure 2. Frequency of using hotel robot on weekdays/weekends

4.3 Operational command analysis of hotel robot

Among 745,528 effective robot operational commands obtained, Table 1 lists the top 10 hotel robot operational commands used by hotel guests based on the frequency of hotel robot usage, and results indicated that the three most popular commands used by hotel guests are turning all lights on, turning off the TV, and turning all lights off.

Table 1. Top 10 hotel robot operational commands used by hotel guests

Command	Command meaning	Frequency
LOP	Turn all lights on	120,235
TOP	Turn off the TV	100,573
LCL	Turn all lights off	95,037
CL01	Draw the curtain	79,388
CL01CL	Sleep, draw back the curtain	66,411
CS01CL	Sleep, close the window screen	38,024
MPP	Play the music/Play a song	32,066
AOP	Turn air conditioner on	25,721
QJ3	Sleep, turn all lights off	20,493
DOP2	Open the door	9,786

## 5. Discussion and Conclusion

### 5.1 Discussion

Regarding the overall hotel robot usage time, findings of the present study reflected that hotel robot can attract hotel guests to use, which is a good signal for hotels to further explore the adoption of robots to hotel rooms. Moreover, results showed that the frequency of hotel robot usage time periods is different on weekdays and weekends, indicating that hotel managers can make necessary adjustments of job duties based on the differences of consumer behavior on weekdays and weekends. Furthermore, most hotel guests only used robot to satisfy their basic needs. Thus, promoting the further utilisation of robots to hotel guests can be considered to reduce human labor and enhance hotel operational efficiency.

### 5.2 Conclusion

The present study takes the initiative to analyse hotel robot service through operational command analysis to understand consumer behaviour in detail regarding their use of hotel robots. Results showed that overall hotel robots are attractive to hotel guests. Findings further indicated that consumers frequently use the basic hotel robot service, including turning all lights on, turning off the TV, and turning all lights off. To conclude, findings provide detailed implications for hotel managers to have an in-depth understanding of consumer behaviour, to fully utilise the use of hotel robots, and to make future strategic planning accordingly.

### 5.3 Limitations of this study and suggestions for future study

Finding of the present study is limited to the context of robots in hotels in China, whether findings can be applicable to other countries or regions remains known. In addition, the present study did not compare consumer usage behaviors depending on hotel category (i.e., full service vs. limited service). Hence, future studies are suggested to explore consumer behaviour of hotel robots in other countries or regions or to make comparison studies so as to provide more accurate implications to hotels to better satisfy hotel guests. Future studies can examine consumer usage behaviors depending on hotel category.

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## **Does commercial hospitality service in the Philippines reflect cultural values?**

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### **Abstract:**

This study explores the extent to which commercial hospitality service in the Philippines reflects cultural values uniquely upheld by the Filipinos. In-depth interviews conducted with two General Managers from luxury hotels in Cebu, Philippines revealed ten Filipino cultural values embedded in the commercial hospitality service. Findings have academic and practical implications that can inform hospitality industry practitioners and educators on the significance of cultural values to enhance cross-cultural management both in the hotel environment and the hospitality curriculum design.

**Keywords:** cultural values, commercial hospitality service, Philippines, Filipino

### **1. Introduction**

Over the years, empirical studies addressed the importance of cultural values in determining the life-styles and behavior of people in various cultures. To fully grasp the uniqueness of any cultural group and to facilitate appropriate intervention and cross-cultural interactions, it is essential to know and understand cultural values (Carter, 1991). Moreover, the study of cultural values has been of interest to academicians for the fact that cultural values are stable over time and it is not related to a specific object or situation (White, 2005). According to Hofstede (2001), values, which are held by individuals or collectivities, are broad tendencies in preference over certain states of affairs. When held by a collective group, values form part of culture together with symbols, heroes, and rituals (Hofstede, 2001). The essence of culture is in its values system, seen as beliefs a society holds concerning what is right, good, and desirable (Hofstede, 2001; Schwartz, 1999). Cultural values serve as the basis for norms of behavior that are considered appropriate in various situations (Schwartz, 1999). These cultural values are acquired in early childhood and are invisible until they become evident in behavior. Through these invisible values, national cultures differ among nations. Although notable scholars such as Hofstede (2001) and Schwartz (1999) identified universal cultural values where cultures can be categorized, it is also evident that each culture has its own characteristics and values system. Given this, the current study explores the cultural values in the Philippines which are manifested in practice, specifically in the commercial hospitality setting. Therefore, this study attempts to address the main research question: “Does commercial hospitality service in the Philippines reflect cultural values?”

### **2. Literature Review**

The Philippines owes its unique culture to its rich history of colonization, the predominance of the Catholic religion, and the mixture of East and West (Aquino, 2019; Reyes, 2015). The blending of the two cultures results in a new form of values which is a cross-breed between the

two (Morris & Schindehutte, 2005). Scholars have identified cultural values, traits, and beliefs commonly shared by the Filipinos. Notable in the field is Enriquez (1992, cited in Clemente et al., 2008) who developed an indigenous theory of values based on the social interaction of the Filipinos. He identified 12 indigenous values: *hiya* (propriety/dignity), *utang na loob* (gratitude/solidarity), *pakikisama* (companionship/esteem), *bahala na* (determination), *lakas ng loob* (guts), *pakikibaka* (resistance), *pakikiramdam* (shared inner perception), *kapwa* (shared identity), *kagandahang loob* (shared humanity), *karangalan* (dignity), *katarungan* (justice), and *kalayaan* (freedom). Clemente et al. (2008) tested the Enriquez' theory and they found all indigenous values except *bahala na* (determination) were still highly endorsed by Filipino adolescents. Their findings also yielded two additional values, *maka-Diyos* (God-fearing), and *paggalang* (respect) which were not covered in Enriquez's list. Elsewhere, Saito, Imamura, and Miyagi (2010) studied the characteristics, personality traits, and values of the Filipinos to shed light on the solution of Japan's nursing care problems. They observed that the Philippines is the largest supplier of human resources for social support services such as nurses, caregivers, and domestic helpers in most developed countries. Based on extant literature, they extracted ten commonly mentioned Filipino traits and values: *pakikisama*, *hiya*, *utang na loob*, close family ties, *bahala na*, *amor propio* (honor/self-esteem), *bayanihan* (mutual aid and cooperation), hospitality, *ningas cogon* (energy deflation, easily gets enthusiastic but quickly cools down), and respect for elders. They concluded that *pakikisama* (companionship/comradery) is the major reason why Filipinos are friendly and highly accepted internationally as social support service personnel.

### 3. Methodology

This study explores the cultural values of the Filipinos that are manifested in commercial hospitality service. Owing to its exploratory nature, this study employs qualitative descriptive research. Cultural values can become visible when manifested in behavior, an in-depth interview method is deemed effective to gather evidence of the behavior of Filipino hotel employees. Two expatriate General Managers of luxury hotels in Cebu, Philippines were interviewed by phone for 30 minutes each in September 2019. They were asked to give unbiased insights on the practical manifestations of the hospitality of their Filipino hotel employees. Cebu was chosen as the research site due to its flourishing tourism business and the homogenous culture of hotel employees who are mainly locals of Cebu province. Besides, one of the authors is originally from Cebu and has a deep understanding of the local culture and values. The interview scripts were subjected to content analysis using the Filipino cultural values established from literature as *a priori* categories.

### 4. Results

The two Hotel General Managers both shared the same insights of the spontaneous and naturalness of the Filipino employees when expressing hospitality service to guests. From the content analysis of their statements, ten cultural values were identified to match employees' behavior and attitude. The summary of results is presented in Table 1.

Table 1: Summary of 10 cultural values identified by the General Managers

Ten Filipino cultural values	Meanings in English	Examples from the General Managers
Kapwa	Shared self; shared identity and togetherness Loving others and being in communion with them is an important value for hospitality.	Exhibited in the natural and genuine greetings and welcoming of hotel staff to guests and fellow staff.
Kagandahang-Loob	Beauty of the will; goodness of heart Acts of hospitality that spring spontaneously from the person's goodness of heart.	Shown in the many examples in how the staff 'wows' and delights the guests, small gestures that create memorable experiences for guests.
Utang na loob	Gratitude Forever grateful for the good deed done to the person.	Filipinos are different in the way they say goodbye to guests, it comes from the heart, and they have little gifts ready for the departing guest.
Paggalang	Respect; reverence; courtesy; honor and esteem Respect for parents, elders and authority.	Hotel staff respects everyone, guests and colleagues alike. When welcoming families, they know how to welcome and delight the children, which make the parents happy.
Pakikiramdam	Sensitivity; empathy; sensing other persons' feelings Sensitivity to non-verbal cues, use indirect communication.	Hotel staff can perceive the needs and feelings of the guest, so they go ahead to render that favor or service even before the guest asks for it.
Pakikikisama	Companionship; comradery Maintain smooth interpersonal relations – an important value for hospitality	Hotel employees develop emotional bonding with guests, to the point that when it is time to bid farewell, both staff and guest have tears in their eyes.
Lakas ng loob	Courage; fortitude; toughness of character Entails self—sacrifice in their real concern for the others.	Filipinos go out of their way to serve and delight the guests.
Amor propio	Love of self; personal dignity, honor, self-respect; sensitivity to a personal affront Maintaining social acceptance, to 'save face'.	This poses a problem for prompt or timely service recovery because hotel staff sometimes refuse to own up their mistake. But when they do accept, as in the case of handling guest's complaints, they are sincerely sorry.
Bahala na	Courage to face uncertainty Readiness to face difficulties by doing their best and trusting in God's help.	This could be the reason for the cheerful attitude of staff, even if they have problems. Their smiles are so natural that they truly come from the heart, and with a send of humour.
Maka-Diyos	Belief in God; God-fearing; religious Considers God very important in their life, they are prayerful.	Any staff event always begins with a prayer. Their religious faith has a lot to do with the hotel employees' positive work attitude.

## 5. Discussion and Conclusion

### 5.1 Discussion

Ten cultural values of the Filipinos have been identified in this study that contributes to commercial hospitality service. Hospitality is an aspect of Filipino culture that remains empirically unexplored (Aquino, 2019). The aforementioned values are essential in interpersonal relationships, specifically host-guest relationships, necessary for the practice of hospitality in the commercial setting. Furthermore, it is important to consider the cultural and domestic dimensions of hospitality to inform the commercial hospitality domain (Lashley, 2015). This study is equally important for hospitality educators in developing future hospitality professionals through the emphasis on values education.

### 5.2 Conclusion

This study attempted to answer the research question of whether commercial hospitality service reflects the cultural values in the Philippines. Ten cultural values were identified to match the genuine hospitality service of Filipino hotel employees. Practical implications of this study point to the importance of expatriate hotel managers to know and understand the cultural values of the host country and to adapt to the local cultural practice of managing a business (Yu, 2008). Further study needs to be conducted to explore the role of Christianity together with cultural values in the practice of commercial hospitality in the Philippines, a country that is predominantly Catholic and is rich in cultural heritage.

### 5.3 Limitations of the study

The paucity of empirical evidence on the study of Filipino values related to hospitality posed a limitation. The authors relied mainly on the interpretive and ethnographic observations from the extant literature. However, it is assumed that the cultural values identified from the literature are commonly held by the Filipinos. Another limitation was having interviewed only two respondents where their responses may not have been exhaustive. With a wider sample, perhaps other cultural values could have surfaced. Nonetheless, the responses of both General Managers coincided in almost all aspects, thus considered valid for this study. Additionally, the interpretation of their responses linking them to cultural values may be hermeneutic. Nevertheless, this study minimized the interpretation errors because the lead author is a Filipino who grew up in the Philippines, confirming Hofstede's position that cultural meanings are hidden unless interpreted by an insider.

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**“Enjoy the present moment”: Present orientation, attitude towards new tourism experience, and the mediating effect of prevention focus**

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**Abstract:**

Although novelty is argued to be a major travel motivation, tourists are not necessarily ready to experience something new. This paper proposes that attitude towards new tourism experience varies with people’s present orientation because of prevention focus. Drawing from 499 questionnaire survey responses, this study reveals that present-oriented individuals favor new tourism experience because of their low prevention focus. The current research contributes to scholarship by exploring present orientation as an antecedent and prevention focus as the explanatory factor of attitude towards new experience, as well as providing implications for tourism marketers.

**Keywords:** New tourism experience, Present orientation, Prevention focus, Personality

**1. Introduction**

Since seeking for novelty is suggested as a vital motivation for people to travel (e.g., Assaker & Hallak, 2013; Kitouna & Kim, 2017; Sahin & Guzel, 2018), the notion that tourism industry should make their efforts to develop new tourism products has been widely accepted (e.g., Koc, 2005; Liao, Chen, & Deng, 2010; Sandvik, Arnett, & Sandvik, 2011). However, even though the exotic landscapes and cultures at a destination are attractive, people might not make the travel experience a reality because of the potential risks aroused from their unfamiliarity with the tourism products (Cohen, 1972). Tourists’ hesitation to accept new experience will ultimately influence the success of a new tourism product. Therefore, understanding the antecedents of individuals’ attitude towards new experience is essential for tourism product developers and marketers.

Experiencing something new for an individual means he/she needs to take risks to some extent. While the attitude towards risk-taking intention was argued to relate to personality (e.g., Griffith and Albanese, 1996; Lee & Tseng, 2015; Plog, 1974, 2001; Pizam et al., 2004). Plog (1974) proposed a psychocentric/allocentric model to explain travel behaviors, arguing that individuals who are allocentric prefer something exotic and seek for adventure, whereas their psychocentric counterparts prefer something familiar and seek for safety. This model theorizes that travel characteristics are contingent on psychographic types. However, existing empirical research on Plog’s model drew inconsistent conclusions. While some works supported the psychological model (e.g., Nickerson and Ellis, 1991), some not (e.g., Litvin & Smith, 2016). Therefore, the relationship between personality and travel behaviors as well as the reasons behind a person’s attitude towards new tourism experience still need more research. The purpose of this paper is to investigate why some but not all people prefer new experience in tourism.

Social psychology theories suggest that individual differences on time orientation as well as orientations of goal pursuit (i.e., regulatory focus) influence risk-taking attitude and behaviors (e.g., Higgins, 1997; Strathman, Gleicher, Boninger, & Edwards, 1994). These theories shed light on the current research. Specifically, this study attempts to explore how time orientation and regulatory focus affect an individual's attitude towards new tourism experience. It contributes to the tourism literature by discovering present orientation (a dimension of time orientation) as a predicting factor and prevention focus (a dimension of regulatory focus) as the explanatory factor. The findings will provide implications for tourism product developers on how to market their new products.

## **2. Literature Review and Hypotheses**

### *2.1 Attitude towards new tourism experience*

New experience in tourism refers to visiting places that one has not seen before (Alvarez & Asugman, 2006), which is always associated with risks (Adam, 2015) including natural disasters, health risks, crime, political instability, and terrorism (Karl & Schmude, 2017). Thus, an individual who is willing to gain new experience in tourism usually needs to have the courage to take adventure to some extent. Because attitude is the psychological tendency in which individuals evaluate their behaviors (Kim, Chen, & Hwang, 2011), this paper refers attitude towards new tourism experience to individuals' evaluation of their behavior of gaining new experience in tourism.

Literature about gaining new tourism experience indicates that high disposable income (e.g., Crouch, 1992) and motivation (e.g., Gnoth, 1997) are the major determinants. However, the fact might be more complicated. First, low income individuals are able to go traveling in the ways of budget backpackers (Loker-Murphy & Pearce, 1995) and working tourists (Tang & Xu, 2019; Uriely & Reichel, 2000). People who earn relatively more might not travel because they tend to save the money for future use (e.g., Plog, 2001; Strathman et al., 1994). Second, although a tourist might be motivated by the novel activities (e.g., Jang & Feng, 2007), he/she is not necessarily ready to immerse him/herself wholly in an alien environment (Cohen, 1972). In this case, personality was argued to play a role in tourists' novelty-seeking behavior (Plog, 1974).

Regarding the reasons why an individual prefers safety or adventure during travel, Plog (2001) concluded three personality characteristics, including generalized anxieties, sense of powerlessness, and territory boundness which formed an individual's level of self-confidence and curiosity, as explanatory elements. While some empirical studies supported Plog's psychographic model (e.g., George, Henthorne, & Williams, 2013), some failed to corroborate it (e.g., Lee-Hoxter & Lester, 1988; Smith, 1990a, 1990b; Sonmez & Graefe, 1998). For example, Litvin and Smith (2016) argued that "travelers, regardless of their degree of venturesomeness, almost always travel to psychocentric destinations". Although Plog's model has been widely cited and used, empirical research on it has been continuous (Cruz-Milán, 2018). Because a different perspective to explaining and testing Plog's model is suggested to be helpful (see Madrigal, 1995; Nickerson and Ellis, 1991), this study joins in this academic debate by exploring the reasons for a person's preference towards safety or adventure during travel from the perspectives of time orientation and orientation of goal pursuit.

### *2.2 Present orientation and attitude towards new tourism experience*

Time orientation, first proposed by Strathman et al. (1994), is a cognitive motivational concept referring to the extent to which people consider distant consequences of their present behavior.

The concept has two opposite dimensions which are present orientation and future orientation. People who are future-oriented tend to consider future consequences in choosing their present behavior even if the present behavior may be undesirable. For example, they will engage in exercise and diet because of the long-term benefits to personal health (Joireman, Shaffer, Balliet, & Strathman, 2012). By contrast, people who are present-oriented are likely to consider immediate consequences of their present behavior, such as the immediate pleasure from eating. To realize this enjoyment, they would be less likely to control their diet and more likely to risk their personal health in the long run. Following this reasoning, present-oriented persons should be more likely to take risk. From the above conceptualization, it is evident that time orientation can predict individuals' behaviors that involve risks.

While it involves risks, traveling is a behavior which is also characterized as a kind of enjoying the present life (Torres, 2016), which might be, to some extent, following the line of reasonings about present orientation discussed above. Present-oriented people may have a high motivation to enjoy the novel experience during travel, even it is susceptible to high personal risk. The motivation will shape a favorable attitude towards the new tourism experience. Therefore, it is hypothesized that:

***H1: Present orientation positively predicts attitude towards new tourism experience***

### *2.3 The mediating role of prevention focus*

Regulatory focus theory assumes that people adopt either of two different strategies which are promotion focus and prevention focus, when achieving their goals (Förster, Higgins, & Idson, 1998). Promotion focus directs a person towards accomplishments and hopes (Higgins, 1997). Promotion-focused persons emphasize the gains of their behaviors. By contrast, prevention focus entails a person concentrating on safety and responsibilities (Higgins, 1997). Prevention-focused individuals tend to be vigilant and careful, and thus put the principle of non-losses at the first place when pursuing their goals.

Regulatory focus has been reported as a reliable predictor of human behaviors, behavioral intention, and attitude (Joireman et al., 2012; Kim et al., 2011). Traveling is an activity which involves risks because of uncertainty and unfamiliarity. Although novel experience is essential for many tourists (Cohen, 1972), it does not necessarily mean that they would like to sacrifice personal safety for an immersive experience of the novel activities. Therefore, safety and novel experience are somewhat contradictory. Regarding what exactly prevents people from gaining new experience, safety and security are argued to be the decisive determinants (e.g., Fuchs & Pizam, 2011) which seem to associate with the emphasis on safety by prevention-focused individuals. It is possible that people high in prevention focus are less likely to favor new tourism experience. Therefore, it is hypothesized that:

***H2: Prevention focus negatively predicts attitude towards new tourism experience***

Time orientation has been shown a predictor of regulatory focus. Prior research found that future-oriented individuals tended to engage in exercise and healthy eating because of their promotion focus (Joireman et al., 2012). This is not surprising because future-oriented persons are driven by a long-term favorable outcome which resembles the gain and accomplishment emphasized by people with promotion focus. However, the maintenance of personal health is different from traveling. Traveling is the activity which emphasizes on an imminent goal of enjoying the present moment instead of a long-term goal. Present orientation is plausibly more relevant to the tourism context. As present-oriented individuals are less likely to consider their safety and responsibility in the future, they may not focus on prevention. According to this logic, they may have higher tendency to experience something new during the trip because they may

not consider too much about losing something when pursuing their traveling goals. Therefore, the current study proposes the following hypothesis:

**H3:** *Present orientation negatively predicts prevention focus*

Given the above hypotheses about the relationships among present orientation, prevention focus, and attitude towards new tourism experience, this study explores if prevention focus is a significant mediator so that the following hypothesis is formulated.

**H4:** *Prevention focus mediates the positive relationship between present orientation and attitude towards new tourism experience.*

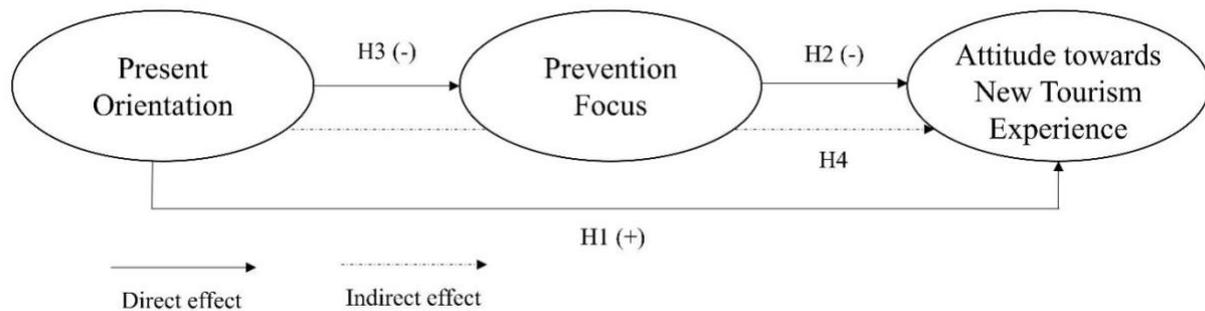


Figure 1. Conceptual Model

### 3. Methodology

#### 3.1 Procedure

Questionnaire survey was adopted to collect the data. Respondents were recruited on the online platform called Amazon Mechanical Turk. Americans whose ages were 18 or above were qualified to complete the online survey. In total, 800 responses were collected. Among which, 301 responses were incomplete. Hence, 499 responses were retained for analysis. There is no outlier case as all z-values are in the range of -4 and 4.

#### 3.2 Measures

Present orientation was measured by the seven items in Joireman et al. (2012). It is a 7-point bipolar scale with 1 denoting “extremely uncharacteristic of you” and 7 denoting “extremely characteristic of you”. Borrowed from Higgins et al. (2001), prevention focus was operationalized by the five items which were in 7-point bipolar scale (1: “Never or seldom” to 7: “Very often”). The measure of attitude towards new tourism experience was borrowed from Alvarez and Asugman (2006). It contains three 7-point Likert scale items (1: “strongly disagree” to 7: “strongly agree”).

### 4. Results

#### 4.1 Profile of the respondents

Table 1 exhibits the profile of respondents. Almost 60% of the respondents were female. Over half of them were aged 55 or above (52.3%). About two-third of them had attended college (66.1%). Moreover, over half of them had an annual household income amounted to USD50,000 or below (51.3%) and had travelled for at least two times in the past 12 months (50.9%).

Table 1. Profile of Respondents

Characteristics	Number	Percentage
<b>Gender</b>		
<i>Male</i>	205	41.1%
<i>Female</i>	294	58.9%
<b>Age</b>		
<i>18-19</i>	6	1.2%
<i>20-24</i>	23	4.6%
<i>25-29</i>	40	8.0%
<i>30-34</i>	39	7.8%
<i>35-39</i>	37	7.4%
<i>40-44</i>	30	6.0%
<i>45-49</i>	27	5.4%
<i>50-54</i>	36	7.2%
<i>55-59</i>	49	9.8%
<i>60-64</i>	59	11.8%
<i>65 or above</i>	153	30.7%
<b>Highest education</b>		
<i>Attended grade school</i>	1	0.2%
<i>Graduate grade school</i>	10	2.0%
<i>Attended high school</i>	16	3.2%
<i>Graduate high school</i>	103	20.6%
<i>Attended college</i>	149	29.9%
<i>Graduate college</i>	141	28.3%
<i>College post graduate</i>	71	14.2%
<i>Other</i>	8	1.6%

Annual household income (USD)

<i>Less than \$25,000</i>	96	19.2%
<i>\$25,000-\$49,999</i>	160	32.1%
<i>\$50,000-\$74,999</i>	109	21.8%
<i>\$75,000-\$99,999</i>	67	13.4%
<i>\$100,000 or more</i>	67	13.4%

Leisure travel frequency in the past 12 months

<i>Null</i>	127	25.5%
<i>Once</i>	118	23.6%
<i>Twice</i>	119	23.8%
<i>Thrice</i>	58	11.6%
<i>Four times or above</i>	77	15.4%

4.2 Measurement Model

Partial Least Square Structural Equation Modeling (PLS-SEM) was adopted to analyze the data. According to Hair, Hult, Ringle, and Sarstedt (2017), outer loadings should be above 0.4 if composite reliability and average variance extracted (AVE) exceed the recommended thresholds. The measurement model testing results showed that one of the items of prevention focus (How often did you obey rules and regulations that were established by your parents?) recorded 0.283 in its outer loading, so that this item was eliminated. After that, all outer loadings are above 0.4 (see Table 2), while the composite reliability and AVE are above the thresholds of 0.7 and 0.5 respectively (see Table 3). Furthermore, Cronbach's alpha and rho<sub>A</sub> are also above 0.7 (also see Table 3). Hence, reliability and convergent validity of the measures are supported. To assess the discriminant validity, comparison of item outer loadings and cross loadings are made. Outer loadings are greater than the absolute value of cross loadings (see Table 2). Square-root of AVE of a construct exceeds its absolute correlation with other constructs (see Table 3). Moreover, according to the Heterotrait-Monotrait Ratio (HTMT) results, all HTMT values are below 0.90 and the bias-corrected confidence intervals do not include 1. Taken together, discriminant validity is supported.

Table 2. Outer loadings and cross loadings of constructs

Measurement items	PO	PF	ATT
Present orientation (PO)			
1. I only act to satisfy immediate concerns, figuring the future will take care of itself.	<b>0.833</b>	-0.255	0.137

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2. My behavior is only influenced by the immediate (i.e., a matter of days or weeks) outcomes of my actions.	<b>0.735</b>	-0.145	0.204
3. My convenience is a big factor in the decisions I make or the actions I take.	<b>0.595</b>	-0.175	0.169
4. I generally ignore warnings about possible future problems because I think the problems will be resolved before they reach crisis level.	<b>0.684</b>	-0.234	0.024
5. I think that sacrificing now is usually unnecessary since future outcomes can be dealt with at a later time.	<b>0.774</b>	-0.259	0.123
6. I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur at a later date.	<b>0.799</b>	-0.271	0.088
7. Since my day-to-day work has specific outcomes, it is more important to me than behavior that has distant outcomes.	<b>0.579</b>	-0.154	0.162
Prevention focus (PF) <sup>a</sup>			
1. Growing up, would you ever "cross the line" by doing things that your parents would not tolerate?*	-0.245	<b>0.860</b>	-0.198
2. Did you get on your parents' nerves often when you were growing up?*	-0.290	<b>0.827</b>	-0.127
3. Growing up, did you ever act in ways that your parents thought were objectionable?*	-0.181	<b>0.844</b>	-0.157
4. Not being careful enough has gotten me into trouble at times.*	-0.243	<b>0.703</b>	-0.136
Attitude towards new tourism experience (ATT)			
1. When I travel, I like it to be an adventure.	0.203	-0.194	<b>0.854</b>
2. When I travel, I am looking to gain new experiences.	0.063	-0.113	<b>0.870</b>
3. When I travel, I prefer to go to places that I have not seen before.	0.170	-0.165	<b>0.787</b>

*Notes:* Values in boldface are outer loadings, whereas others are cross-loadings; <sup>a</sup> The item "How often did you obey rules and regulations that were established by your parents?" was deleted owing to its low outer loading; \* Reverse-coded items

Table 3. Assessment of reliability and validity of constructs

Correlation between Constructs	PO	PF	ATT
Present orientation (PO)	1.000		
Prevention focus (PF)	-0.301	1.000	
Attitude towards new tourism experience (ATT)	0.179	-0.192	1.000
Average Variance Extracted (AVE)	0.518	0.657	0.702
Square root of AVE	0.720	0.811	0.838
Composite Reliability	0.881	0.884	0.876

Cronbach's Alpha	0.841	0.824	0.788
rho_A	0.852	0.831	0.798

#### 4.3 Common Method Bias

Both procedural and statistical methods were used to minimize the common method bias. Before respondents started to respond to the survey, they were promised that their identities would not be disclosed. Through conducting the Harman's single-factor test, three factors were produced while the first factor accounted for 29.20% of variance, which was below the suggested threshold of 50%. The Unmeasured Latent Marker Construct (ULMC) method was used to further assess common method bias (Liang, Saraf, Hu, & Xue, 2007). According to Table 4, most R2 values are not statistically significant. The indicators' substantive variances are much greater than their method variances ( $R12 > R22$ ). Their ratio (R2:R1) is 119:1. Given these results, common method bias should not be an issue for the present research.

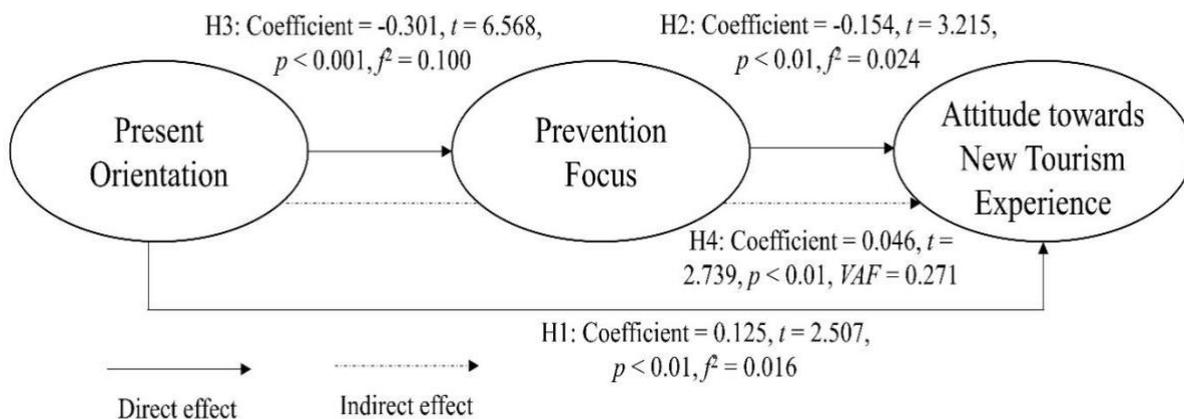
Table 4. Common Method Bias Analysis – Unmeasured Latent Marker Construct

Construct	Items	Substantive Factor Loading (R1)	R1 <sup>2</sup>	Method Factor Loading (R2)	R2 <sup>2</sup>
Present orientation	PO1	0.838***	0.703	-0.001	0.000
	PO2	0.837***	0.700	-0.100	0.010
	PO3	0.497***	0.247	0.083	0.007
	PO4	0.747***	0.557	-0.051	0.003
	PO5	0.720***	0.519	0.052	0.003
	PO6	0.793***	0.629	0.011	0.000
	PO7	0.545***	0.297	0.025	0.001
Prevention focus	PF1	0.852***	0.725	-0.014	0.000
	PF2	0.766***	0.587	-0.080	0.006
	PF3	0.932***	0.868	0.091*	0.008
	PF4	0.603***	0.364	-0.093	0.009
Attitude towards new tourism experience	ATT1	0.802***	0.643	0.076*	0.006
	ATT2	0.931***	0.866	-0.110***	0.012
	ATT3	0.778***	0.605	0.042	0.002
Average			0.594		0.005

Note. \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$

#### 4.4 Testing of Hypotheses

The effect of leisure travel frequency in the past 12 months on attitude towards new tourism experience was controlled in the model testing. Before interpreting the model testing results, VIF values were checked to examine any multicollinearity issue. Because all values are below 5, the issue does not exist. Results are exhibited in Figure 2. Present orientation positively predicts attitude towards new tourism experience, so that H1 is supported. H2 is also supported as prevention focus negatively predicts attitude towards new tourism experience. Coherent with our conjecture in H3, present orientation negatively predicts prevention focus. Finally, the significant mediating effect of prevention focus in the positive relationship between present orientation and attitude provides support to H4. Regarding the predictive relevance of the structural model, the Q2 values which are above zero indicate a satisfactory result. The R2 values of prevention orientation (0.091) and attitude (0.119) are statistically significant ( $p < .05$ ). In a nutshell, all proposed hypotheses are supported while the model testing is adequate.



*Note.* The relationship between the control variable (leisure travel frequency in the past 12 months) and attitude towards new tourism experience is statistically significant (coefficient: 0.258,  $t = 6.070$ ,  $p < .001$ ).

Figure 2. Conceptual Model and Results

## 5. Discussion

The current study examines present orientation as a predictor of attitude towards new tourism experience and prevention focus as the explanatory factor. Although novelty is important in tourist experience, one cannot assume that tourists will certainly like and pay for the new experience in tourism as attitude and behavior vary with motivations, socio-demographic background, and personality. This stream of research is extended by our findings that people who are high in present orientation positively evaluate new tourism experience because they emphasize less on prevention of loss. The findings resonate with Strathman and colleagues' (1994) illustration. Present-oriented persons are so interested in the immediate outcome that potential risks in the future are ranked lower in priority. Their minds might be overwhelmed by the fun derived from new tourism experience, instead of the threat to personal safety aroused from unfamiliarity with the tourism products. Although present orientation is conceptually opposite to future orientation, it does not mean that their effects on an outcome variable are contrary to each other. Prior research noted that future-oriented individuals might also concern the present consequences (e.g., Shipp, Edwards, & Lambert, 2009). Likewise, recent argument generally supported a two-factor model -- examining the effects of future orientation and present orientation separately (e.g., Adams, 2012). The reason was that their effects on outcome

variables could be in the same valence (Joireman et al., 2012). However, as future orientation is not measured in this study, the answer remains unknown which leaves a gap for future research.

## 6. Conclusions and Implications

This paper explores the reason why some, but not all, people prefer seeking for new experience in tourism by considering the relationships among present orientation, prevention focus, and attitude towards new tourism experience. Data were collected through a questionnaire survey and analyzed by PLS-SEM analysis. The results reveal that present orientation positively influences people's attitude towards new tourism experience through prevention focus. In particular, present orientation is negatively associated with prevention focus which is also negatively related to the attitude. Accordingly, there are some theoretical implications for knowledge creation and practical implications for tourism product developers and marketers.

This study contributes to the knowledge about tourists' decision-making on gaining new experience through traveling. First, the current study provides additional evidence for the relationship between individual differences and tourist preferences. Plog (1974) proposed an allocentric/psychocentric model, arguing that people who are allocentric prefer novel and exotic destinations whereas those who are psychocentric prefer familiar destinations. Although some empirical studies failed to confirm Plog's model, this paper supports Plog's proposition that tourist preferences vary with individuals from the perspectives of time orientation and prevention focus. Specifically, this paper extends Plog's (1974) research by showing that an individual's consideration of present consequences of his/her actions and prevention focus when pursuing the traveling goals play a significant role in forming his/her attitude towards new tourism experience. Furthermore, since attitude towards new tourism experience implies novelty seeking tendency, the findings add knowledge to the theories of time orientation and regulatory focus by extending the explanatory power of these two theories to novelty seeking.

Based on the findings, there are some implications for tourism marketers. On the one hand, marketers can stimulate the present orientation of potential tourists by persuading them to enjoy the present life and present benefits, and not to wait for tomorrow. On the other hand, because of the discouraging effect of prevention focus, emphasis on the potential risks of new tourism products is not recommended.

The implications should be considered with several limitations in this paper. First, all respondents were Americans. Generalization of the implications to other ethnicities has to be cautious. A re-examination of the model with respondents in culture highly different from American is recommended. Second, this study does not consider the effect of numerous other antecedents. For example, literature indicated the plausible influence of disposable income. Future research is recommended to incorporate it in the model testing and to examine its alternative role such as a moderator. Third, this paper only tests the mediating role of prevention focus (people who seek for safety and responsibility). However, because individuals who adopt promotion focus are concerned with gaining benefits when achieving their goals, which seems matched with the goals of gaining new tourism experience, the role of promotion focus is worth for investigation in the future.

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## **Female tourists' safety and security perceptions in Phuket, Thailand**

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### **Abstract:**

This paper aims to identify the safety and security factors in Phuket that influence the female tourists' perception. The study revealed that the lighting in the tourist area, contingency agent, and safe road were the factors that most influence the safety and security perception among female tourists. The traffic conditions in Phuket were perceived as the least safe and secure. With the Pearson correlation coefficient, the female tourists with higher monthly income were found having lower safety and security perception.

**Keywords:** Female tourists, Safety and security, Perception, Phuket

### **1. Introduction**

Tourism Authority of Thailand (TAT) reported that the income of women worldwide increased on average 11.4 percent during 2007-2014. Besides, the number of female tourists visiting Thailand was substantially raised for both local and international markets. Therefore, TAT launched Women's Journey Thailand in August 2016 to promote tourism and attract more female tourists (Luxury Business, 2020). Currently, Thailand was ranked as the top 10 most dangerous countries for solo female tourist in 2019 (Asher & Lyric Fergusson, (2019). Another survey by International SOS (2020) prevailed that Phuket presented the low rate of travel risk where violent crime rates are low, occasional transport disruption, effective security, and emergency services while their infrastructures are sound. The more positive perception among female tourists in Phuket's safety and security is vital to establish and it possibly enables the visibility and competitive advantage of the destination correspondingly. Consequently, the main purpose of this study is to identify the safety and security factors in Phuket that influence the female tourists' perception. The findings of the study could be potentially beneficial sources for destination marketers, entrepreneurs, or tourism-related authorities to successfully improve the safety and security at the destination.

## **2. Literature Review**

### *2.1 The impacts of safety and security in tourism destinations*

The issue of safety and security is widely discussed regarding the mandatory condition for the host community and travel and tourism development. Zainal (2012) strongly stated that safety and security have been recognized as one of the indispensable factors in promoting tourism activities. In fact, only few elements of safety and security issues are focused and realized such as public safety, health safety, and transportation or road safety, etc. (Breda & Costa, 2005). Furthermore, the destination performance on safety and security is directly related to the destination image (Tan & Wu, 2016). Based on the previous studies, there were five main forces that would affect the tourist's perception of the destination images; crime, terrorism, food safety, health issues, and natural disasters (Norizawati & Tarmiji, 2014; Breda & Costa, 2005). In most cases, safety and security issues can cause changing the tourists' perception of the destination, and finally, it will affect their decisions for the destination selection and intention to revisit.

### *2.2 Female Tourists' Perception towards safety*

In the early stages of the household tourism decision making process women are the initiator on a family vacation (Rojas-de-Gracia, Urbistondo & Ana Maria, 2019). They considered numerous factors when making decisions for their destination selection. One of those factors is safety and security, a significant factor that has become an indispensable condition involved in the process of destination selection (Kôvári & Zimányi, 2011). Moreover, it represents the quality of tourism management in the country. Chiu & Lin, 2010 revealed that male tourists have a stronger ability to protect themselves than females in terms of safety perception and awareness. Additionally, more than 50 percent of women report their gender as a constraint to travel for leisure while this concern was not found among men (Sonia, 2011). It is noted that the tourists' demographic characteristics have a significant influence on the concern and perception of travel security (Zheng & Zhang, 2002).

## **3. Methodology**

Phuket was nominated as the destination for data collection. The data were obtained from both domestic and international female tourists, who were waiting in the departure hall at Phuket International Airport in August 2018. In total, 500 questionnaires were responded by the sampling group but only 421 copies were usable and convenient sampling was approached. The questionnaire was developed based on a comprehensive literature review to explore the female tourists' safety perception and satisfaction toward destination attributes related to safety and security. The extent of their perception was on a five-point Likert scale. To analyze the data, ANOVA and Pearson correlation coefficient were employed to verify the relationship between personal profile, age and monthly income, whether the increase in each variable would influence the level of safety and security perception.

## **4. Results**

According to the demographic, Chinese was the dominant market who visited Phuket followed by Russian, Australian and New Zealanders, European, Other Asia, and other nationalities. The majority of the respondents (38%) has generated monthly income 1,000 USD and below. Most of the female travelers visited Phuket with their family (35.9%), followed by traveling with a

partner or spouse (29.7%), and friends (26.1%). More than half of the respondents have self-arrangement for their trip and nearly 40% relied on travel companies for trip arrangements.

The key findings presented that female tourists possessed high safety and security perception on the following attributes correspondingly; touring the city in daytime (4.39), accommodation area (4.33), tourist spots and places of visit (4.28), accessibility of the destination (4.03), and security of personal belongings (4.00). Apart from this, the factors that could influence the safety and security perception were investigated. The lighting in a tourist area, contingency agent availability, and safe roads were the top-rated accordingly. While the availability of safety booklets and the availability of rewards for information leading to arrests were perceived as the least influential factors.

To gain a clearer understanding of what contributes statistically significant differences in safety and security perception among female tourists in Phuket, each safety and security attribute was additionally examined with the demographic variables. Statistically significant differences were rarely found in age groups and marital status groups. On the other hand, types of their trip arrangement, self-arrangement trip, and travel with a tour company were found statistically significant differences especially in the quality of roads and other infrastructures, touring city in daytime, and security of personal belongings. Interestingly, among diversification of nationality and accompanying persons mutually revealed statistically significant differences in almost all destination's safety and security attributes.

The further investigation on the correlation was extended to the age group and income as presented in Table 1. It was found that there was a weak positive correlation between age and being charged reasonably when traveling at the destination and local transportation/ taxi. As a result, the older tourists reported higher safety and security perception on local transportation and charged price. Besides, there was a weak negative correlation between monthly income and beach lifeguard and services, the amount of lighting at night time, security of personal belongings, police presence and quality of roads, bridges, and other infrastructures respectively. The tourists who have higher monthly income perceived lower safety and security perception on beach lifeguard, lighting at night time, security of personal belongings, police presence, and quality of roads and other infrastructures.

**Table 1: Correlations among attributes of perceptions on safety and security.**

No.	Attributes	Pearson Correlations	
		Age	Monthly Income
1.	Touring city in daytime	-.006	-.035
2.	The amount of lighting at night time	-.004	-.113*
3.	Accessibility to the destination	.053	-.016
4.	Tourist spots and places of visit	.014	-.01

5.	Local transportation/ Taxi	.158**	.049
6.	Being charged reasonably when traveling at the destination	.114*	.042
7.	Traffic conditions	.092	.014
8.	Quality of roads, bridges, and other infrastructures	.026	-.106*
9.	Accommodation	.077	.048
10.	Fair shopping offered, prices	.036	.05
11.	Beach lifeguard and services	-.044	-.186**
12.	Police presence	.044	-.110*
13.	Security of personal belongings	.082	-.113*
14.	Food hygiene and water safety	.083	.001

## 5. Discussion and Conclusion

Female tourists displayed the overall safety and security in Phuket at a high level while the traffic conditions were perceived as the least safe and secure. This might be implied that Phuket has well planned and developed the facilities and infrastructure to support tourism since Phuket has become a world-class tourist destination (Ministry of Foreign Affairs, 2018). However, there are rooms for improvement on the traffic facilities and infrastructures. Additionally, female tourists agreed that safe road attribute is one of the most perceived factors that contribute to the safe and secure perception of Phuket. Therefore, creating and maintaining road safety is the primary concern for the destination to take action on improvements. Enhancing the quality and quantity of lighting in tourist spots and the availability of contingency agents could maximize the safety and security perception among female tourists. Female tourists from developed countries; Australia, New Zealand and EU feel less safe and secure since the safety and security facilities in their countries are advanced than others. Due to the nature of pre-arrange tourists' activities and services that possibly minimize the worries for female tourists including their safety and security concerns, travelling with tour company creates better safety and security perception than self-arrange travel. Higher income people may have or expect better standard of living. Consequently, female tourists who earned higher monthly income possess lower safety and security perception. A similar study by Zheng & Zhang (2002) also stated that female, elderly, and high-income tourists tend to cancel travel plans if a tourism destination is considered unsafe. To capture the tourists who likely have higher purchasing power on tourism products, the destination marketers or tourism-related authorities should develop and promote the quality and availability of beach lifeguard, adequate lighting at night time, security of personal belongings, the frequency of police

presence, and quality of roads and other infrastructures. The extended study may focus on the safety and security perceptions that influence the revisit including the prevention measures which could complement the recent study. Admittedly, this study collected the data from only the respondents who already have travel experience at the destination and used Likert scale to investigate the extent of perception. The future studies would be suggested to compare the expectations about safety and security and the experience from their actual experience. The qualitative methods might be applied to obtain insightful perception. Thus, the relevant bodies will be able to see the gaps that have to be closed and factors or dimensions to be improved or developed.

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## **Do airline apps enhance travel experience?**

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### **Abstract:**

With popularity of mobile technologies, airline applications have become a critical tool that provides various benefits to both customers and airline companies (Jeon et al, 2019; Liu & Law, 2013). Yet, limited attention has been paid in the literature to understand airline application (e.g., Budd & Vorley, 2013; Rady, 2018). To date, little to no research has looked at individual airline applications or has assessed if airline applications enhance travel experience. Therefore, this study aims to identify the features that are offered by top ten airline applications and to confirm whether or not airline applications enhance travel experience.

This research is a qualitative study using content analysis and semi-structured interview method. Firstly, a content analysis was conducted to identify and compare the main features of the top ten most downloaded airline applications, which were reported by SensorTower (2019), in both Apple App store and Google Play store in 2019. Secondly, to obtain in-depth understanding of airline application users, a total of 30 semi-structured personal interviews with open-ended questions were carried out in this study.

Through the content analysis, this study found that most of airline applications allow airline customers to book a flight, search for flights, get mobile boarding passes, check-in, select a seat or meal, view membership and mileage information, receive notifications and check flight status. The semi-structured interviews also confirmed that airline application enhance travel experiences as majority of airline application users perceived airline applications favorably in general. The findings of this study also indicated that airline applications were discovered to provide more convenience to frequent travelers (business travelers) than infrequent travelers. Frequent travelers were found to appreciate and utilize various functions of airline applications, including membership status, more than other travelers (e.g., leisure traveler).

In addition, this study has several practical implications for airline companies. The results of this suggested that that airline companies should understand the different travelers' needs and preferences and should design mobile applications that can satisfy and attract various airline application users who may travel for different purposes (e.g., business or leisure trips). Specifically, airline companies should focus on improving features, such as lounge information and real-time push notifications (e.g., departure gate number or boarding time) for business travelers. Also, airlines should consider offering more promotions and special offers for flight tickets on their mobile applications to attract more leisure travelers as they are more price sensitive than other travelers.

**Keywords:** Aviation, airlines, user experience, mobile applications, ICT

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## **Robots in tourism: Tourists' perceptions over the use of anthropomorphic and other types of robots in services**

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### **Abstract:**

Tourism organisations have started to adopt robots, such as in the form of delivery robots and robot-concierge. A substantial number of academic studies have investigated the role, importance or implication of technology in tourism and hospitality. Such studies, yielded some interesting outcomes such as the fact that the most commonly approved usage of robots is perceived to be rather operational and functional. Yet, the answer to the question of whether tourists are willing to embrace a humanlike or anthropomorphic robot in tourism remains rather elusive. This study used a qualitative methodological approach in order to delve deep into the issue of people's perceptions regarding the usage of robots in the tourism field. Tourists who chose to spend their holidays at the international destination of Cyprus were approached while holidaying to be interviewed according to qualitative inquiry principles. Saturation of findings was established at around 70 interviews with some additional taking place. A total number of 78 interviews were retained in the study. Emerging topics and sub-topics were emerged based Gioia methodological principles to reach conclusions and address the overall aim of the study.

The findings betray that informants acknowledge the contribution of robots in the tourism field. Yet, they recognise that they may impact negatively towards the anthropocentricity of any service organisation that aims to deliver a hospitable and emotional experience to its guests. Four clusters of informants were identified based on their interaction (or not, and perceptions (positive/negative) of robots in the tourism industry. The first two clusters comprise of those who came in contact with robots and share positive or a negative/sceptic view for their future tourism usage. The other two clusters comprise of informants who haven't interacted with robots and share either a positive, or a negative view of their future tourism usage. This leads to the conclusion that the interaction or not with a robot does not secure either positive or negative perceptions regarding robots in tourism. With the exception of certain informants, the majority proposed that a robot should possess human-like/android characteristics to trigger their curiosity. As a conclusion, tourists acknowledge the positive impacts of having robots performing certain functions in the tourism sector while this may add value to their overall experience. Nonetheless, the thought of having robots replacing humans in tourism creates a feeling of discomfort, insecurity and negative emotions, specifically fear and anger. Based on these results, tourism organisations may incorporate to some extent such technological advancement in their premises under a condition of pivotal importance. If they aim to come across as an anthropocentric organisation then they should be cautious not to give the impression that humans (i.e. employees) can be substituted by machines based on the rather false assumption that it adds value to the guest experience.

## **Consumer socialization of children in tourism: The role of family, individual, and consumer characteristics**

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### **Abstract:**

Consumer socialization implies the process through which children learn the skills, knowledge, and attitudes essential to become a consumer. While previous research investigated the mechanism of children consumer socialization regarding some tangible products, like televisions, toys and food, few studies empirically researched the subject in the context of products with the characteristic of intangibility such as tourism. Therefore, the article provides an update and extension of previous work by examining the model of children consumer socialization in the area of tourism. According to previous research, the degree of socialization can be evaluated by the measurement of consumer behavior, including spending/saving decisions, assortment decisions, product and brand decisions. In current study, the extent of children consumer socialization in tourism is quantized by using *Children Family Tourism Decision-making Influence Measurement Scale* to assess their participant and influence in family tourism decision-making. In addition, three types of characteristics—family, individual and consumer—as major determinants of consumer socialization were included in the model. The data were collected from five primary schools in Zhejiang Province, China. In total, 1117 children between the ages of 8 and 12 participated in this survey. The findings reveal that children consumer socialization is positive predicted by family characteristics (i.e. *family communication patterns*), individual characteristics (i.e. *attachment style*) and consumer characteristics (i.e. *tourism perceived age* and *product knowledge*). Moreover, family characteristics mediate the positive relationship between children consumer socialization and individual characteristics. Such findings suggest that children consumer socialization can be affected by family, individual, and consumer characteristics, giving the new connotation to the mechanism of consumer socialization from tourism perspective and leading to the enriched theoretical and methodological knowledge in this field.

**Keywords:** Children, Tourism, Consumer socialization, Family

## **Resident's discriminatory actions against tourists**

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### **Abstract:**

This paper examines the relationship between tourist stereotypes and residents' discriminatory acts against tourists in the context of a major societal event, COVID-19 pandemic. Discriminatory acts may trigger concerns about discrimination between social groups and affect host-guest relations management. An online questionnaire was distributed to 416 Americans via gendered and non-student sampling approaches. Results indicated that discriminatory actions against tourists were significantly influenced by negative stereotypes but not positive stereotypes. The findings offer insightful knowledge of host-guest relations that benefits both academic and tourism practitioners.

**Keywords:** Tourist Stereotypes, Residents' Behaviours, Discriminatory Actions, COVID-19

### **1. Introduction**

Residents' behavioural responses towards tourists is increasing investigated in the tourism literature. Existing studies have identified lists of positive and negative residents' behaviours which could lead to discriminatory actions towards tourists (van Veelen, Otten, Cadinu, & Hansen, 2016). Furthermore, such behaviours are often driven by tourist stereotypes perceived by residents (Tasci & Gartner, 2007). For instance, positive tourist stereotypes could elicit positive residents' behaviours while negative tourist stereotypes could induce negative residents' behaviours towards tourists.

Since the outbreak of COVID-19 pandemic in early 2020, discriminatory acts against Chinese tourists have been highlighted on media and social forums. There have been reports showed that Chinese tourists were prohibited from private spaces, such as restaurants in Hong Kong and South Korea (Fottrell, 2020; Ting, 2020). Besides that, some Chinese tourists were separated and screened individually at customs (i.e., Singapore) from other nationalities (Ministry of Health, 2020). As the pandemic worsen, discriminatory actions elevated and became more prevalent in other destinations. For instance, Japanese residents distanced themselves away from Chinese (Ipsos, MORI, 2020), and Chinese tourists were physical abused in public in England (Preston-Ellis, 2020). These actions have triggered concerns about discrimination between social groups, as well as the management of host-guest relations.

The purpose of this research is to explore the relationship between tourist stereotypes with discriminatory responses against tourist in the context of a major societal event (i.e., COVID-19). More specifically, this research aims to uncover the relationships between (1) tourist stereotypes, (2) residents' behavioural responses, and (3) discriminatory responses against tourist during COVID-19. For instance, would positive tourist stereotypes elicit facilitative residents' behaviours or reduce harmful behaviours and subsequently less discrimination against tourists? Conversely, would negative tourist stereotypes reduce facilitative or induce harmful residents' behaviours that could increase discrimination?

## 2. Methodology

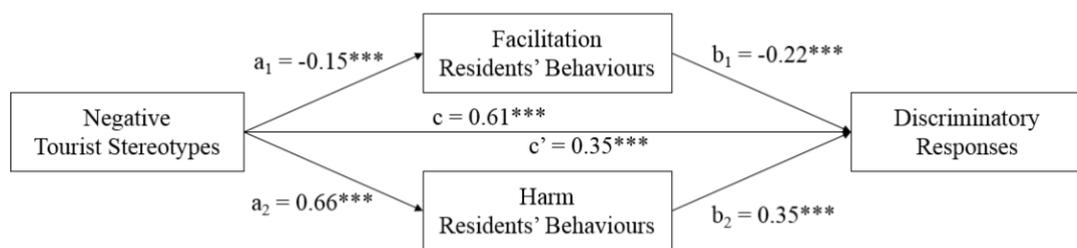
An online questionnaire was distributed to residents in the United States. A 50-50 gendered, non-student sampling approach was adopted. The questionnaire consists of four parts: (1) six positive and six negative tourist stereotypes were evaluated on a 7-point (dis)agreement scale (Tung, King, & Tse 2020); (2) six facilitation and six harmful resident's behaviours towards tourists measured on a 7-point Likert scale where 1 = Never to 7 = Often; (3) six discriminatory responses against Mainland Chinese tourists that have been reported since the COVID-19 outbreak were evaluated on a 7-point (dis)agreement scale; and (4) socio-demographic characteristic of respondents.

## 3. Results

416 Americans participated in this study. 50.96% of the respondents are female while the male respondents accounted for 49.04%. The sample was dominated by respondents below 45 years old. Furthermore, the majority of respondents are from California (21.39%), followed by New York (20.91%) and Illinois (20.67%). 63.22% of the Americans have not travelled internationally in the last 12 months, and 81.25% have never travelled to China. The Composite Reliability (CR) for all measurements exceeded 0.70 (Hu & Bentler, 1999). Table 1 presents the CRs, means, and standard deviations for all three measurements.

	Composite Reliability	Mean	Standard Deviation
<i>Tourist Stereotypes</i>			
Positive	0.93	4.89	1.38
Negative	0.87	2.99	1.43
<i>Resident's Behaviours</i>			
Facilitation	0.92	4.03	1.54
Harm	0.93	2.19	1.47
<i>Discriminatory Responses</i>			
Separate at the border	0.93	3.66	2.10
Screen individually at the border		4.17	2.13
Avoid contacts		3.67	2.19
Exclude from public spaces		3.27	2.12
Exclude from private spaces		3.21	2.09
Prohibit to enter my country		3.51	2.21

The relationships between tourist stereotypes, both positive and negative, to discriminatory responses against tourists were assessed. A significant positive relationship ( $c = 0.61$ ,  $p < 0.001$ ) was identified only for the relationship between negative tourist stereotypes to discriminatory responses against tourist. Parallel mediation analysis using SPSS Process v3.3 (Hayes, 2013) was adopted to evaluate the mediating effects of residents' facilitative or harmful actions. Negative tourist stereotypes had a significant negative link with facilitation actions ( $a_1 = -0.15$ ,  $p < 0.001$ ) where the facilitation actions further reduced the agreements on discriminatory responses against tourists ( $b_1 = -0.22$ ,  $p < 0.001$ ). A 95% confidence level based on 10,000 bootstrap sample indicated a significant indirect effect through facilitation action ( $a_1b_1 = 0.03$ , 95%CI [0.01, 0.07]). Besides that, negative tourist stereotypes showed a significant positive link with harmful actions ( $a_2 = 0.66$ ,  $p < 0.001$ ). Harmful actions further elicited agreement on discriminatory responses against tourists ( $b_2 = 0.35$ ,  $p < 0.001$ ). Parallel mediation analysis with the same approach was conducted, and the result indicated that a significant indirect effect through harmful actions ( $a_2b_2 = 0.23$ , 95% CI [0.13, 0.35]). Additionally, the difference between these two indirect effects is  $0.03 - 0.23 = -0.20$  is significant (95% CI [-0.32, -0.09]). (see Figure 1).



**Figure 1** – Mediation analysis of model

The results suggest that residents' negative tourist stereotypes not only reduced their performance of positive facilitative actions but also induced harmful actions towards tourists which subsequently influence their agreement on discriminatory responses. More importantly, the mediating effect of harmful residents' behaviours is stronger than facilitative behaviours. This is a serious phenomenon within a society that warrants more attention, especially with the increasing negative views of Chinese tourists portrayed since the outbreak of COVID-19. This could induce more anti-social behaviours to show unacceptance of tourists within residents' communities. In turn, the social identity of tourists could be eroded that could further increase the negativity of the tourist stereotypes perceived by the residents', thereby negatively impact host-guest relations.

Regrettably and surprisingly, positive tourist stereotypes neither reduced nor induced discriminatory responses against tourists. The disassociation offers new insights regarding the lack of effects of positive stereotypes on reducing discrimination during a sudden societal event, such as COVID-19. A possible explanation could be residents who upheld positive tourist stereotypes refrained from voicing their disagreements in regards to these actions as discriminatory as doing so may provoke discrimination from other residents and devalue their social identities within their communities.

#### 4. Discussion and Conclusion

Resident's behaviours towards tourist is critical in building positive host-guest relations and stimulating sustainable tourism development. While existing studies emphasizes positive and negative residents' behaviours, this research shows how tourist stereotypes could affect residents' discriminatory actions towards tourists. This offer insightful knowledge for studies in host-guest relations as negative tourist stereotypes were more influential than positive tourist stereotypes in eliciting discriminatory actions in major societal events. Practically, the findings suggest that destination management organizations (DMOs) could place more efforts on the implementation of internal communication on reducing negative tourist stereotypes to improve host-guest relations.

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## **Role challenges in sharing economy employment: A study of food delivery persons**

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### **Abstract:**

The study aims to investigate how the job motivations and role stressors for food-delivery persons are emerged by the sharing economy. Eight job motivations were yielded and were then empirically validated to fit with a tri-dimensional conceptualization of job motivation (growth, hygiene, and avoidance). Their effects on role stressors vary to highlight role conflict as a serious problem in the sharing economy. The findings expand the current understanding on sharing economy employment and provide implications for businesses and legal sectors.

**Keywords:** Sharing economy, employment, food-delivery, role theory, job motivation, turnover

### **1. Introduction**

There is a general belief that the sharing economy represents the direct sharing activities between owners and renters, while it overlooks the commercial intermediaries who “define the rules, guaranties and regulatory framework, and allocate liabilities and risks.” (Dredge & Gyimothy, 2015, p.295). Online food-delivery platform, such as Uber Eats and Deliveroo, shift their own risks and liabilities to others by redefining all stakeholders’ roles in food-delivery service chain (Furunes & Mkono, 2019). Many food-delivery persons believe that they are being unfairly treated (Todoli-Signes, 2018), because they work simultaneously as independent contractors and employees (Sundararajan, 2016). Compared with an independent contractor, they receive less flexibility, because they are instructed to wear uniform and wait in high-demand areas. However, they receive less labor welfare than normal employees. This ambiguous role disrupts the traditional role structure, and thus results in many lawsuits regarding the labor disputes (Butler, 2017; Cox, 2019). Hence, this study is a systematic academic inquiry into the role structure of food-delivery persons, answering the following three research questions:

**RQ1:** What are the job motivations for working as a food-delivery person in the sharing economy?

**RQ2:** How does the role structure of food-delivery persons challenged by the sharing economy?

**RQ3:** How does role stress influence food-delivery persons’ behavioural responses?

## 2. Literature Review

### 2.1 *Human resource challenges in the sharing economy*

Many protests against Airbnb expansion have made the future of the sharing economy doubtful (The Irish Time, 2019). Lambertson (2018) identify the lack of supply as one of the top five emerging challenges for the sharing economy, because the number of service providers in the sharing economy is neither controllable nor predictable, because they not only rely on the amount of underutilized resources, but also on people's willingness to share (Philip, Ozanne, & Ballantine, 2015; Ravenelle, 2019). Kevin Wang, the cofounder of Ridejoy, even claimed that "You never really have enough inventory." (Needleman & Loten, 2014) It shows the importance to view the sharing economy from the perspective of providers.

### 2.2 *Motivations for taking part in the sharing economy*

The sharing economy highlights the bilateral service or product exchanges among providers and users that are equivalently positioned (Perren & Kozinets, 2018). The exchanging behaviors may weaken money and financial outcomes as providers' primary focus. Bellotti et al. (2015) suggests that sharing economy providers are more likely to be motivated by idealistic motivations, such as creating a better and sustainable world, but less by economic benefits. Bocker and Meelen (2017) doubt whether this finding is limited to the case in which the sharing product is relatively expensive but is limitedly consumed by the users in terms of time and capacity (e.g., tool-sharing). Hence, Gleim, Johnson and Lawson (2019) urge scholars to recognize potential variations on job motivations for sharing economy workers, because there is no-one size theory to standardize all job motivations and the approach should be tailored to each job nature (Hyun & Oh, 2011).

### 2.3 *Challenges to role theory*

The work nature of food-delivery persons in the sharing economy is vague to be distinguished from either independent contractor's or employee's (Sundararajan, 2016). They may find themselves concurrently in multiple roles requiring contradictory prescribed behaviors, because there are possible deviations from their actual work role, no matter they recognize themselves as independent contractors or employees. In such situation, employees may experience role ambiguity and conflict because they must necessarily ignore some of the expectations from their role sender(s) to complete the job duties (Dev & Olsen, 1989). The ambiguity work role in the sharing economy not only misleads employees to misread their level of responsibility and authority associated with their job, but also misleads role senders to send contradictory messages and have over/under-expectations (Chekitan & Michael, 1989; Furunes & Mkono, 2019).

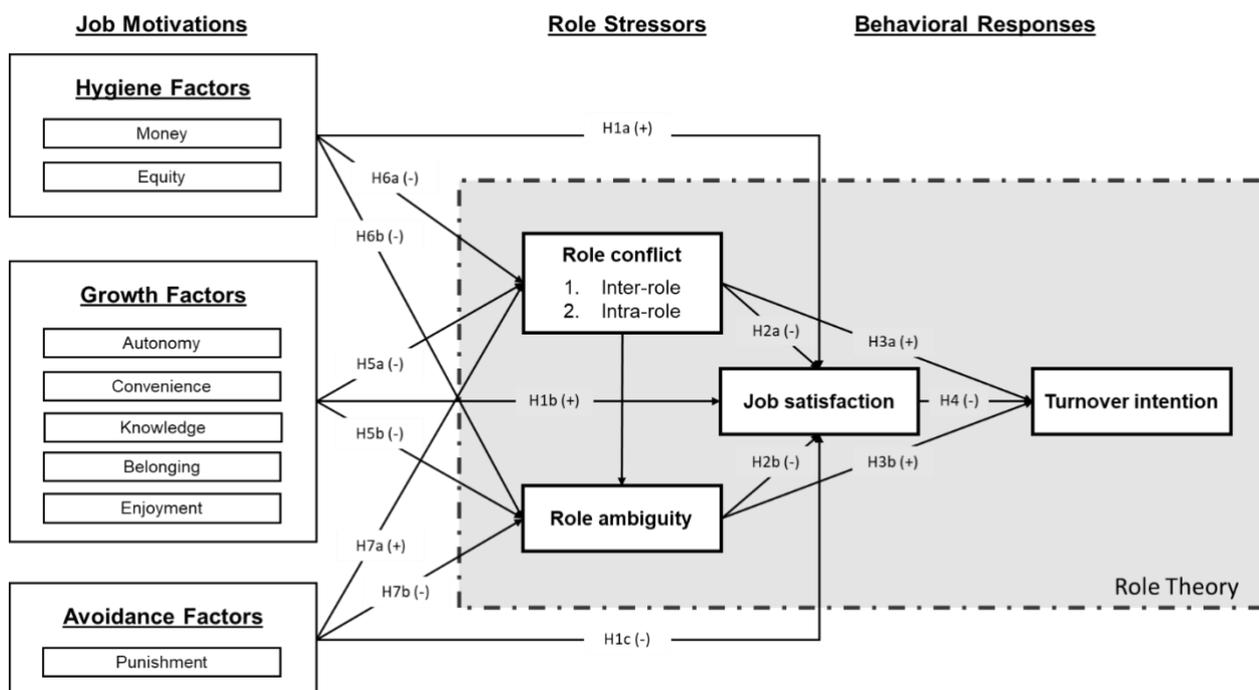
An employee's work role is formed by his/her interactions with role senders (e.g., supervisors and customers) (Burkert, Fischer, & Schaffer, 2011). Role senders have different expectations on the workers' behaviors in accordance with their work roles (Chekitan & Michael, 1989). Hence, the more the role senders an employee has, the more the prescribed behaviors an employee needs to perform. Unlike a typical business in which role senders are clearly defined by an organizational structure, food-delivery persons deliver services as an individual, not a company, and thus they may experience more stresses from their role senders (Furunes & Mkono, 2019).

### 3. Methodology

The first step involves in-depth interviews with 50 food-delivery persons in the sharing economy to explore their job motivations and role structure for scale development. The thematic analysis on NVivo 11.0 yielded eight job motivations (*money, convenience, autonomy, punishment, equity, belonging, enjoyment, and knowledge*), and four role senders who may cause stresses on food-delivery persons' role (*online platform, restaurant, safeguard, and customer*). An instrument that contains 27 items measuring job motivations and 12 items measuring role stressors was developed based on existing literature and interview data to support the questionnaire design.

As a second step, an online survey was developed to concern with the mechanism through which job motivations influence food-delivery persons' role stress and behavioral responses. 800 valid responses were finally collected. Exploratory factor analysis with varimax rotation was first conducted to validate a tri-dimensional conceptualization of job motivations (growth, hygiene, and avoidance). Partial least scale structure equation modeling was then applied using SmartPLS 3.0 to test the proposed research model (Figure 1).

Figure 1. Proposed research model



### 4. Results

#### 4.1 Profile of respondents

The obvious gender imbalance, with male (90.4%) largely outnumbering female (9.6%), implies a food-delivery job as a male-dominated occupation. The age of respondents ranged from 18 to 63. They work 54.7 hours averagely a week as a food-delivery person and 57.7% of them earned between RMB4,001 to RMB8,000 monthly.

4.2 Structural model assessment

Figure 2 presents the result of structural equation modelling:

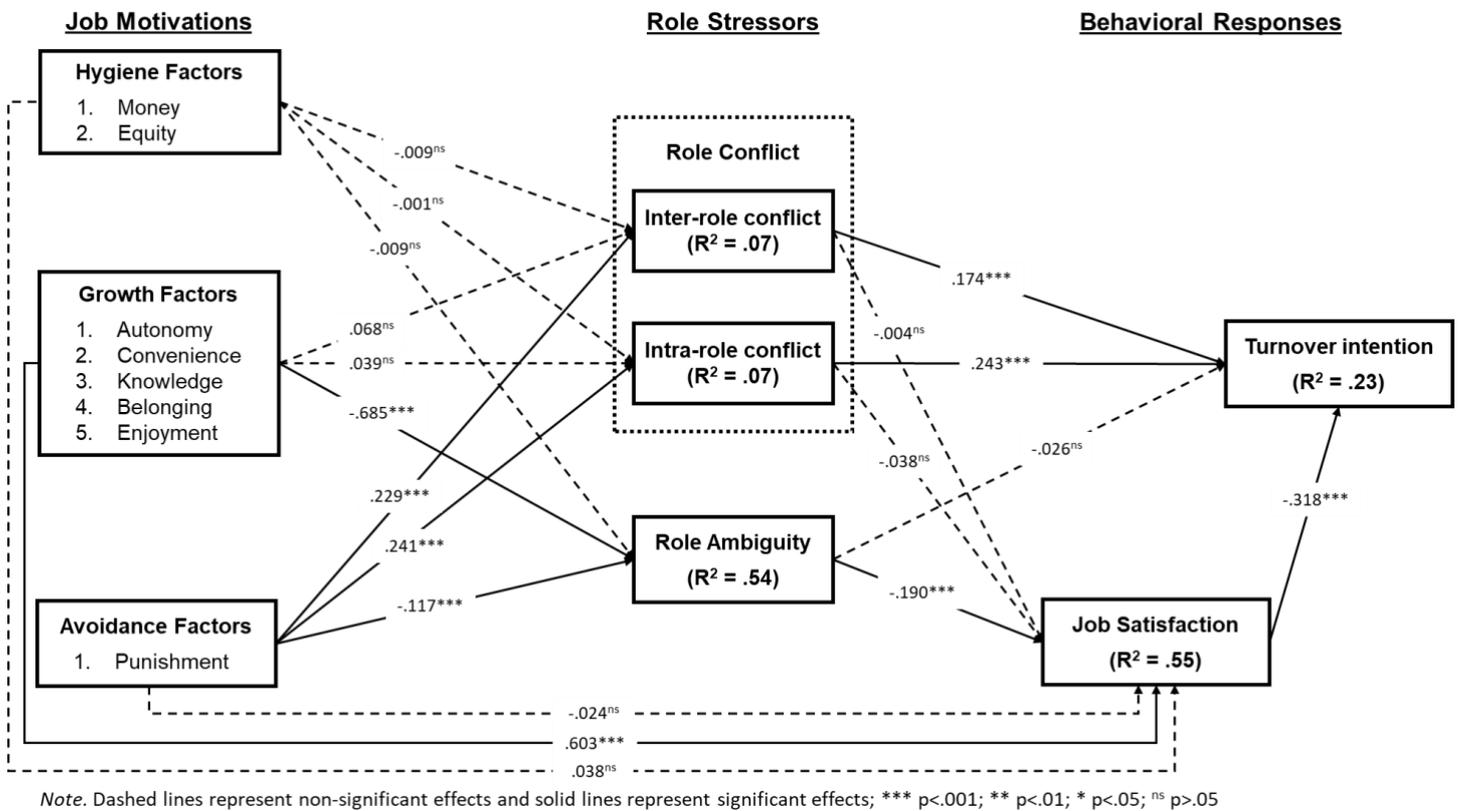


Figure 2. Result of structural equation modelling

5. Discussion and Conclusion

5.1 Discussion

In addition to validating many possible job motivations in the sharing economy, the qualitative analysis found equity as a unique job motivation for food-delivery persons in the sharing economy. The pay-for-performance program in the sharing economy allows food-delivery persons to get exactly paid for what they have done and to get rid of the unfair management decisions (Karatepe, 2011). It reaffirms the ideology of the sharing economy to build “a decentralized, equitable and sustainable economy” (Martin, 2016, p. 154).

The quantitative results advance The Two-Factor Theory by proposing avoidance factors as an additional type of motivation. Although it doesn’t serve as a hard-and-fast rule to distinct job motivations, this recognition enriches the current understanding on food-delivery services in the sharing economy as this kind of businesses usually include a strict punishment system to countervail their relatively low controls over their workers. Besides, the findings support seven out of fifteen proposed hypotheses, clarifying the mechanism through which job motivations and role stressors influence job satisfaction and turnover intention. Role conflict seems to be a more serious problem that ultimately leads to turnover intention, not only because of the insignificant mediating role of job satisfaction, but also of the insignificant negative predicting effects from all motivation factors. It encourages sharing economy businesses to come up with new external strategies, such as mentoring program (Kim, Im, & Hwang, 2015), to help food-delivery persons overcome role conflicts.

### 5.2 Practical implications

First, the findings urge legal sectors to be concerned with the necessary to define this new form of labor relationship in the sharing economy, because sharing economy workers' role structure falls simultaneously into these two types of labor relationship as reflected by harmful effect of role conflict. Second, this study would benefit operators, not limited to food-delivery service, but also to other services in the sharing economy (e.g., tour-sharing service) that involves suppliers (e.g., restaurants in food-delivery service; tourist attractions in tour-sharing service) by identifying possible role senders who trigger workers' role conflicts. Stakeholder education, a concept advanced from consumer education, is needed to clarify the work role of workers in the sharing economy and navigate all role senders' expectations.

### 5.3 Limitations

The qualitative analysis method in this study relies on subjective interpretations on the interview data. Using semantic analysis software may be needed to objectively validate the qualitative findings. Besides, only 22.3% of food-delivery person's turnover intention was explained in the integrated model. Given that age and entrepreneurial identification were identified to have confounding effect on turnover intention, future scholars may extend the research model by including other individual or organizational factors to better explain their turnover intention.

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## **Can tour leader likeability enhance tourist value co-creation behaviors?**

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### **Abstract:**

The purpose of this study is to investigate the relationship between tour leader likeability and tourist value co-creation behaviors and examine the mediating effect of tour leader attachment. The research sample comprised 274 tourists who participated in group package tours. The results revealed that the tour leader likeability positively affects tour leader attachment and tourist participation behaviors and that tour leader attachment positively affects tourist participation and citizenship behaviors. Moreover, tour leader attachment plays a mediating role in these relationships.

**Keywords:** Likeability, Attachment, Tour Leader, Tourist Value Co-Creation Behaviors

### **1. Introduction**

Group package tours (GPTs) are a popular mode of overseas travel in many Asian countries (Tsaour & Tu, 2019). During group tours, group members play an essential role in co-creating travel experience (Campos, Mendes, Valle, & Scott, 2018). In tourism, co-creation is defined as the joint creation of service value by the service company and the customer. Tourist value co-creation behaviors can lead to unique and memorable tourism experiences that benefit the tourists or service providers (Assiouras, Skourtis, Giannopoulos, Buhalis, & Koniordos, 2019). In group tours, co-creating a service experience for tourists requires the participation and interaction of tour leaders and tourists. Therefore, tour leader likeability is a key factor in the promotion of tourist co-creation service experiences. Likeability refers to the degree to which service providers are perceived by customers as friendly, nice, polite, and pleasant (Pulles & Hartman, 2017). Hwang, Kim, and Hyun (2013) discovered that likable employees are sociable and exhibit unreserved behaviors. In addition, employees with high likeability leave customers with a friendly and pleasant impression and elicit liberal reciprocation from patrons. Therefore, tour leader likeability may have a positive relationship with tourist value co-creation behaviors.

Numerous scholars have explored the mediating role of emotional attachment in consumer behavior (Ahn, 2019). Nguyen, Ekinici, Simkin, and Melewar (2015) claimed that customers have a close two-way interaction with brand likeability and that likeability is a cognitive process that enables customers to develop brand attachment. The customers' motivation to participate in a brand's activities is triggered when customers have a high emotional attachment to a particular brand (Auh, Bell, McLeod, & Shih, 2007). Cheng, Wu, Yen, and Chen (2016)

discovered that tourists exhibit citizenship behaviors when they feel attachment to the tour leader. Therefore, tour leader attachment may play a mediating role in the relationship between tour leader likeability and tourist value co-creation behaviors. Accordingly, this study aims to explore the relationship between tour leader likeability and tourist value co-creation behaviors and clarify the mediating role of tour leader attachment in the relationship between tour leader likeability and tourist value co-creation behaviors. We contribute to the literature by considering tour leader likability and attachment as antecedents and quantifying their effects on tourist value co-creation behaviors. In addition, this research considers attachment to be a critical psychological mechanism to explain why tour leader likability influences tourist value co-creation behaviors.

## 2. Literature Review

### *Tourist value co-creation behaviors*

Customer value co-creation has received considerable interest in tourism and hospitality industries. Tynan, McKechnie, and Chhuon (2010) noted that co-creation is a value creation process for establishing excellent service experiences through the exchange of knowledge and skills between customers and service companies. Moreover, co-creation is a valuable customer behavior for service companies. Therefore, Grönroos (2012) referred to customer value co-creation behavior as the behavioral performance of customers in enhancing product or service values through joint participation and co-creation of the service process.

### *Tour leader likeability*

Likeability is the degree to which a person is considered friendly, nice, polite, and pleasant (Pulles & Hartman, 2017). To maintain the smoothness of the group tour itinerary and to improve tourist satisfaction, the tour leader must establish likeability among group members. Mancini (1996) proposed strategies and practices that can be adopted by tour leaders when leading a group, including praising members' behaviors, maintaining fairness, and exceeding customer expectations. These actions help tour leaders enhance their likeability, competency, and worth and create a positive group environment. Thus, tour leader likeability considerably affects the performance of the tour leader.

### *Tour leader attachment*

Tour leader attachment is a long-lasting and commitment-induced bond between tour leaders and tourists (Yen, Chen, Cheng, & Teng, 2018). In group tours, tour leaders and members may develop a strong connection and sense of attachment through a long interaction process. Tour leaders can earn likeability from tourists through internal and external factors and attract tourists' attention through appearance, speech, and behavior. Tour leader attachment can be formed through the presentation of professional knowledge, ability, and personality by the tour leader (Tsaur & Ku, 2019) and through the development of an emotional connection between the tourists and tour leader.

### *Research hypotheses*

This study proposed the following hypotheses:

H1: Tour leader likability is positively related to tour leader attachment.

H2: Tour leader likability is positively related to tourist value co-creation behaviors.

H3: Tour leader attachment is positively related to tourist value co-creation behaviors.

### 3. Methodology

In 2019, Taiwan had 138 consolidated travel agencies (Taiwan Tourism Bureau, 2019). Managers of these travel agencies were contacted by telephone and invited to participate in this study, 23 of whom agreed. First, the study content was explained to the managers in the form of written information, which was forwarded to the customers of the sampled travel agencies. Subsequently, each manager was sent 20 customer questionnaires, each with a return envelope. This study adopted a purposive sampling method. The managers were requested to forward the questionnaires to tour leaders, who would distribute the questionnaires to the tourist group after the tour was complete. The completed questionnaires were returned directly to the researcher. In total, 274 valid questionnaires were collected. The demographic profile of respondents in this study reflected the general demographic information reported in previous studies (Tsaur & Ku, 2019; Yen et al., 2018).

We used the five-item likability scale of Pulles and Hartman (2017) to evaluate the tourists' perceptions of tour leader likability. The four-item attachment scale of Yen et al. (2018) was used to assess the tourists' level of attachment to a specific tour leader. Furthermore, we used the scale proposed by Yi and Gong (2013) to evaluate constructs related to tourist participation behaviors and tourist citizenship behaviors.

### 4. Results

The fit indices of the structural model ( $\chi^2 = 1792.95$ ,  $df = 641$ ,  $\chi^2/df = 2.80$ ,  $p < 0.001$ ,  $GFI = 0.74$ ,  $AGFI = 0.70$ ,  $CFI = 0.87$ ,  $NFI = 0.81$ ,  $IFI = 0.87$ ,  $RMR = 0.05$ , and  $RMSEA = 0.08$ ) indicated its appropriateness for modeling the data. Significant positive relationships were observed from the standardized path coefficients for the paths from tour leader likeability to tour leader attachment ( $\beta = 0.89$ ), tour leader likeability to tourist participation behaviors ( $\beta = 0.41$ ), tour leader attachment to tourist participation behaviors ( $\beta = 0.31$ ), and tour leader attachment to tourist citizenship behaviors ( $\beta = 0.77$ ). Furthermore, The results of the Sobel test indicated that tour leader attachment had significant mediating effects on the relationships of tour leader likeability with tourist participation behaviors ( $z = 2.88 > 1.96$ ) and citizenship behaviors ( $z = 4.19 > 1.96$ ).

### 5. Discussion and Conclusion

The results reveal that tour leader likeability positively affects tour leader attachment and tourist participation behaviors and that tour leader attachment positively affects tourist participation and citizenship behaviors. In addition, tour leader attachment has a mediating effect on these relationships. This research empirically validated findings from the literature by synthesizing the insights from value co-creation theory and examining the relationship among tour leader likeability, tour leader attachment, and tourist value co-creation behaviors. To enhance tourists' perceptions of tour leaders' likability, tourist agency managers can arrange for tourists with similar attributes or background to be served by tour leaders with suitable personality traits and background. Furthermore, travel agency managers can use training courses to enhance tour leaders' interpersonal communication and oral expression skills for cultivating tour leader likability.

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## **What is holding back Macao's development into a smart tourism destination?**

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### **Abstract:**

Despite its prominent wealth and proximity to mainland China, the gambling haven of Macao shows a noticeable lagging in developing itself into a smart tourism destination. This study aims to determine the major obstacles that Macao is facing in this transformation. In-depth interviews with twelve local experts were conducted. Key findings were highlighted: laws on data privacy and protection, decision-making groups, economic structure, and tourists' unwillingness. Practical implications and recommendations were also discussed.

**Keywords:** Smart Tourism, Tourism Destination, Macao

### **1. Introduction**

China has been admired by its strong move into the development of smart city and smart destination initiatives. The country has embraced smart tourism into its core strategy for its tourism development masterplan (Li et al., 2017), and the term "smart tourism" has been hyped in news media ever since. China's mobile payment systems are ubiquitous throughout the country, and its mobile payment users represent about 61% of the world's (eMarketer, 2019). Macao, a special administrative region of China, shows a noticeable slow sign of its transformation into a smart tourism destination despite its prominent wealth. Macao earns almost two times higher than Las Vegas, in terms of gross gaming revenue (Business Matters, 2019), making it one of economies earning a tremendously high GDP per capita in the world. The development into a smart city has been put in the agenda, represented by the cornerstones of "smart tourism", "smart transport", "smart healthcare", and "smart government" respectively (Government of Macao Special Administrative Region, 2016). The gambling haven of Macao comprises predominately ethnic Chinese. Macao's development towards a smart tourism destination, however, seems a bit out of synchronization with that exhibited by cities on the mainland.

This empirical study aims to answer the following two research questions: (1) What are the major obstacles that Macao is facing towards its development of a smart tourism destination? (2) What are the possible ways to address some of these issues, if not all, from a practical point of view?

### **2. Literature Review**

Tourism is an information-intensive industry. The concepts of "smart tourism" are no new to academic researchers and industry practitioners although different stakeholders may have different perceptions. Smart tourism is rooted in numerous smart technologies, which emphasize on constant wired and wireless connectivity (Gretzel, Reino et al., 2015). Li et al.

(2017) link the notation of smart tourism to the adaptability to tourism information consumption in a macro environment, under which both the information service supply side and the information consumption side interact and form a virtuous cycle.

The concept of smart tourism destination does not merely lie in going digitalized for a destination's infrastructure, but it should be more on co-creation of value, tourist-destination relationship, and destination competitiveness (Wang et al., 2013). Boes et al. (2015) conclude that leadership, human capital, innovation, and social capital constitute the core concepts for smart tourism destinations. Koo et al. (2016) emphasize that smart tourism is a multi-layer architecture, which comprises technology, management, and tourism experience. The existing literature that has shown a comprehensive understanding of smart tourism constructs is scarce, if ever any (Gretzel, Sigala et al., 2015). A number of generic challenges on smart tourism have been studied and outlined: availability of electric power sources, tourists' willingness and competencies, competitions among businesses to win short attention from tourists, privacy issues as well as digital divide (Gretzel, Reino et al., 2015).

Table 1. Generic Challenges on Smart Tourism

Generic Challenge	Explanation
Electric power sources	Power grid that supports a smart destination; Battery power of tourists' personal devices
Tourists' willingness and competencies	New tourism experience at the cost of personal data
Competitions among business	More fierce competitions, even for microbusiness
Privacy issues	Accountability and responsibility of security of data and its legitimate use
Digital divide	Digital gap or exclusion for tourists who do not own a digital device or those who do not have network connections; Different levels of competencies in technology use, for tourists and service providers

### 3. Methodology

This study uses Macao as a case study aiming at obtaining an in-depth understanding of its current issues in smart tourism development although, in contrast, the rest of China demonstrates a good example to the world. This study attempts to draw opinions from experts or stakeholders from various local sectors. Twelve in-depth interviews were conducted between mid-November 2019 and mid-January 2020. The interviewees come from various sectors covering the academia, government, hotel, information technology companies and non-government organizations. All respondents are anonymously identified in this paper. The interviews were conducted in one of the two spoken languages—Cantonese or Mandarin. Content analysis is used to interpret and classify key messages from the transcripts.

Table 2. Profile of Interviewees

Name	Gender	Job Title	Profession / Job Nature	Industry
A	M	Instructor	Administration and research	Education
B	M	Lecturer	Teaching and research	Education
C	M	Senior Manager	Corporate training and development	Hotel
D	M	Permanent Council Member	Think tank and advisory	Community
E	M	General Manager	Information technology and engineering	IT
F	M	Manager	Business and IT projects	Hotel
G	F	Assistant Professor	Teaching and research	Education
H	M	Lecturer	Teaching and projects	Education
I	M	IT Officer	IT administration and development	Education
J	M	-	Transport planning and development	Government
K	F	Secretary General	Youth development	Community
L	F	Managing Director	Information technology	IT

## 4. Findings

The findings are based on the expert interviewees' knowledge and insights, and they are analysed and divided into four broad categories.

### 4.1 Laws on Personal Data Privacy and Protection

Macao has its own legal system, mainly inherited from the Portuguese administration. Chinese traditional values are predominant in the self-ruling city, as Respondent F (2019) pointed out, but its personal data and privacy protection laws are comparable to the European standards. Respondent J (2019) confirmed that the citywide surveillance cameras have been installed to identify vehicles running on public roads, but the potential use of those cameras for purposes other than that (i.e. identifying individual motorists) has a long way to go.

### 4.2 Decision-making Groups

As a distinct social-cultural norm, seniority still plays an important role in Macao. IT projects are generally implemented by the younger generation whereas project sponsors and key decision-makers are often in their 50's and 60's, and thus slower technology adoption is inevitable (Respondent F, 2019).

#### *4.3 Economic Structure*

The slow technology adoption is also attributed by the economic structure of Macao—having a very high proportion of SMEs (Respondent G, 2019). The relative high cost of home and business Internet access fees make it difficult for business operators (Respondent I, 2020). In a small city with a land area of 32 square kilometres, there is a high tendency for monopoly of public utilities services.

#### *4.4 Tourists' Unwillingness*

Certain groups of tourists may not want to be easily identified as they want to remain anonymous throughout their stay in Macao. As a gambling city, Macao has been attracting many high-roller gamblers from mainland China. They may want to leave as few as digital footprints possible in the local computerized systems during their entire stay.

### **5. Discussion and Conclusion**

#### *5.1 Limitations*

This study only included 12 interviewees, a large proportion of whom have a profession in higher education institutions. More opinions drawing from the government sector are much in need to gain a holistic view on this type of inquiry.

#### *5.2 Recommendations and Conclusions*

Respondents agreed on a few urgent problems that Macao must resolve in the short run. These include the following:

Wider acceptance of mobile payment methods

Making public transport information more accessible and easier to use

Seeking higher integration of mobile communications networks

Self-service kiosks around tourist information centres, ferry terminals and airports can play a key role in support tourists who are less willing to download unknown, foreign-made apps (Respondent F, 2019).

##### *5.2.1 Government Roles*

Almost all interviewees expressed a strong will that the local government should take up the leading role in the smart tourism initiatives, including but not limited to policy formulation in favour of mobile payment systems, coordination in building a portal-like platform where multiple smart tourism apps are housed, as well as mobile networks integration among mainland China, Hong Kong, and Macao.

##### *5.2.2 Tourism Ecosystem*

Smart tourism should not be merely seen as “tourism multiplied by two” and in fact the word “smart” adds an exponential effect to “tourism”, making it “tourism squared” (Respondent H, 2019). Two interviewees coincidentally talked about the term “tourism ecosystem”, in which all players from a destination—collectively known as the host—should join hands together to

make data accessible and shareable (Respondent H, 2019; Respondent L, 2020). All technologies would come and thus people should focus more on sustainable business models instead (Respondent L, 2020). Macao is a tourism destination where local people need not worry about its annual visitor numbers thanks to huge influx of mainland Chinese visitors. This worry-free style or notion, however, could be dangerous because it may make local people less motivated to innovate (Respondent L, 2020).

### 5.2.3 Evaluation Instrument

Respondent H (2019) suggested that the evaluation instruments should be developed to objectively measure the effectiveness of a business model. No quick answer to this was proposed. Coincidentally, a few interviewees shared their travel experience about using Google in searching itinerary information during their stay in foreign countries. Their comments on Google were very positive but showed some disappointment towards Macao's own travel apps. Respondent D (2019) expressed that Google should be used for benchmarking purposes, and Macao should aim for an all-in-one travel platform that exceeds what Google can offer to travellers. What Macao really lacks seems to be data, not technology per se. "Content is the king; data is the king" (Respondent L, 2020).

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## Perceptions of Caribbean cuisine and willingness to patronize

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### **Abstract:**

This study identifies unique food attributes of Caribbean cuisine and their impact on willingness to eat based on the frequency of having Caribbean food and regular vs frequent consumers. Overall, food quality shows a positive impact on willingness to retry Caribbean food. However, cooking-style and cultural representativeness seem to be hindering growth and popularity of Caribbean cuisine in the US. To attract more consumers and encourage them to eat Caribbean foods often, Caribbean cuisine should be positioned as an appetizing food as well as be localized. We conclude with a discussion and implications of our findings from both a practical and theoretical standpoint.

**Keywords:** Caribbean cuisine, Ethnic food, Food attributes, Behavioral intentions

### **1. Introduction**

The diverse cultural and social backgrounds of immigrants to the United States have strongly influenced its foodservice industry for more than two centuries. Many ethnic cuisines have evolved into common consumption choices for the American consumer. For instance, Italian, Mexican and Chinese cuisines dominate the ethnic food market in terms of familiarity, trial and frequency of eating (National Restaurant Association, 2015). The demand for ethnic foods, whether purchased and consumed in restaurants or in the home, has been growing in popularity. In fact, eight of the top twenty food trends cited by the National Restaurant Association have something to do with ethnic cuisine (2018).

Given the growing acceptance and consumption of ethnic cuisine, numerous researchers have strived to better understand consumer satisfaction, food attributes, consumer perception, and value in ethnic restaurants (Clemes et al., 2013; Ha & Jang, 2010; Josiam & Monteiro, 2004; Liu & Jang, 2009; Verbeke & Poquiviqui López, 2005). Many studies in ethnic cuisine have mainly focused on Asian cuisine (Jang et al., 2009) including Chinese (e.g., Kim, Youn, & Rao, 2017; Liu & Jang, 2009; Lu & Fine, 1995), Korean (e.g., Ha & Jang, 2010a; Liu & Jang, 2009; Lu & Fine, 1995), Thai (e.g., Tsai & Lu, 2012) and Indian (e.g., Josiam & Monteiro, 2004). Although one small study investigated Latin-American ethnic foods, it was only focused on Hispanics who are living in Belgium (e.g., Verbeke & Poquiviqui López, 2005). With limited investigation into ethnic cuisine in food research, this study attempts to shed more light on Caribbean cuisine. Given the geographical proximity of its islands and principalities to the United States, it makes the wealth of native cuisines of interest to Americans seeking new food experiences. However, Caribbean cuisine is rarely discussed in the hospitality literature. While the current literature helps to identify food attributes that influence consumer experience, decision making, and satisfaction, there is a need to construct a more specific list of unique attributes to perceptions of Caribbean food derived from current American consumers.

In addition, the roots of Caribbean cuisine lie in other cuisines ranging from French, Spanish, and South American to African and Indian – cuisines that have already become familiar to most Americans. Further, these ethnic foods are regularly consumed by immigrants to the US from those countries. Therefore, both geographical proximity and familiarity make researching this cuisine and its potential as a market of interest to scholars, restaurateurs and food producers. In this study, we have chosen to focus on the major island chain just off the US mainland which includes Cuban, Dominican Republic and Puerto Rican food. While there are many other native cuisines, these three domains feature similarities in foods and cooking methods that make them a plausible group.

While the literature provides us with findings about consumer perceptions of other cuisines, there is no research specific to the island domains we have selected, even though there are some Caribbean restaurants that have found success in the US. A benefit of studying this cuisine could be that Caribbean cuisine restaurateurs better understand the perceptions of potential/existing customers about their product in order to successfully attract and satisfy customers. We believe that our investigation of consumer perceptions of Caribbean cuisine will help to fill the literature gap as well as provide insight into market strategies to introduce/further the growth of Caribbean restaurants in the United States.

## **2. Literature Review**

### *2.1 Caribbean Cuisine in the U.S.*

With increasing immigration rates due to employment opportunities, higher education, and tourism, the demand for ethnic food in the United States is projected to grow at a rate of 11.8% over the next five years (Mordor Intelligence, 2019). Specifically, North America is one of the regions showing maximum competitor activities, while the African market has grown over the recent past in niche ethnic food categories (Mordor Intelligence, 2019). With this trend, Caribbean Cuisine has been getting more attention in the ethnic food market in the US. “It’s bold and full-flavored and aromatic and textured food” (Warton, 2015, Para.8). Caribbean Cuisine features a fusion of flavors, colors and textures that represents the influence of African and Spanish cultures that arrived in the Caribbean as early as the 15<sup>th</sup> century with those of the local Amerindian culture (Taínos were indigenous habitants). The most commonly used foods in Cuban, Dominican Republic and Puerto Rican cuisines include rice, plantains, beans, cassava, cilantro, bell pepper, chickpeas, tomatoes, sweet potatoes, and coconut (Warton, 2015).

In spite of the use of common ingredients, each island features a number of signature dishes unique to its culture. For instance, the Cuban Sandwich, a grilled sandwich made with Cuban bread and filled with slow roasted pork, sweet ham, Swiss cheese, pickles and mustard, is already popular with Americans, featured on menus throughout Florida. The Puerto Rican Piña Colada – also a long-time favorite in American bars – is a refreshing drink made with rum, pineapple juice, coconut cream, and ice. And Mangu, mashed plantains, is a popular Dominican dish which serves as a diet staple along with beans and rice.

### *2.2 Food Perceptions Based on Attributes*

The term *attributes* is often used in the literature to indicate factors that influence consumer perceptions of a certain food (e.g., Jang et al., 2009), customer satisfaction and behavioural intentions in restaurants (e.g., Liu & Jang, 2009). A review of literature suggests that sensory perceptions (e.g., flavor, aroma, texture, appearance), food content (e.g., ingredients, condiments, spices), methods of preparation and cooking, food/cuisines type, and value (i.e.,

monetary considerations) have significant effects on food preferences and consumption (Mak et al., 2012; Randall & Sanjur, 1981).

In the literature concerning ethnic food or ethnic restaurants, Liu and Jang (2009) demonstrated that food quality, service quality, atmospherics, and other factors (e.g., price fairness and authenticity) are the three factors that contribute to customers' experience at Asian food serving restaurants. Similarly, Back (2012) found that performance attributes of Korean restaurants include food, atmosphere, service, and value. On the other hand, Verbake and Lopez (2005) examined consumer attitude towards an ethnic food based on nine attributes: search (price, color, appeal), experience (taste, spiciness, convenience), and credence attributes (leanness, safety, and healthiness). Furthermore, familiarity with and information about an ethnic food improves acceptance of that food among other cultures (Choe & Hong, 2018; Hong et al., 2014).

### **3. Methodology**

#### *3.1 Procedure and Participants*

In order to reach a broader population, the authors authorised an online survey company to randomly distribute the questionnaire and to collect a sufficient number of responses. A general population in the U.S. was recruited and participated the survey. A total of 486 useable sample was obtained; 317 participants (65.22%) who have had Caribbean food were included in the analyses. Among these participants, the sample was divided into two groups based on their frequency of eating Caribbean food. We identified 72 participants (23%) who are frequent consumers, e.g. who usually eat Caribbean food more than once a month. The remainder 244 participants (77%) were identified as non-frequent, regular consumers.

#### *3.2 Measures*

A preliminary list of measurement items pertained to food attributes: willingness to try and the frequency of trying Caribbean food. The respondents were asked to rate the importance of the attributes when thinking about Caribbean food. Each attribute was rated using a 7-point Likert scale, ranging from "Not important" (1) to "Very Important" (7). Willingness to eat were measured using 9 items on a seven-point Likert scale, anchored from strongly disagree (1) to strongly agree (7). The survey items and additional information are included in Table 1.

#### *3.3 Data analysis*

First, a factor analysis was conducted to identify the underlying dimensions of food attributes. Second, participants were categorized into two-groups based on their frequency of eating Caribbean food. Third, regression analyses were employed to explore the impact of the factors on willingness to eat Caribbean food.

## **4. Results**

#### *4.1 Profile of respondents*

Of the 317 participants, there were more females (70.3%) than males (29.3%), and more than half were 26-45 years old (62.7%). The breakdown of age groups was: 16.7% in 18-25years, 37.2% in 26-35years, 25.2% in 35-45years, 10.4% in 46-55years, 6.3% in 56-65years, and 3.8% in over 66years.

The major ethnicity was Caucasian (63.1%), followed by Asian (17.4%), Hispanic or Latino (9.8%), and African American (5.4%). The monthly household income was distributed evenly in each category, and approximately half of the respondents had a yearly household income of at least US\$50,000.

#### 4.2 Results of factor analysis

An exploratory factor analysis (EFA) was conducted to identify the underlying dimensions of Caribbean food attributes. Table 1 shows four factors that comprise 18 Caribbean food attributes out of 30 food attributes explaining 56.44% of all variances. The EFA was performed using the principal component and the Oblimin with Kaiser Normalization rotation methods, with the cut-off factor loading of 0.5. Four factors were identified: the first accounted for 33.2% of the total data variance and is labeled as *cooking style*. The second factor was named *food quality* and explained 14.4%. The third factor, named *healthy and nutritious* represented 5.2% of the total data variance. The fourth factor was labeled *cultural representativeness*, which explained 3.6% of the total variance. The scales were deemed reliable with all Cronbach's alpha coefficients above .8.

**Table 1. Results of Exploratory Factor Analysis**

Items	Factor loading	Eigen value	Variance explained (%)	Reliability
<b><i>Cooking Style</i></b>		5.976	33.20	.873
Boiled	0.825			
Deep-fried	0.723			
Sweet	0.717			
Roasted	0.697			
Salty	0.662			
Has a strong fruit component	0.658			
Has a strong grain component	0.630			
<b><i>Food Quality</i></b>		2.595	14.41	.861
Tasty	0.830			
Fresh	0.788			
Edible	0.785			
Quality	0.671			
Digestible	0.654			
<b><i>Healthy and Nutritious</i></b>		0.939	5.21	.804
Nutritionally balanced	-0.862			
Healthy	-0.851			
Has a strong vegetable component	-0.583			
<b><i>Cultural Representativeness</i></b>		0.651	3.62	.815
Traditional	-0.751			
Unique	-0.718			

Exotic

-0.702

NOTE: Total variance explained: 33.2%, KMO: .88 (Bartlett's Test:  $p < 0.0001$ ) Extraction Method: Principal Axis Factoring, Rotation Method: Oblimin with Kaiser Normalization

#### 4.3 Differences between frequent and regular consumers

First, we performed a regression analysis to determine the relative importance of food attributes of Caribbean cuisine for behavioral intention (i.e., willingness to retry or eat again). We examined the influence of three factors on consumers' willingness to eat Caribbean food. Results revealed that *cooking style* ( $B=-.122, t=-2.423, p<.05$ ), *food quality* ( $B=0.660, t=14.484, p<0.001$ ), and *cultural representativeness* ( $B=-.197, t=-3.349, p=.001$ ) significantly contribute to the regression model ( $R^2=.511, F(311, 4) = 81.318, p < .001$ ). Among the four factors, healthy and nutritious was the only non-significant factor for behavioral intention, and food quality had a positive impact on willingness to eat. However, the other factors such as *cooking style* and *cultural representativeness* have negative impact on willingness to eat.

Furthermore, two separate regression models were run to confirm the differences between frequent and regular consumers. For regular consumers, the first model explained 63.4% of the variance in willingness to eat ( $F(109, 4) = 47.27, p < .001$ ). Among the four factors, *cooking style* ( $B=-.163, t=-2.119, p<.05$ ), *food quality* ( $B=.714, t=10.482, p<.001$ ), and *cultural representativeness* ( $B=-0.1265, t=-2.928, p<.01$ ) were found to significantly influence willingness to retry and eat Caribbean food again. Interestingly, for the frequent consumers, only food quality had a positive impact on willingness to eat ( $B=.633, t=5.551, p<.001$ ). For the frequent consumers, the regression model explained 52.5% of the variance in willingness to eat ( $F(41, 4) = 47.27, p<.001$ ) and only food quality showed a significant impact on willingness to eat. Directly comparing the coefficient of two different types of consumers ( $Z$ -value=11.65  $<.001$ ) on food quality, it showed there was a clear difference between regular and frequent consumers in the willingness to retry Caribbean cuisine.

**Table 2. Results of differences between frequent and regular consumer**

	Regular/non-frequent consumers				Frequent consumers			
	B	SE	Beta	t	B	SE	Beta	t
<b>Constant</b>	5.787	.075		76.730***	5.796	.130		44.633***
<b>Cooking Style</b>	-.213	.101	-.163	-2.119*	-.210	.136	-.207	-1.541
<b>Food Quality<sup>a</sup></b>	<u>.970</u>	.093	.714	10.462***	.799	.144	.633	5.551***
<b>Healthy and Nutritious</b>	.072	.116	.052	.620	-.126	.173	-.105	-.729
<b>Cultural Representativeness</b>	-.398	.136	-.265	-2.928*	-.276	.207	-.189	-1.333

NOTE: \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

The underlined number indicates statistically higher absolute value than another customer type.

Coefficient comparisons from Z-score are conducted only if coefficients in both equations are statistically significant.

$$z = \frac{b_1 - b_2}{\sqrt{SE_{b_1}^2 + SE_{b_2}^2}}$$

a. Z-test = 11.651\*\*\*

## 5. Discussion and Conclusion

This study attempts to understand the perceptions of Caribbean food in the US. Our results identified how Caribbean food is perceived by US consumers based on food attributes and how the unique food attributes influence consumers' willingness to retry and eat Caribbean food. In particular, we identified four factors that represent food attributes of Caribbean food: *cooking style*, *food quality*, *healthy and nutritious*, and *cultural representativeness*. Our study showed agreement with other scholars on attributes such as quality and authenticity; but we also found other culture-specific attributes.

Our findings showed that three factors, *cooking style*, *food quality*, and *cultural representativeness* significantly contribute to the willingness to eat for all types of consumers. Interestingly, because *cooking style* and *cultural representativeness* have negative influences on willingness to eat, as the consumer becomes more perceptive about *cooking style* and *cultural representativeness* when they eat Caribbean food, they are less willing to eat Caribbean food. In other words, boiled, deep-fried, and sweat natures of Caribbean food would make consumers less frequently consume and eat Caribbean cuisine. Moreover, unique and exotic characteristics of Caribbean cuisine could disrupt the growth and popularity of the cuisine among US consumers. On the other hand, frequent consumers' willingness to eat is attributed to *food quality*. That is, frequent consumers would be willing to eat Caribbean food because the food is "good enough". To successfully attract more consumers and encourage them to eat Caribbean food often, Caribbean cuisines should be positioned as an appetizing food as well as be localized in the US market. Such findings could provide practical implications not only to entrepreneurs who own Caribbean cuisine/restaurants but also to ethnic food outlets in the US. This study helps scholars to better understand consumer perceptions and behavioural intention in the context of Caribbean food as a unique ethnic cuisine, as well as informs ethnic restaurateurs about critical factors unique to their cuisine that are important to their customers.

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## **Identification of vegan restaurant customers' experiences using text analysis**

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### **Abstract:**

Founded on a practice of abstaining from all animal-related food and products, veganism is becoming a popular trend, especially in developed regions, increasing the consumption of vegan diets and establishment of vegan restaurants in many regions (Janssen, Busch, Rodiger & Hamm, 2016). These specialized restaurants provide plant-based diets to satisfy the physiological needs and enhance the experiences of its patrons. That notwithstanding, little is known about the “delighters” and “frustrators” of vegan restaurant customers' experience. Besides, there is little effort to analyze big data containing vegan restaurant customers' experience using semantic network analysis. Meanwhile, vegan restaurants customer experiences could elicit different meanings and interpretation from other restaurants, and cater to a market niche with health and ethical motives. Moreover, the theme, ambience, and equipment used in most vegan restaurants are distinct and more sustainable. To fill these gaps, this study seeks to (a) examine the “delighters” and “frustrators” of vegan restaurant experience and (b) examine responses of vegan restaurant patrons after their experience. Outcomes of this study will improve our knowledge on an overlooked area in veganism – vegan food restaurants – and the factors that inform customers' dining experiences and post-tasting responses.

The data was collected through online reviews on Tripadvisor.com using the automated parsing software (Webharvy) from May 25 to June 13, 2019. As of the data collection period, 1,020 vegan restaurants were listed on TripAdvisor.com with average rating score of 4.45 (SD=.303) out of 5.00. A total of 215, 218 reviews in English language were used in identifying the delighters and frustrators of vegan restaurant experience. This study used reviews with the highest score of 5 and lowest score of 1 with 118, 649 reviews rated 5 whilst 4, 079 had a rating score of 1. Semantic network analysis was used to enable the researchers to examine the power and meaning of words that are commonly used by patrons when sharing their experiences.

The study identified five main delight factors of the vegan restaurant experience including organic ingredients and novel menus, slow food and acceptance of dietary restrictions, and guilt-free/allergy-free food. Frustrators were, however, related to overpriced vegan foods, rude and slow service, and insanitary eating conditions, among others. These results suggest that while vegan restaurant customers find some experiences as delightful, they however identify some pertinent aspects as frustrating thereby affecting their propensity to make positive pronouncements and recommendations. The study, thus, presents some novel findings while lending some support to previous studies (e.g. Canny, 2014; Goolaup & Mossberg, 2017; Ha & Jang, 2013; Kim et al., 2020; Pantelidis, 2010; Ryu & Han, 2010; Ryu, Lee & Kim, 2012).

This study expands the range of studies on vegan foods and sheds light on the factors that delight and frustrate customers' experiences. Practically, the results can help improve product quality and services through knowledge of the delighters and frustrators of customers' experiences. Vegan restaurant managers can also use knowledge of this study to enhance competitive advantage, and aid in marketing strategies to attract potential customers and retain existing ones.

**Keywords:** Vegan food; Vegan restaurant; experiences; delighters and frustrators; semantic network analysis

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## **Exploring message strategy effectiveness and customer engagement on Facebook: A study of cruise lines**

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### **Abstract:**

With the explosive growth of both the cruise industry and social media marketing, researchers have urged cruise lines to pay attention to passenger needs and satisfaction. This study explores the existence of previously defined message format and message content dimensions in Facebook posts, evaluates their effectiveness, and derives themes of user engagement in the cruise sector. A content analysis revealed the most popular message formats and content types, and facilitated the development of a typology of comments. Cruise line operators can improve their Facebook marketing activities by using more product, video-type and involvement messages, as well as encouraging users to share their experiences.

**Keywords:** Social media, Facebook, message strategy, message effectiveness, cruise, content analysis

### **1. Introduction**

The advent of new communication technologies such as the internet has triggered a revolution in marketing and advertising by eliminating three longstanding barriers between companies and customers; advertising costs, media production costs and roll out time (Eiamkanchanalai & Hongcharu, 2009). These technological advancements paved the way for the introduction of social networking sites, such as Facebook, which enable users to connect with each other and share creative content across a digital platform (Lin & Lu, 2011).

Companies maintain Facebook brand pages to communicate with existing and potential customers with the intention of persuading them to purchase their products or use their services (Su, Sun, & Reynolds, 2015). With this in mind, firms must view their pages, as a strategic marketing tool capable of targeting the right customers with the right messages at the right time at a nominal cost (Hsu, 2012). By treating Facebook posts as advertisements, and examining the reactions and comments directed at them, as well as their propensity to be shared, meanings can be derived regarding the effectiveness of social media marketing.

Customer engagement through Facebook has been the subject of numerous studies (Yang, Ren, & Adomavicius, 2018), with Facebook message strategy and effectiveness explored in a number of tourism sectors, with the exception of cruises (Shahijan, Rezaei, & Amin, 2018). This study is pertinent to the field of tourism, as scholars are yet to agree on how to attain marketing effectiveness through social media (Leung, Bai, & Erdem, 2017), with few studies having examined message strategy effectiveness from a qualitative perspective (see Hsu, 2012). It is against this backdrop that this study seeks to explore cruise lines' message strategy effectiveness and customer engagement on their respective Facebook pages.

The value of this study is distinctive in a number of ways. First, outcomes of the study will provide novel contributions to the extant literature particularly on message strategy

effectiveness and customer engagement among cruise line companies. Second, this study will be useful to operators and managers of cruise companies on the dynamics involved in their message strategies and the levels of engagement with customers. This could help provide ways to improve their social marketing activities.

Based on the forgoing discourse, the objectives of the study are to (a) explore the existence of previously defined message format and message content dimensions in posts; (b) examine their effectiveness using reactions, comments and shares as proxies; and (c) derive themes of user engagement associated with the cruise sector by examining the comments devoted to the posts.

## **2. Literature Review**

The cruise industry is expanding at an exponential rate, exceeding that of all other segments in the leisure travel market (de Grosbois, 2016). With the rapid expansion of the industry and an upward trend in social media marketing, researchers have urged cruise lines to pay attention to passenger needs and satisfaction in the digital realm (Han & Hyun, 2018; Zhang et al., 2015).

### *2.1 Customer engagement on Facebook*

Customer engagement is defined as a psychological willingness to enter into and maintain a mutual exchange of sentiments with entities that are designed to foster social interactions (Simon & Tossan, 2018). The concept encompasses all possible customer behavioural activities directed at a company (Weman, Gummerus, Pihlström, & Liljander, 2012). This interchange has been shown to increase the likelihood of an emotional connection on the part of the customer, while increasing their trust and confidence in the brand (Su et al., 2015).

Social media facilitates interaction among users in the online environment through the creating, sharing, and exchange of content (Bäck, Halonen, Ahlqvist, & Heinonen, 2010). Research suggests that users access company pages to keep informed, connect with other customers, and for enjoyment (Sanz-Blas, Martí-Parreño, & Ruiz-Mafe, 2014). Accordingly, Weinberg and Pehlivan (2011) opine that social networking sites can be used to influence customers and determine their attitudes and beliefs regarding a company's offerings. Moreover, it is reported that both satisfied and dissatisfied cruise passengers share their experience on social media, possessing the potential to influence existing and prospective customers (Castillo-Manzano & López-Valpuesta, 2018).

The Facebook pages of companies contain informational material, known as brand posts, aimed at fostering relationships with actual and potential customers, known as followers (De Vries, Gensler, & Leeflang, 2012). Posts consist of text, pictures, videos and links. Text messages contain words, and picture messages feature photographs accompanied by limited text (Leung, Tanford, & Jiang, 2017). Links provide additional information by redirecting the user to other channels such as websites (Araujo, Neijens, & Vliegenthart, 2015). Followers engage with the company through three behaviours directed at their posts: reacting (using icons of emotional expressions known as emojis), commenting and sharing (Kim & Yang, 2017). (Sanz-Blas et al., 2014). Due to the dynamics of social media, the control that companies have over their content is restricted to the placement, as dissemination is now in the hands of customers who like and share the posts on their own page; widening the viewing audience (Mangold & Faulds, 2009).

## *2.2 Message strategy*

The concept of message strategy originated in the field of advertising and was first applied to print and television media (Laskey, Fox, & Crask, 1995). Message strategy is defined as “a guiding approach to a company’s marketing communication efforts” (Taylor, 1999, p. 7). It comprises message content and message format. Message content refers to “what is said” in posts and includes product information, price information and promotions, among other content. Message format refers to “how it is said” using pictures, words, text and links (Leung, Bai, et al., 2017). Similarly, message format has been described as the visual presentation of the intended communication, while message content refers to the sentiments expressed (Leung, Tanford, et al., 2017). Message effectiveness refers to “the degree to which receivers perceive that a message is relevant, helpful, real, and credible” (Andsager, Bemker, Choi, & Torwel, 2006, p. 4). Research suggests that the careful manipulation of these message elements contributes to increased message effectiveness (Putte, 2009).

## *2.3 Message effectiveness*

Services are intangible in nature and so marketers employ creative promotional approaches recognised as their message strategy. Research has shown that users’ perception of their online relationship with a brand, is a predictor of purchasing behaviour (Sas, Dix, Hart, & Su, 2009). Each product or service therefore requires a specific message appeal to have the desired impact on the target market (Liebermann & Flint-Goor, 1996). In a recent study, Leung, Tanford, et al. (2017) enquired about the marketing effectiveness of the various message types used by hotel brands on Facebook. The authors found that non-promotional messages enjoy a better reception. An earlier study by De Vries et al. (2012) which used Facebook user ‘reactions’ and comments to gauge message effectiveness revealed that posts with negative comments receive less user reactions. This study points to the need for companies to consider the likeability of their message in order to affect positive user actions. The fact is, users’ social media activities influence their peers to engage in electronic word-of-mouth pursuits such as opinion giving and seeking, and so negative reactions are often amplified. Similarly, their propensity to share a company’s post is dependent on characteristics such as message creativity and appeal, which means that only the most impactful messages will be circulated (Lee & Hong, 2016).

# **3. Methodology**

## *3.1 Methods*

Facebook was selected for data collection as it is the most widely used social networking site around the world with 2.23 billion users (Statista, 2018, p. 21), and also the network most commonly used by businesses (Pletikosa Cvijikj & Michahelles, 2013). Thus, in order to achieve the objectives of the study, the top 10 cruise lines ranked by their passenger market share were chosen. The cruise lines from highest share are Carnival Cruise Line, Royal Caribbean International, Norwegian Cruise Line, MSC Cruises, Princess Cruises, Costa Cruises, Celebrity Cruises, Holland America Line, P&O Cruises and Disney Cruise Line; accounting for over 80% of total passenger market share in the industry (Cruise Market Watch, 2018). As a result of a language barrier and translation difficulties, AIDA cruises (7<sup>th</sup>) whose posts were in German, was replaced with Disney cruises (ranked 11<sup>th</sup>). The official Facebook pages of all the cruise lines were identified.

A qualitative content analysis of the Facebook posts of the 10 selected cruise lines was conducted. Downe-Wamboldt (1992, p. 314) defines this method as the systematic analysis of

visual, verbal or written data in order to make inferences that can be used to describe a phenomenon. For this study, all posts made from November 1 to November 30 2018 were examined. Studies show that a one-month observation period is commonly used in tandem with the content analysis method in studying brand posts (see Kim, Spiller, & Hettche, 2015; Sabate, Berbegal-Mirabent, Cañabate, & Lebherz, 2014; Taecharungroj, 2017; Tafesse, 2015). Furthermore, a one-month period has been deemed sufficient to observe the diverse nature of social media brand posts (Tafesse & Wien, 2017). Content analysis has been used in the studies of Kwok and Yu (2012), Leung et al., (2017) and Swani et al (2013) to examine message effectiveness of message strategy among hotels. De Vries et al. (2012) and Saxton and Waters (2014) in examining brand posts used reactions as indicators of message effectiveness.

In gathering the data, the following information were sourced: cruise line, date of post, type of message format, type of message content, number of each type of reaction, number of comments, number of shares, and types of comments. Reactions consisted of the following emojis: like, love, haha, wow, sad and angry. A three step coding process involving (a) message format coding; (b) message content coding; (c) coding of the indicators of message effectiveness; and lastly (d) coding of comments was utilised for the study. A preliminary thematic analysis was conducted to derive comment categories. Themes have been characterised as patterns found in information that describe and organise observations, while thematic analysis is the process of encoding this kind of information (Boyatzis, 1998). The recommendation of Glaser and Strauss (1971) to explore the information until the point of saturation was observed.

### 3.2 Data Analysis

In analysing the data, the message format categories employed by Leung, Bai, et al. (2017) were adapted. Message format therefore comprises a five-type classification: text-link, picture-text, picture-text-link, video-text, and video-text-link. This was imperative as it was recognised that cruise lines employ a mix of formats in each post, and this precluded the use of the original typology employed by the aforementioned authors.

Regarding message content, the six-type message content classification by Leung, Bai, et al. (2017) consisting of: brand, information, involvement, product, promotion and rewards was used. Brand posts entail company honours and awards, ship naming ceremonies, features on ship designers, as well as planned holiday celebrations. Information posts include vacation tips and tricks, company sentiments shared on current events, and the commemoration of holidays. Involvement posts feature voting calls for competitions, invitations to watch televised company programmes, vacation photo contests and charity drives which match customer donations. Product posts involve photos and videos of on-board amenities and activities, as well as on-shore excursions and sights. Promotion posts share details of sales events and 'priced itineraries'. Reward posts comprise offers made to customers to win prizes without making a purchase. All classifications except reward were observed.

In exploring message effectiveness, Kwok and Yu (2012) and De Vries et al. (2012) used the number of likes (reactions), shares and comments associated with each post as indicators of marketing effectiveness. Parsons (2013) concurs that reactions are a way to evaluate the popularity of a particular posting on a page. Consequently, this study used reaction, comments and shares as measures of effectiveness.

In order to derive themes from the comments, thematic analysis was carried out. Fourteen themes were discovered, which were condensed into eight categories as follow: (a) *recommendations* which comprises recommendations to other customers and suggestions for

the company; (b) *complaints* which consists of complaints directed at the company; (c) *queries* which includes price and product queries; (d) *tagging* which indicates the tagging of other users (most often friends); (e) *spam* which includes spam and job-seeking actions; (f) *company response* which is a company's response to comments by users; (g) *experience sharing* which involves customer references to future cruises booked and past experience sharing; and, (h) *general comments* which entails general comments and reactions toward posts. The proposed categorisation encompasses all possible objectives intended by users and cruise lines when they make comments directed at posts.

Oeldorf-Hirsch and Sundar (2015) describe tagging as a Facebook function whereby a user can add the name of another user in a comment. This serves to link them to the post and sends them a notification to that effect. The authors opine that users feel a sense of community when they tag friends, and that their friends feel compelled to make a response which becomes attributed to the particular brand post.

A code sheet was developed for the above-mentioned categories. The data was entered into Microsoft Excel and basic statistical functions were used to aid in the qualitative analysis.

#### 4. Results

In the study, 390 posts were coded.

Table 2 shows that Carnival Cruises possesses the largest following (4.9 million) on Facebook with Royal Caribbean and MSC tied in at the second spot having 4.6 million respectively. Broadly, information from the table shows that Royal Caribbean, Princess and Celebrity averaged more than 2 posts per day, with Disney and Costa having the least number of posts.

**Table 2**

*General information about the cruise lines and their Facebook engagement levels.*

Cruise line	Market	Fans	Reactions <sup>c</sup>				
	Share <sup>a</sup>	( <sup>'000</sup> )	Posts <sup>b</sup>	( <sup>'000</sup> )	Reactions <sup>d</sup>	Comments <sup>d</sup>	Shares <sup>d</sup>
Carnival	22.0%	4,900	23	38.1	1659	172	230
Royal Caribbean	19.2%	4,600	77	60.2	783	127	130
Norwegian	8.7%	2,400	30	6.9	231	17	36
MSC	7.2%	4,600	46	2.5	56	4	10
Princess	6.4%	2,100	62	92.6	1494	103	87
Costa	6.0%	2,500	14	1.7	128	8	18
Celebrity	3.5%	1,300	78	36.6	470	597	576
Holland America	3.2%	1,500	22	9.9	452	50	52
P&O	2.4%	361	26	5.9	230	51	17
Disney	2.3%	2,300	9	9.8	1097	95	180

Note: <sup>a</sup> Passenger market share provided by Cruise Market Watch (2018), <sup>b</sup> period November 1 to 30, 2018, <sup>c</sup> total during the period across posts, <sup>d</sup> average per post

Table 3 shows that the preferred message format was picture-text (57%), followed by picture-text-link (25%), video-text (16%), video-text-link (2%) and text-link (1%). All cruise lines utilised the picture-text format, with picture-text-link and video-text being used by 80% of companies. One company used all possible formats, while the others used three of the five available.

Table 3 illustrates that the message content types used by cruise lines were brand (3%), information (1%) involvement (9%), product (84%), and promotion (3%). All companies posted product messages, with the majority posting involvement (80%) and brand messages (60%). Promotion and information were the least favoured message content types across cruise lines.

**Table 3**

*Typology of message strategy for cruise lines*

Message Format	Percentage (%)	Message Content	Percentage (%)
Text-link	1	Brand	3
Picture-text	57	Information	1
Picture-text-link	25	Involvement	9
Video-text	16	Product	84
Video-text-link	2	Promotion	3

The most popular response to posts was general comments (30%), followed by tagging (20%) and experience sharing (21%). There were no patterns observed between message format, message content and the types of comments posted. Shares outnumbered comments on a post 64% of the time.

Out of the accumulated number of reactions, like accounted for the largest share (82%), followed by love (12%), wow (5%) and haha (1%). Sad and angry accounted for less than 1% of total reactions. Like was the preferred reaction type regardless of message content or message format type. Video-text-link messages, accounted for only 2% of posts but garnered the most likes per post. Video-text messages accounted for 16% of posts, but average reactions per post to this message format type was more than double that of other types, and were most likely to be shared by users. The message content types that were most effective in eliciting user reactions were involvement and information, which garnered more reactions per post than other types. On the other hand, the content type which generated the most comments were involvement posts and product posts. Involvement posts were most likely to be shared followed by product posts and information posts.

The highest levels of user engagement, measured by reactions per post, were recorded by Carnival, Princess and Disney (see

Table 2 above). There was no connection between the number of followers and the total reactions garnered from posts during the observation period, nor between the quantity of posts per cruise line and the total number of reactions. MSC Cruises has 4.6 million followers (the second highest in the study), and made 46 posts during the period (the average is 31), however, it recorded the lowest number of average reactions, comments and shares per post. A closer

look at the type of content and format used by MSC did not reveal any insights into this phenomenon.

## 5. Discussion and Conclusion

### 5.1 Discussion

Most studies have been concerned with the effectiveness of the various message format and message content types on Facebook, however, no study focused on these elements as it relates to cruise lines, or the kinds of sentiments shared by users in relation to posts. By examining the comments associated with posts, an eight-category typology of comments was created. Tafesse and Wien (2017) analysed the brand pages of 33 companies with a global presence (e.g. Google, Starbucks and Mercedes-Benz) and found an average of 18 posts within a one-month period, with a minimum of 11 and a maximum of 47. Similarly, Leung, Bai, et al. (2017) found that posts per day across hotel brands were between 0.38 and 2.13. Hays, Page, and Buhalis (2013) assert that posting has a positive influence on user engagement. Cruise lines are above average in this regard as they record an average of 31 posts per month, a minimum of 0.3 per day, with the most prolific companies exceeding the threshold cited in previous research. This could be the by-product of dedicated social media managers employed by these companies (Montalvo, 2011). It is evident that companies monitor their Facebook pages closely, as replies are often provided by companies in response to queries made by users in the comment section. Habibi, Laroche, and Richard (2014) reiterate that companies make a concerted effort to capture customer attention and promote active participation on their pages.

Kwok and Yu (2012) in assessing 12 restaurant pages found that posts containing pictures attracted the most reactions. Research carried out by Leung, Bai, et al. (2017) and Leung, Tanford, et al. (2017) on hotel pages also concluded that users were most responsive to picture messages. Leung (2012) also agrees that pictures were more effective than other formats. In this regard, the present study discovered that cruise line Facebook followers had a marginal proclivity for picture-type messages when compared to video-type messages when the number of reactions was used as a determinant of preference. Accordingly, research demonstrates that pictures are processed differently from words and carry different cognitive associations (Laskey, Seaton, & Nicholls, 1994). Moreover, the propensity of cruise lines to utilise pictures in posts has a basis in advertising research. Hirschman (1986) found that the addition of pictures to verbal advertisement had a positive impact on its effectiveness.

Research on the popularity of the various message formats on hotel pages and restaurants revealed that links were most popular (Kwok & Yu, 2012; Leung, Bai, et al., 2017). On the other hand, for cruise lines, based on the mixed typology of message format employed in this study which permits a combination of formats, all posts featured text. A total of 88% of all posts included pictures, 18% had videos and 28% utilised links. Moreover, all cruise lines in this study used the picture-text and picture-text-link formats to a greater degree than other formats. Unnava and Burnkrant (1991) affirm that pictures are used in advertising to convey information or reinforce message arguments (usually presented with text). Still, the use of links in tandem with pictures was strategic, as a compact link and picturesque photo were often complemented by minimal text. This is exemplified by Princess Cruises urging followers to “relax in the shade and soak in the breath taking view”. The link takes users to the itinerary which features the destination in the post.

Leung, Tanford, et al. (2017) in their examination of 1837 posts from 12 brands found that video messages comprise less than 3% of hotel communications. In the current study video-type messages comprise 18% of the total, with all cruise lines using this medium. The ability of video-type messages to outperform others as it relates to reactions per post is remarkable. Chen and Lee (2014) advocate that narrative involvement serves to entertain viewers in a manner similar to movies and television programmes and that the result – enjoyment – is a desired outcome of media consumption.

The findings of this study show that product was the most common message content type (84%). This is in contrast to a study of hotel brand pages which found that involvement (25%) was the most popular message content type, followed by information (20%) and product (20%) (Leung, Bai, et al., 2017). This could be the result of indirect persuasion attempts which are often utilised in traditional advertisements to persuade users without the application of overt promotional strategies, which are believed to decrease advertising effectiveness (McQuarrie & Phillips, 2005). Instead of presenting the itinerary and price for a vacation on board their newest ship, the *Nieuw Statendam* (promotion message), Holland America line chose a subtler method. They invited Facebook followers to sample the more than 120 labels of Whiskey in Notes, their Whiskey bar (product message).

Leung, Bai, et al. (2017) also found that promotion messages accounted for 7% of posts, while this study tallied 3%. This suggests that even though companies use Facebook for marketing purposes, promotions as it relates to the offering of discounts and the holding of sales events is a rarely used strategy. The observation period saw the presence of Black Friday and Cyber Monday promotion posts but these were publicised by only 2 of the 10 cruise lines evaluated. Kwok and Yu (2012) in a study of restaurant brand posts on Facebook concur that promotional messages are not well received by users. Ashley and Tuten (2015) opine that customers often become followers of companies on Facebook in hopes of qualifying for discounts and coupons, and that it is possible that underperforming brands are more likely to exploit this type of message content. Still, Cervellon and Galipienzo (2015) using an experimental design involving the pages of 7 luxury hotel brands observed that the type of content does not affect user perception of a company. Nevertheless, the results of the current study concur with previous research which suggests that companies employ a variety of appeals as they seek to target a diverse social media audience (Ashley & Tuten, 2015).

In a study of 355 brand posts, interactive posts, such as those posing a question have been shown to positively influence the number of comments (De Vries et al., 2012). Even though the message content type employed the most by cruise lines was the product-type, involvement posts, which were used only 9% of the time were shown to engage users the most. One can therefore conclude that Facebook is most suitable for showcasing elements of brand culture, product and service features, and creating connections with customers. On the other hand, it is not recommended for use as a tool for explicit promotional activities. In addition, Araujo et al. (2015) found that users are more likely to share messages that contain content they believe will be useful to their audience. Muk and Chung (2014) assert that informative social media messages create positive attitudes toward a company's page. This is evident in the higher than average reactions per post for information messages.

Comments on brand posts also consist of replies to comments made by other users. Scholars have recognised active participation through commenting as a vital indicator of consumer engagement (Algesheimer, Dholakia, & Herrmann, 2005). Dehghani and Tumer (2015) assert that both users and companies benefit from the comments posted on social media, and that companies should leverage likes, comments and shares for profit. When Facebook users who are not followers of companies are tagged by other users in comments directed at brand posts, this leads to positive perceptions of a brand and increases purchase intention (Zhao, Grasmuck, & Martin, 2008). Active participation is said to be a determinant of the success of brand communities such as those on Facebook, "through positive attitude, commitment, word-of-mouth promotion, and loyalty to the community" (Kang, 2018, p. 107). It was observed that users frequently replied to the comments of other users, and often time a small conversation was carried on between users through comments. In this regard, the level of enjoyment that users derive from interactions with an online platform has been shown to contribute greatly to its success (Paris, Lee, & Seery, 2010).

De Vries et al. (2012) found that different factors impact the number of likes and comments on posts, with vivid and interactive posts receiving a high number of likes. Smith (2013) exposed respondents to the Facebook content of 27 brands, and likewise concluded that they experience a combination of cognitive, sensorial, and emotional experiences, which influence their reactions. Andsager et al. (2006) laments that the creation of effective messages to positively influence the behaviour and attitude of the target market is a demanding endeavour which requires the use of appropriate exemplars (models) in brand posts. In light of this, cruise lines regularly feature guests or staff enjoying and providing the experience in a bid to elicit feelings that lead to a positive perception of the brand. Such message strategies are considered ego-related and appeal to users' desire for social approval and also influence them to view product consumption as a means to reminisce on or aspire to the experience visualised (Hwang, McMillan, & Lee, 2003). With these dynamics in mind, the idea of manipulating message strategy to evoke the desired responses from users becomes less daunting. It is therefore recommended that the requisite variables are skilfully coordinated in order to increase customer engagement.

## *5.2 Conclusion*

Message strategy which comprises message format and message content is a key determinant of message effectiveness which in turn influences customer engagement. This study set out to explore the existence of previously defined message format and message content dimensions in Facebook brand posts, examine their effectiveness using reactions, comments and shares as proxies, and, derive themes of user engagement associated with the cruise sector by examining the comments devoted to the posts. To achieve the set objectives, the study employed content analysis and modified the typology of message format devised by Leung, Bai, et al. (2017). A five-type message format typology was consequently derived.

Based on the outcomes of the study, there is some evidence that the preferred message format is picture-text, and it is used by all the selected cruise lines. On the other hand, the most utilised message content type is product. It should be noted that during the observation period reward messages were not utilised by the cruise lines. In terms of message format type, video-type messages were found to elicit the most reactions per post, while for message content involvement messages were most effective in garnering reactions. Based on comments per post, the most prominent message format types were picture-text and picture-text-link, which is in contrast to the findings of hotel and restaurant research, while the involvement message content type was most popular. Based on number of shares, the message content type which was most effective is involvement. Like was the preferred reaction type across message format and content types, with shares on a post most times outnumbered comments.

Regarding themes of user engagement, eight categories were derived with the most popular three being general comments, followed by tagging, and experience sharing. No patterns emerged as it relates to message format, message content and the types of comments posted.

The study made valuable contributions to both literature and practice. In terms of its contribution to literature, the study expands studies on Facebook message effectiveness by looking at message strategy and incorporating the cruise sector. Again, the study adapted the four type message format typology of Leung et al and identified a five type message format typology in the cruise line context.

From a practical standpoint, cruise line operators and managers can use the findings of this study to improve their message strategy and thereby enhance their Facebook. As shown in the study, different types of messages can influence message effectiveness. Managers of cruise

line companies should therefore monitor the effectiveness of the different types of messages they post and examine the number of reactions to identify the most effective Facebook message format and message content type. Lastly, findings on message strategy effectiveness can help cruise line operators improve their Facebook marketing activities by using more product, video-type and involvement messages.

### 5.3 Limitations of this study and suggestions for future study

The study was limited in a number of ways. Firstly, the selected cruise lines were based on passenger market share ranking, and therefore were not randomly sampled, and so the results may not be representative of the cruise sector. It must therefore be noted that the findings of this study are related to the sample. Also, only Facebook pages with English as the posting language were evaluated for the study. Additionally, the study hinged on the number of likes, comments, and shares as indicators of message effectiveness. However, it must be noted that other variables such as the timing and positioning of posts, among others, could influence message effectiveness.

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## Exploring the culinary application of hog plum (*Spondias pinnata*) leaves as functional food ingredient

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### Abstract:

*Spondias pinnata*, a species of hog plum tree, is endemic to Southern China, India, Solomon Islands, Indonesia, Malaysia, Myanmar and Thailand. In the Philippines, it is widely distributed in Bicol Region, the southern portion of Luzon Island and is widely used in carpentry, ornaments and medicinal purposes. There is a niche in gastronomy for the emerging use of herbs, spices and plants with beneficial effects to health. Because of the diversity of forests and natural resources in the Philippines, there are provinces or districts where endemic trees such as the *Spondias pinnata* or *lubas* in local dialect are found exclusively. The microbiological, proximate and physico-chemical analyses of the crude extract from the leaves of *S. pinnata* can be a baseline and primary source of data for future application in food production particularly in gastronomy. It may also provide for future researches the use of *S. pinnata* as an antimicrobial agent to be used in food preservation and prevent cases of food spoilage and poisoning and in the community where food production is present and served. Subsequently, the study may be used for future researches in application of *S. pinnata* extract in pharmaceutical industry.

The study aimed to determine the microbiological, proximate, and physico-chemical analyses of crude extract from the leaves of *S. pinnata* following internationally accepted analytical methods and to suggest possible culinary applications as functional food ingredient.

The leaves underwent crude extraction for microbiological testing following the Bacteriological Analytical Manual and conformed to the reference standards of Association of Official Analytical Chemists (AOAC) to determine the Aerobic Plate Count, Yeast and Mold, *Staphylococcus aureus*, *Escherichia coli*, and Coliform count. The microbiological analyses were carried out to determine the acceptability and safety of *S. pinnata* leaves crude extract for human consumption.

The untreated fresh leaves underwent proximate testing and analysis using the parameters of vacuum oven drying for moisture content, ignition for ash content, Soxhlet extraction for fat content, Kjeldahl method for protein content, and by computation for carbohydrates and calorie content. Moreover, the untreated fresh leaves underwent in physico-chemical tests to determine the moisture content, pH, titratable acidity, and total soluble solids using electrometry, titrimetry, and refractometry respectively.

Qualitatively, member checking was conducted as means of enhancing the results from the quantitative analyses that was conducted and to validate the claims of an indigenous knowledge of the *S. pinnata* leaves. The said qualitative analysis was conducted through an interview of *cooks*, a housewife, and a researcher on *S. pinnata*.

Microbiological analyses results of untreated crude extract from untreated leaves for Aerobic Plate Count, Yeast and Molds count, *Staphylococcus aureus* count, *Escherichia coli* count, and Coliform count yield acceptable level following the standards of World Health Organization, US Food and Drug Administration and the American Herbal Product Association.

The results for proximate analyses of untreated fresh leaves for moisture content, ash content, fat content, protein content, carbohydrates content, and calorie content showed significant level of nutrients following the standards of AOAC.

The physico-chemical analyses results of untreated fresh leaves for pH, titratable acidity as citric acid, and total soluble solid using the reference standards exhibited high level of acidity similar to the acidity level *calamansi* or musk lime (*Citrus microcarpa*) juice.

Overall, the leaves and extract of *S. pinnata*, as verified, can be incorporated in dishes as a souring agent, as flavoring and as food preservative and may qualify as a functional food ingredient. The study provided a baseline data for future researches. Future studies of the tree and its parts must be undertaken to determine further its culinary application either as a preservative, flavoring or as a direct ingredient to food preparation.

**Keywords:** Gastronomy, *Spondias pinnata*, microbiological analysis, proximate analysis, physico-chemical analysis, functional food ingredient

**A case study of hotel management response to negative online reviews:  
An application of Tripe A typology**

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**Abstract:**

This study seeks to understand how hotels respond to negative online reviews in line with service recovery and justice theory approaches as guided by the Triple “A” Typology. This is the first study that using case study and content analysis approach to examine online management response. The results reveal significant differences within hotel chains while some similarities and differences exist between the hotel chains in the way they respond to online reviews. Theoretical and practical implications of the findings are discussed with emphasis on future practical improvements and research directions.

**Keywords:** Management response, Negative online review, Triple “A” typology, Hotel

**1. Introduction**

Electronic word of mouth about travel services has moved from expert reviewers to the consumers (Zhang & Vásquez, 2014). Electronic content generated by consumers is easily accessible and often perceived as more credible than traditional marketing communications (Flanagin & Metzger, 2013). Service failure itself may not lead to customer dissatisfaction, but the way of service provider’s handling of service failure (Smith, Bolton, & Wagner, 1999). Therefore, the management response to negative online reviews is significant for every hotel operation.

Most of the previous studies of management response mainly focused on the number of responses or response rates by using quantitative approaches (Liu, Schuckert, & Law, 2015; Proserpio & Zervas, 2017). Consequently, this study adopts a qualitative approach to investigate how hotel management responds to negative online reviews. This study has three objectives. First, understand how hotels respond to negative online reviews. Second, ascertain any similarities or differences within and between hotel chains in the way they respond to online negative reviews. Lastly, recommend practical steps to enhance hotel online service recovery strategies.

## 2. Literature Review

### 2.1 Social media in hospitality industry

In this century, social media has developed from solely broadcasting to participatory media which allows people to share information and their experiences (Li & Wang, 2011). Social media has been widely adopted by travelers to share their own traveling experiences through travel blogs, video sharing sites (e.g. YouTube), social networking sites (e.g. Facebook and Instagram) and online information media (e.g. TripAdvisor and OpenRice). Hotels and restaurants are one of the top businesses whose customers would read online customer reviews before making a purchase (Statista, 2017).

### 2.2 Negative online customer reviews and management response

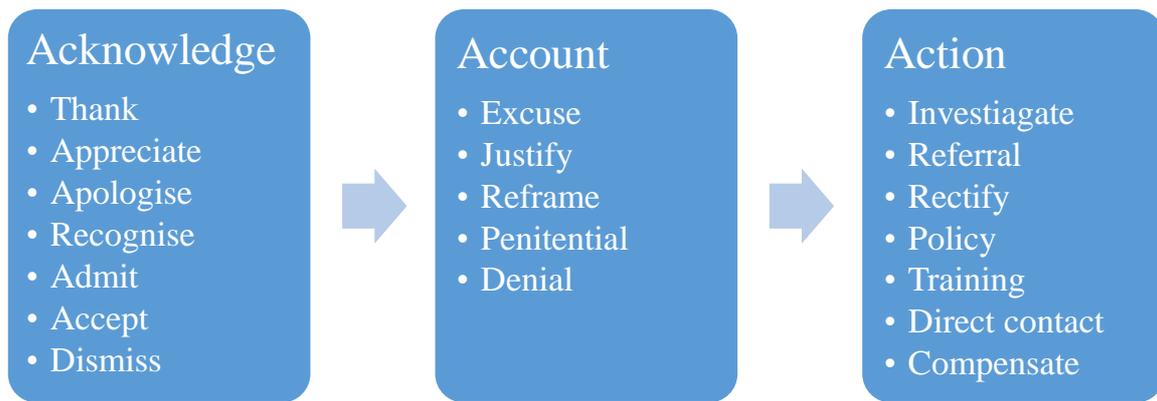
Negative online customer reviews are the negative customer feedback communication between the customers and potential customers about the products and services of a specific brand, by posting or viewing on an online social media platform (Wetzer, 2007). In general, negative online customer reviews increase a customer's perceived risk and serve as a warning to those with a purchase intention. Hennig-Thurau, Walsh, and Walsh (2003) argued that negative online customer reviews have a greater impact than positive ones. In an effort to describe the underlying reason, Lee, Park, and Han (2008) explained that when a potential customer sees negative comments, they are more likely to perceive the product as low quality.

By nature, service organizations are prone to service failure. Some scholars have argued that service failure may not lead to customer dissatisfaction, but the service provider's handling of service failure or lack of response (Smith et al., 1999). This means that service organizations need to be strategic in the way they handle customer complaints. Research has suggested that customer satisfaction might increase after service recovery efforts, this phenomenon can be described as *service recovery paradox* (Hart, Heskett, & Sasser Jr, 1990). Management responses to online reviews usually show the extent to which a hotel cares about its customers (Xie, Zhang, & Zhang, 2014). The concept of service recovery paradox is pertinent to how management responds to online reviews as customers usually become more satisfied after a positive response compared to the customers that have no experience in service failure.

### 2.3 Triple "A" typology as a theoretical framework

The Triple "A" typology was developed by Sparks and Bradley (2017). The typology is a combination of service recovery tenets from service marketing and justice literature. The typology comprises three main components: acknowledgments, accounts, and actions. Acknowledgments refer to sentiments communicating recognition, acceptance, and confirmation. Accounts refer to statements providing explanations for an occurrence. These can be justifications, excuses, refusals/denials, etc. Actions refer to initiatives taken to address the source of the customer's dissatisfaction and grievance. (Figure 1).

**Figure 1 – Triple “A” typology**



Source: Sparks and Bradley (2017)

### 3. Methodology

TripAdvisor was selected as a data source because it allows customers to post their feedback easily and the hotel managers to respond to the reviews (Sparks and Bradley, 2017). To achieve the research objective in identifying any similarities or differences within and between hotel chains, the present study analyzed management responses from 3 properties in 3 hotel groups in Hong Kong (Marriott, InterContinental, and Hyatt) during the period from 1<sup>st</sup> January 2015 to 31<sup>st</sup> December 2017. These selected hotels have to meet the following three criteria. First, the hotel groups should have three or more properties in Hong Kong. Second, the selected hotel groups should be ranked within the top three spots on TripAdvisor. Third, if a hotel group has more than three properties in Hong Kong, the properties ranked top three within the group on TripAdvisor would be selected. In addition, only negative reviews were included in the study. The selected negative reviews in this study included those reviews with three-star rating and below with negative comments. Content analysis with Triple “A” Typology was used as a data analysis method. To ensure the validity and reliability of the manual coding in this study, the reliability of coding was assessed through an intercoder reliability check. Table 1 would show a summary of the numbers of management responses analyzed in this study.

*Table 1 –Numbers of analysed management responses*

Hotel group	Hotel property	One-star rating (%)	Two-star rating (%)	Three-star rating (%)	Number of responses analysed
Marriott	1	13.0	19.5	67.5	77
	2	23.1	7.7	69.2	26
	3	24.5	13.2	62.3	53
	<b>Total</b>	<b>18.6</b>	<b>15.4</b>	<b>66.0</b>	<b>156</b>
InterContinental	4	20.0	16.9	63.1	65
	5	32.0	24.0	44.0	50
	6	20.0	22.9	57.1	35
	<b>Total</b>	<b>24.0</b>	<b>20.7</b>	<b>55.3</b>	<b>150</b>
Hyatt	7	21.1	23.9	54.9	71
	8	16.9	29.9	53.2	77
	9	28.6	60.0	11.4	35
	<b>Total</b>	<b>20.8</b>	<b>33.3</b>	<b>45.9</b>	<b>183</b>
<b>Grand total</b>		<b>21.1</b>	<b>23.7</b>	<b>55.2</b>	<b>489</b>

#### 4. Results

The result of this study shows that properties in the Marriott, IHG, and Hyatt chains took 2.3, 3.5 and 5.9 days on average respectively to respond to the negative online reviews (Table 2). There were no big variations in the Marriott and IHG hotel groups. However, the Hyatt group shows a big variation within the groups as hotel 7 took only 3.8 days on average to respond, while hotel 8 took 9.6 days on average to respond. Although there is no exact optimal number of days for hotels to respond, previous study suggested that customer satisfaction and the intention to return are positively related to the speed of response (Mattila & Mount, 2003).

It was observed that hotel chains did not have a chain-wide standard way of responding to the reviews. For example, hotel 1 in the Marriott group had most of the responses provided by the general manager, but hotel 2 and 3 had most of the reviews responded to by departmental managers. This is consistent with previous research which indicated that hotel properties within the same chain can respond to reviews differently in terms of frequency and pattern (Park & Allen, 2013).

In the manner of responding, all hotel chains used “acknowledgment” in their responses. “Thanking” was found to be the common form. While providing “accounts” was common in the Marriott properties, it was rarely used in IHG and Hyatt. Lastly, properties in all three hotel chains seemed to adopt similar forms of “action”, such as referral, rectification and direct contact invitation. This is inconsistent with the previous study that suggested the way to respond with an apology and a notice of corrective action (Mei & Jeffrey, 2016).

Table 2 - Summary table of the management response base on "Triple A" typology

Variable	Marriot			IHG			Hyatt		
	1	2	3	4	5	6	7	8	9
<b>Acknowledge</b>	<b>100%</b>	<b>100%</b>	<b>96%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Thank	97%	96%	96%	91%	84%	83%	94%	100%	91%
Appreciate	22%	0%	20%	22%	36%	37%	28%	9%	23%
Apologize	42%	88%	12%	80%	64%	23%	66%	26%	63%
Recognize	3%	0%	2%	4%	22%	40%	24%	60%	63%
Admit	0%	0%	0%	18%	14%	0%	6%	3%	6%
Accept	1%	0%	0%	0%	0%	0%	0%	0%	0%
Dismiss	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Account</b>	<b>69%</b>	<b>92%</b>	<b>28%</b>	<b>42%</b>	<b>46%</b>	<b>29%</b>	<b>31%</b>	<b>30%</b>	<b>43%</b>
Excuse	8%	17%	40%	0%	0%	10%	0%	0%	0%
Justify	9%	0%	7%	70%	70%	70%	77%	96%	93%
Reframe	0%	8%	33%	11%	13%	20%	5%	4%	7%
Penitential	89%	83%	60%	33%	30%	10%	18%	0%	0%
Denial	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Action</b>	<b>95%</b>	<b>100%</b>	<b>91%</b>	<b>77%</b>	<b>82%</b>	<b>54%</b>	<b>77%</b>	<b>83%</b>	<b>63%</b>
Investigation	3%	23%	13%	10%	2%	5%	22%	6%	5%
Referral	42%	58%	33%	12%	34%	16%	38%	78%	59%
Rectify	63%	62%	42%	62%	54%	79%	62%	89%	50%
Policy	0%	0%	0%	0%	0%	5%	0%	0%	0%
Training	14%	0%	0%	0%	7%	0%	0%	8%	5%
Direct contact	34%	96%	71%	46%	80%	11%	60%	9%	36%
Compensation	5%	4%	0%	2%	0%	0%	2%	0%	0%
Number of day(s) to respond	2.6	2.7	1.6	4.1	2.8	3.7	3.8	9.6	4.3

## 5. Discussion and conclusion

The findings reveal that while the three Hong Kong hotel chains have applied some kind of Triple "A" Typology, there were some variations in the manner in which they responded. In addition, some hotel properties requested customers to provide more information about the service failure experience even when the problems had been well explained in the review. This could be harmful to hotel reputation as it may create a negative impression of the hotel using a standardized auto response (Sparks, So, & Bradley, 2016).

This research is the first to examine the management response by using a content analysis approach with the theoretical application. Also, the present study contrasts with other studies which used only reviews with one-star rating or the worst review in their research (Levy, Duan, & Boo, 2013; Vasquez, 2012). However, the three-star rated reviews contributed over half of the negative reviews, which is a significant contribution to the methodology direction for future study in online management response.

Several practical contributions can be derived from the results of the study. First, specific department heads should be responsible for responding the reviews. This is not only beneficial to the hotels since the department head should be the person in-charge of the problems, but also their response should be the most convincing because of their expertise. Secondly, standard operating procedures (SOPs) should be developed and implemented as the guideline in responding to the reviews. The implementation of SOPs is not the same as using standard

responses. SOPs only serve as the guideline to assist management when they respond to the reviews. Thirdly, special training should be offered to the department heads in line with the requirements of the SOPs to ensure proper responding (Bonfanti, Vigolo, & Negri, 2016). Lastly, hotels should use reframing situations where they feel reviews are suspicious. Hotels should bear in mind that the “customer is not always right” (Sorell, 1994). The online customer review may not tell the whole story as it is only from the customer’s perspective. Thus, it is important for the management response to reframe and explain the case to the customer and potential customers.

The study has several limitations that should be acknowledged. The present study only examines branded chain hotels but not an individual hotel. Future research can examine if any differences exist between individual hotels and chain hotels. In addition, the use of content analysis may not reveal the underlying motives for the observed patterns. A combined method in content analysis and interviews with hotel managers is recommended in future research.

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## **Longitudinal and cross-cultural perspectives of constraints to cruising**

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### **Abstract:**

Tourism studies are dominated by cross-sectional research with one-off data collection and limited understanding of how situation evolves overtime across different cultures. Travel constraint literature is no exception to such a trend. This study aims to adopt longitudinal and cross-cultural perspectives to test if the constraint measure developed in one culture holds true in another culture and if the measure can sustain in the same culture overtime. Three datasets concerning constraints to cruising were collected to reach the study purposes: 1) U.S. data in 2008; 2) U.S. data in 2017; and 3) China data in 2017. The results suggest that while cruise constraint measure is relatively robust for the U.S. data across different years, different measurement structures were found between the U.S. and Chinese data collected in the same year.

**Keywords:** Constraints, cruise tourism, longitudinal, cross-cultural

### **1. Introduction**

Cruise tourism has experienced stable growth from 1990 to 2019 with an average annual 6.6% increase in the total number of passengers (Cruise Market Watch, not dated). While initial demand for cruising was primarily from North America, subsequently Europe and the rest of the world, especially China have gained an increasing share of the market. Today, China has become a key contributor to the rapid growth of cruise tourism in Asia; the country's pivotal role in the emerging global cruise arena is evidenced by its independent category in the 2017 regional cruise line deployment plan along with the Caribbean, Mediterranean, Europe without Mediterranean, Australia/New Zealand/Pacific, Asia without China, Alaska, South American, and 'Other' categories (CLIA, 2017). Last year, China's cruise industry received 2.5 million passengers, enjoying a 2.7 percent increase over the previous year, according to reports by the Ministry of Transport of China. The authorities expect China, currently the world's second largest cruise market, to cater to 14 million passengers annually (China Daily, 2019).

Although cruise tourism is thriving in the Western hemisphere, its development in Asia is relatively new and leaves much room for exploration. While Mainland China was barely a cruise destination just over a decade ago (Wang, Wang, & Xia, 2010), cruise demand has recently expanded rapidly. The potential of this industry is expected to be further revealed in the coming decades thanks to Chinese travelers' growing interest in cruise vacations and the establishment of mega cruise terminals in China. Cruise tourism in China is facing a turning point with a slower growth rate in last year following rapid development during the past decade. Industry practitioners are aiming to explore new market, create valuable cruise experiences and nurture a high-quality tourism market as a long-term development strategy. Therefore, the

understanding of constraints to cruising and their differences between current markets' (i.e., the U.S.) and emerging markets' (i.e., China) are vital to the development of cruise tourism.

## 2. Literature Review

Leisure constraint research dates back at least a century, but scholars in North America have only conducted systematic studies over the past four to five decades regarding the constraints people encounter to fulfilling leisure activities. In earlier studies, "constraints" were simply defined as barriers (Hung & Petrick, 2010), traditionally assumed to constitute intervening variables in the leisure preference–participation relationship (Crawford & Godbey, 1987). Later, "constraints" were redefined as factors that inhibit continued use of leisure services, result in one's inability to participate in a new activity, hinder one's ability to maintain or increase frequency of participation, and/or adversely affect the quality of a leisure experience (Nadirova & Jackson, 2000).

Crawford and Godbey (1987) outlined three types of leisure barriers: *intrapersonal barriers*, wherein the primary relationship of importance is between preferences and barriers; *interpersonal barriers*, which result from either the incongruence of individuals' intrapersonal barriers or from behavioral patterns of interpersonal relations; and *structural barriers*, namely intervening environmental factors such as time, financial resources, and facilities, which hinder potential leisure participation. Later, Crawford, Jackson, and Godbey (1991) modified these three discrete constraint models and suggested that intrapersonal, interpersonal, and structural constraints be recast as an integrated model in which leisure participants are viewed as having negotiated a sequential, hierarchical series of constraint levels. The body of empirical research on leisure constraints increased enormously in the 1980s, highlighting theoretical and practical implications (Jackson, 2000).

In an exploratory study, attempting to determine constraints to cruising, Kerstetter, Yen and Yarnal (2005) found that cruise tourists not only have structural, intrapersonal and interpersonal constraints, but also have constraints they termed "not an option", revealing that some potential cruisers don't even consider cruising an option. Hung and Petrick (2010), as well as Zou and Petrick (2017), also found this to be the case.

Leisure constraints research began in China in the early 1990s, but relevant publications emerged gradually (Dong & Chick, 2012). In the recent years, the number of studies on leisure or tourism constraints among the Chinese has increased, with research conducted in contexts such as leisure activities (Dong & Chick, 2012), outbound tourism (Lai et al., 2013), calligraphic landscape experiences (Zhang, Zhang, Cheng, Lu, & Shi, 2012), and dark tourism (Zhang, Yang, Zheng, & Zhang, 2016).

In a study examining the potential for cruise tourism, Zou and Petrick (2017) found that Chinese tourists were most constrained to take a cruise by other travel alternatives, difficulties to get cruise information, concerns about safety, immaturity of the cruise industry in China, and expensiveness of a cruise vacation. Zou and Petrick (2016) segmented potential Chinese cruise tourists into low, medium and high constraint groups, and found that more than forty percent of their sample had a high level of perceived constraints and that those with the most constraints were least educated. They further found that those who were least constrained were more likely to be older and retired, and to have significantly better images of cruise vacations.

Scholars have often called for more longitudinal studies (e.g., Lu & Nepal, 2009; Tassiopoulos & Haydam, 2008; Sirakaya, Teye, & Sönmez, 2002) and cross-cultural research (e.g., Dimanche, 1994; Sophonsiri & Polyorat, 2009; Haq & Wong, 2010). However, these recommendations have been seldom realized due to factors including lack of access to data, a

one-off approach commonly adopted with research funds, and limited research time and budget. While cross-sectional studies continue to be a primary source of knowledge creation in the tourism and hospitality literature, longitudinal and cross-cultural studies have also been promoted as good practice in scientific enquiry.

Valentine, Allison, and Schneider (1999) also found that among 1,352 articles published in leading leisure science journals, only 20 (1.5%) were cross-national studies. The authors called for a global perspective in leisure research by conducting more cross-cultural research to promote interdisciplinary enquiry, especially through comparisons of English and non-English speaking countries.

While constraints to cruise tourism have been explored to some degree (e.g., Hung & Petrick, 2010; Zou & Petrick, 2016, 2017), neither longitudinal nor cultural comparisons have been conducted to enhance understanding of such constraints. Leisure and travel constraints have been traditionally studied in a cross-sectional manner. Although such investigations are essential to discovering new theories, longitudinal and cross-cultural approaches ought to be incorporated into long-term research agendas to discover, verify, and sustain knowledge. This study aimed to contribute to constraint studies by including longitudinal and cross-cultural comparisons on the same set of measures to evaluate the effects of time and culture on a travel constraint instrument. This is likely an important area of study, as travel constraints may not be homogeneous across different groups or at different times (Pennington-Gray & Kerstetter, 2002). Therefore, this study seeks to obtain a deeper understanding of cruise constraints in two major markets, the U.S. and China. Hence, within-country (U.S. data in different years) and between-country (U.S. vs. China) comparisons will be conducted.

### 3. Methodology

Several steps were employed in this cross-cultural (Chinese–American) and longitudinal (among Americans in 2008 and 2017) study. Research began in 2008 when the first batch of constraints data was collected among American travelers. To develop cruising constraint measurement items, the study followed measurement scale development procedures proposed by Churchill (1979). First, interviews were conducted with 43 American travelers to understand their cruising constraints. Fifty-five constraint items generated from interviews and a literature review were submitted to a panel of tourism experts for review to condense the items to a manageable number. A pilot test was then conducted with 293 undergraduate students to assess the factor structure and reliability of the measure. Using exploratory factor analysis, items with cross-loading problems and low factor loadings were removed. An online survey was subsequently conducted with American travelers who fulfilled the three sampling criteria applicable to the cruising market at that time: 1) 25 years old or older; 2) 50/50 gender distribution; and 3) earn an annual household income of at least US\$25,000. 897 survey respondents were recruited in 2018 (333 non-cruisers and 564 cruisers). The final 18-item measure demonstrated satisfactory reliability and validity and was hence published (Hung & Petrick, 2010).

The developed measure was later applied in an investigation of cruising constraints among Chinese and Americans in 2017. An online survey was conducted in mainland China and the U.S. The questionnaire was composed in English based on Hung and Petrick (2010) before being translated by two bilingual (Chinese–English) tourism scholars into simplified Chinese, the official language of mainland China. The Chinese questionnaire was distributed to qualified Chinese travelers via a reputable survey company based on the following sampling criteria: 1) 25 years old or older; 2) 50/50 gender distribution; and 3) earn an above-average annual

household income. Only those who meet the sampling criteria were included in this study, resulting in 1,600 usable responses among which 916 were cruisers and 684 were non-cruisers. Similar sampling criteria were applied for data collection in the U.S. and yielded 800 usable responses (548 from cruisers and 252 from non-cruisers).

#### 4. Results

This study first performed CFA for the 2017 U.S. sample ( $n = 800$ ) to examine whether it confirms four underlying dimensions of cruise travel constraints reported from the study of Hung and Petrick (2010) that also collected the U.S. sample in 2008. The four dimensions were confirmed with all the significant factor loadings and the goodness-of-fit indices [ $\chi^2 = 758.06$  ( $df = 120$ ), RMSEA = 0.08, CFI = 0.96, TLI = 0.95], suggesting that the model fit the data well (Hair et al., 1998).

For data from China, CFA was first conducted to see if the U.S. measurement model fit the China data. The goodness-of-fit indices [ $\chi^2 = 3,210.18$  ( $df = 127$ ), RMSEA = 0.12, CFI = 0.88, TLI = 0.86] suggested that the measurement model did not adequately fit the data. Because different cultural values may render China data distinct from U.S. data, EFA was performed to check the underlying dimensions of the China data. As suggested by DeVellis (1991), the sample ( $n = 1,600$ ) was divided into two sub-samples. The sub-sample 1 ( $n = 800$ ) was selected for EFA to identify underlying dimensions, after which sub-sample 2 ( $n = 800$ ) was adopted as a holdout sample for CFA. EFA was first conducted to identify the underlying dimensions of cruise travel constraints based on principal axis factoring and oblique rotation. Unlike the U.S. data, the China data showed only two underlying dimensions of cruise travel constraints with 66.97% of the variance explained according to EFA. CFA then confirmed the two dimensions with all the significant factor loadings and acceptable goodness-of-fit indices [ $\chi^2 = 614.13$  ( $df = 93$ ), RMSEA = 0.08, CFI = 0.96, TLI = 0.95].

The reliabilities of all final measures for both U.S. and Chinese data were found to exceed 0.7 (Nunnally, 1978), and were hence deemed acceptable. Further, all AVEs were greater than 0.5 (Fornell & Larcker, 1981), and all factor loadings from CFA were statistically significant ( $\alpha < 0.05$ ) which suggests the scales had convergent validity (Anderson & Gerbing, 1988). Discriminant validity was also demonstrated as each square root of AVE was higher than the corresponding inter-construct correlation (Fornell & Larcker, 1981).

#### 5. Discussion and Conclusion

Triangulation with multiple research methods is often encouraged in the scholarly community as a means of ensuring the reliability and validity of research findings. Denzin (1978) categorized triangulation as being either between -methods or within-methods. The former refers to validating study findings via multiple methods such as qualitative and quantitative approaches, whereas the latter uses different techniques within a given method (e.g., including various measures of the same construct in a study). Field and Morse (1985) further classified methodological triangulation as simultaneous (two methods at once) and sequential (testing the results of one method at different times). Further, Jick (1979) proposed a holistic approach to triangulation, contending that triangulation goes beyond the traditional functions of scaling, reliability testing, and convergent validity to facilitate new knowledge formation.

Following similar logic, the current study triangulates a constraint measure within one country at different times using longitudinal data and between two different cultures of the U.S. and China. This type of triangulation extends beyond validating study results via different methods

to emphasize the role of study context in measurement scale development in terms of time. In other words, the current study sought to unveil whether research findings would hold true in contexts that varied over time and culture. Results suggest that the selected constraint measure is more robust within the same culture across different times than across different cultures at the same time.

The study reveals differences between the U.S. and Chinese samples. While a relatively robust cruise constraint measure has been developed for U.S. travelers, China is likely in need of a tailor-made measurement scale to further clarify Chinese constraints to cruising. Interestingly, the top constraint for both the U.S. and Chinese markets was “*Many other travel alternatives that I’d like to do before cruising*”. Therefore, a likely priority for the cruise industry involves converting non-cruisers into cruisers, given the market potential as demonstrated by these travelers’ low obstacles to cruising. Because cruise tourism is a newly developed form of travel in Chinese society, general awareness and understanding of cruising are likely rather limited. Although intuitive travel decisions may exist, research has shown that tourists often follow a funnel-like choice filtering process to reach a final travel decision. In Crompton and Ankomah’s (1993) choice set model, travel decision making begins with a number of destination choices in the early consideration set, followed by filtering and eliminating less-desirable destinations before reaching a final destination choice. This logic implies that incorporating cruise travel into tourists’ early consideration set is the first step in encouraging travelers to select a cruise as a final travel choice. Therefore, in our view, developing cruise tourism culture and raising awareness of cruising are essential to tapping the market of non-cruisers in China. Further investigation is necessary to determine which tactics will be most effective in converting non-cruisers to cruisers.

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## **Exploring students' reflection and evaluation of employability in hospitality programme in Fujian, China**

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### **Abstract:**

Focusing on two famous universities, namely Xiamen University and Huaqiao University, in Fujian Province, the model of the “Key of Employability” was adopted to evaluate the self-efficacy and self-confidence of developing students' career after graduation from the students' perspective. With the semi-structured interviews to Year-4 students, the results show that the program design is significantly important for graduate's confidence of employability. Confidence could be greatly developed through the well-designed internship programme with internship, school's reputation and personal competence.

**Keywords:** Hospitality Education, Key of Employability, Self-efficacy and Self-confidence

### **1. Introduction**

Together with the development of the hospitality and tourism industry, more tertiary institutes offer the undergraduate programme for hospitality management in Mainland China to fulfill the demand of the manpower is increasing in Mainland China. In 2018, there were around 12,000 star-rating hotels with 52.2 billion of gross profit (China Industry Research, 2019). Among all the provinces and cities, Fujian is ranked the top 6 of highest revenue per available room (China Industry Research, 2019). Thus, the prospect of hospitality graduates was very promising. However, it is hard to retain the graduate as many fresh graduates changed their occupation upon their graduation. According to Hospitality Industry Research Center of Beijing Hospitality Institute (2018), less than 30% of undergraduates developed their career in hospitality industry after graduation. Furthermore, only around twenty percent of those graduates retained in the industry after two years of employment. Although there are handful literature focuses on the employability of hospitality industry from institutional and employers' perspective, but handful information from students' perspective, especially in Mainland China. Since Fujian Province of China is one of the top 7 in highest hotel revenue and it is facing the problem of manpower shortage, this research is focus on Fujian province (Ministry of Culture and Tourism of The People's Republic of China, 2018). To solve the problem, it is necessary to identify the issues from the students' perspectives. The purposes of this research are to find out 1) whether programme design affects the students' confidence of employability; and 2) what are the factors that influence the students' confidence of employability from students' perspectives?

## 2. Literature Review

### 2.1 Career development of undergraduate

Many graduates left the hospitality and tourism field two to five years after they graduated (King, McKercher, & Waryszak, 2003; Tolkach & Tung, 2019), as some would look for other serviced-oriented jobs such as DHL, a courier company (Chang & Tse, 2015). More female students than male students studied this programme. but females got high dropout rate of the industry than males for over two decades (King, et al., 2003; McKercher, Coghlan, & Williams, 1995). Female employees were more likely to change their career due to the work-family balance (Chang & Tse, 2015). Apart from changing the occupation, some graduates would rather develop their career in other countries or region, due to the trend of globalization and better job opportunities acquired (Chang & Tse, 2015; Tolkach & Tung, 2019). In China, low salary and long working hour with shift-duty diminish the attractiveness to the graduate for career development (Hospitality Industry Research Center of Beijing Hospitality Institute, 2018; Chang & Tse, 2015).

### 2.2 Preferred graduate from student's perspectives

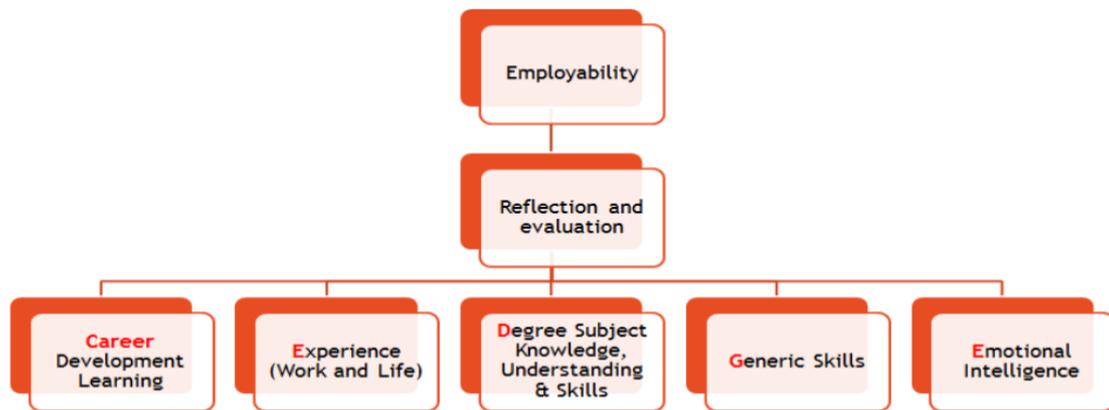
Graduates concerned about the employability and this is one of the key elements for them to evaluate the effectiveness of their educational programmes, including the quality of education that they received (Wang & Chen, 2013). Some previous studies have examined graduate career paths and the effectiveness of programmes are associated from the student perspective (McKercher et al, 1995; Robinson, Ruhanen, & Breakey, 2016; Wang & Chen, 2013).

A number of researches have examined that influence of internship to the career goal and future career. Some students would change or reassure their career goal after the internship as they had more understanding to the real career environment (King et al., 2003; Robinson et al., 2016).

### 2.3 Essential component of employability

To consider the components of a preferred graduate from industry, institutional and students' perspectives from literatures, the model of the "Key of Employability" from Pool and Sewell (2007), is shown in figure 1, was found to be most appropriate to adopt in this research. With the foundation of five essential and overlapped elements of employability (CareerEDGE), students can reflect and evaluate the self-efficacy and self-confidence of developing their career the industry after graduation.

Figure 1: Key of Employability Model (CareerEDGE)



The model of “Key of Employability” comprises of two tiers. For the lower tier, it contains Career Development Learning, Experience of work and life, Degree subject knowledge, understanding and skills, Generic skills, and Emotional intelligent. These elements are overlapped and interrelated. In the upper tier, the employability comes from the students’ reflection and evaluation of the self-efficacy and the self-confidence. Self-confidence and self-efficacy are correlated, and self-confidence is the way to project the self-efficacy to outsiders (Bandura, 1995). Thus, graduates’ self-confidence in employability is considered in this study. With the model of Key of Employability, this study seeks to:

- find out the relationship between program differences and graduates’ confidence of developing career in hospitality industry
- understand the influence factors of graduates’ confidence of developing career in hospitality industry
- provide practical implications to tertiary institutes and hotel managers on developing preferred graduates.

### 3. Methodology

#### 3.1 Measurement

In this research, two universities from Fujian were selected for the case study, namely Huaqiao University (HQU) and Xiamen University (XMU). XMU is one of China’s leading universities. Its Hospitality Management program started in 2014 with high-quality teaching staff and strong at research area (Xiamen University, 2019). Although HQU is not a top university and its ranking is far behind of XMU, its College of Tourism is in the ‘China’s top 10 tourism colleges’ (Huaqiao University, 2019). Having the strong support for practical area, HQU is very famous for their training rooms and labs. Therefore, it is very valuable to compare two different types of universities.

Random sampling was adopted to access the students’ confidence of developing their career in hospitality industry. After two rounds of pilot tests, ten final year bachelor's degree students from each university were selected to participate the semi-structured interviews in October 2019, followed by member checking process. The interview was conducted in Putonghua. Transcriptions and translation from Putonghua to English were done by two authors to ensure the accuracy and consistency.

## **4. Results**

### *4.1 Profile of the respondents*

The respondents' age ranges were between 22 and 23. Among the respondents from HQU, there were 4 males and 6 females. For XMU, there were 5 males and 5 females.

### *4.2 Confidence level*

For XMU, six respondents have strong confidence while one student has limited confidence and three students are lack of confidence. For HQU, the six of them have strong confidence, two have limited confidence and no confidence respectively.

### *4.3 Confidence from factors related to course design*

Both two universities arrange internship for students for around 6 months. Respondents from both of school mentioned that discipline specific subjects are very important in term of confidence of employability. Apart from the hotel related subjects, other subjects are very helpful for developing their confidence, e.g. Management module, English module and data analysis etc.

### *4.4 Confidence comes from other factors*

Personal ability - Many respondents obtain confidence, personal skills and other soft skills through the university learning, which confirmed perspectives of Chan (2011) and Wardle (2012).

Prestige of the school – The reputation and ranking of the university would influence students' confidence of employability. XMU students are prouder of their institutes than HQU students.

Passion to the industry – With the school support, students' confidence is enhanced with the passion. To develop the passion for the hospitality industry, school and industry also play their important roles. XMU's students feel more support from school.

### *4.5 The Factors of confidence deficiency*

First, some respondents lose confidence after their internship since the prospect and working environment is below their expectation. Second, some students perceived they lack sufficient knowledge about job market. With the uncertain career prospects, the confidence level would be diminished.

## **5. Discussion and Conclusion**

### *5.1 Discussion and conclusion*

Theoretically, the program design is significantly important for graduates' confidence of employability. The positive factors related to discipline core course, personal generic skills, school fame and support from school, professional skills which comes from internship and practical experiences in different scenarios are more emphasized and required by the students to increase their confidence. Career development limitation, career planning incapability,

practical knowledge and experience insufficiency, and unfavourable course design can decrease the students' confidence of employability and lead to changing of occupation upon graduation. Furthermore, social communication skill, emotion control skills, family influence, individual specialism and social networks influence graduate's employment decision.

### 5.2 Conclusion

It is suggested to include industry practitioners when designing the curriculum, as they would have better understanding to the needs and requirement of the schools and the students. Better communication between institutes and hotel managers are needed to enhance students' exposure, strengthen the internship effectiveness. Educators may utilize the networking between students, alumni and industry to provide more opportunities for student to know and experience out of school. It is also important to provide information and suggestions for career planning courses, job hunting and interview skills at school for the graduates.

### 5.3 Limitation of this study

First, the scope of this study is in Fujian Province rather than whole China. Second, the influence of family background and gender factor to students' perceptions of employability in Mainland China are not included. Last but not the least, this study was conducted before the COVID-19 outbreak, the impacts of health crisis are not considered in this research.

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## **The role of time pressure in driving tourist impulsive buying propensity**

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### **Abstract:**

Understanding the factors that motivate tourists to engage in impulsive buying behaviour is an important topic in tourism industry. Destinations often provide various incentives to enhance tourist willingness to consume locally and contribute to the economy development. Current literatures on impulsive buying behaviour focused on factors under the general consumption condition, such as the store environment and time availability (Park, Iyer & Smith 1989), in store travel distance (Hui, et al 2013), and pre-shopping factors like prior marketing exposure and trip goal (Bell, Corsten & Knox 2011). Although how tourists perceive, use and respond to time in their holiday experiences provides opportunities for understanding tourist behaviour under certain context, time perception has arguably received little attention because the one discipline that features time as its central rationale, that of history, tends not to look at the closer and smaller temporal intervals of interest within the trajectory of tourists' experiences (Pearce 2020). One study has examined the impact of tourist shopping motivation on choice of commercial activities at the airport and found that time pressure and individual impulsive buying traits moderate the effect (Lin & Chen 2013). Additionally, positive emotion felt by tourists enhances the engagement in impulsive buying behaviour at duty-free shops, while time pressure during shopping reinforces negative emotions and thus induce affective impulsive buying (Sohn & Lee 2017). Research to date suggest that time pressure perception have significant influence on tourist impulsive propensity. And the related literatures have very limited sample and discussed the topic only in a certain context (e.g., duty-free shops). However, tourism contains comprehensive consumption settings, and whether the effect in duty-free store can be extended into other conditions is still worthy to be explored.

In this paper, we want to explore the time pressure effect in a broader tourism situation. More importantly, we are interested in whether the product type influences the effect between time pressure and tourist impulsive propensity, which can also deepen the understanding about tourist consumption behaviour.

Past research show that tourists faced with surroundings of unacquainted others residing in the unfamiliar environment are more likely to engage in the counter-normative behaviour such as misbehave because of the perceived loss of social control (Wan 2018). While time pressure brings exacerbated feeling of loss of control to the surrounding environment, time pressure perception is more salient in the travelling context since most of the journey should be ended at a certain point, no matter to say it would occur at any time during travelling.

We suggest that time pressure perception experienced by tourists would increase their incentive to engage in impulsive buying behaviour. When tourist perceive higher level time pressure, they would experience loss of control and then are relatively more likely to rely on the feeling

instead of reasoning to make purchase intention, thus increase the tendency to engage in impulsive buying. Since hedonic (vs. utilitarian) products purchase are dominated by the feeling-based (reason-based) information processing (Miao 2011), the product type would moderate the relationship between time pressure and impulsive buying propensity, such that time pressure would heighten tourist tendency to consume hedonic products, but not for utilitarian products. Further, the effect is stronger for tourists with higher impulsive buying traits. Implications of the research for consumers, marketers, and policymakers are discussed.

**Keywords:** Impulsive buying, Time pressure

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## **Exploring winery visitors profiles and satisfaction in the emerging wine state of Missouri USA**

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### **Abstract:**

As wineries in most US states represent a still-emerging tourism industry, it is critical that they develop effective marketing strategies to attract new visitors. To do this, they need to understand winery visitors' characteristics and their behaviors at wineries. To facilitate such understanding in the state of Missouri, this study profiled 338 winery visitors based on their wine-related characteristics (wine consumption behavior, wine involvement), winery experience (satisfaction, primary winery activity), and socio-demographic factors. It also explored a model for wineries visitors' satisfaction with Missouri wines. Winery visitors in Missouri were sampled by winery personnel on-site using a protocol designed by the authors. The data was analyzed using SPSS with descriptive statistics, ANOVA and multiple regression. The results were significant using types of drinkers. Furthermore, the proposed model construct variables were significantly related to Missouri wine satisfaction. The study contributes theoretically to winery tourism knowledge by including winery activities in addition to conventional wine consumption characteristics. Management and marketing implications are discussed.

**Keywords:** Wine tourism, winery experience, consumer behavior, satisfaction, winery marketing

### **1. Introduction**

Winery tourism, according to Dowling (1998), is "experiential tourism occurring in wine regions, providing a unique experience which includes wine, gastronomy, hospitality, culture, the arts, education, and travel" (p. 78). One thing that differentiates winery tourism from other types is its offering of tourism products that are both tangible (wines, souvenirs, Hors d' Oeuvres) and intangible (atmosphere, staff's service, enjoyment happiness, memories). The US is considered to be the largest wine market in the world in terms of both volume and value (Wine Institute, 2014a, 2014b). In 2014, it is estimated that wine revenues approached \$40billion, with 69% of wine sales coming from domestic products and 31% from imported wine (Frederickson, 2015). The number of wineries in the United States continues to rise, in 2009 there were 6357 compared to 10742 in 2019 with a rapid increase of very small and limited production wineries. The leading winery region by production in the United States is still California. It accounts for 87% of annual wine production (Wine Vines Analytics, 2016, 2017). However, small and emerging wineries in other states have increased their revenue by taking advantage of winery tourism, a field that not only produces wines, but offers diverse leisure and tourism opportunities. Missouri, over the last decade, have developed a new and rapidly growing wine tourism industry with 92 wineries in 2009 compared to 134 in 2019 (Missouri Grape & Wine).

When a tourism market is not well-established, it is critical for tourism promoters to develop an effective strategy to attract new visitors. This includes understanding winery visitors' needs

and attitudes toward wineries. One approach to understanding winery tourists is profiling them based on their characteristics, such as their participation in winery activities, wine consumption behavior, and socio-demographic variables. In addition, psychological factors such as wine involvement and satisfaction will give more accurate implications about the internal characteristics of tourists. Profiling usually aims to identify different groups of tourists (Bruwer & Li, 2007). This approach is particularly effective for target marketing. A targeted market would be any group that contributes to a winery's revenue and reputation. The experience economy in a tourism setting is focused on experiences that are designed and/or enhanced by the tourism supplier (H. Oh, Fiore, & Jeoung, 2007). The experience economy can be differentiated from the individual experience as the latter is serendipitous and specific to individuals, while the experience economy is shaped by a tourism supplier that provides a more desirable experience tailored to a target market (Andrades, Dimanche, Prebensen, Chen, & Uysal, 2014).

Recently the Wine Market Council (2014) has completed research showing that of the 230 million adults in the US, 40% drink wine. Of these, 33% are defined as high frequency drinkers, or those who consume wine more than once a week, and the remaining 67% are considered occasional drinkers because they drink wine once a week or less. The high frequency drinkers can be perceived as matching the heavy-user category, and indeed, this group consumes 81% of all wine in the US. Obviously these high frequency wine consumers are a sought after market for wine firms. These consumers buy the majority of wine sold and often serve as opinion leaders in the product category. However, frequent drinkers are not a homogenous segment of the wine market. One important characteristic that can be used to distinguish among frequent wine drinkers is how much they typically spend on a bottle of wine. We have chosen to look at the purchase of wine for home consumption. While it is certainly the case that consumers may spend more for a bottle of wine for a special occasion to be celebrated at home, the fact that these consumers usually drink wine several times during the week suggests that the most of their bottle purchases are for casual consumption.

Winery tourism provides diverse tourism services, such as the tasting of wines, learning about wines and wine making, and enjoying the view of vineyards (Gill, Byslma, & Ouschan, 2007). It is therefore important to understand how winery visitors interact with each of these attributes as visitors' perceived value of these attributes will directly and indirectly impact their spending at wineries and their destination loyalty (Carlsen & Boksberger, 2015; Reisinger, 2009; Shapiro & Gómez, 2014). The purpose of the current study is to evaluate winery visitors' behavior toward emerging wineries in Missouri. The study's primary objective are 1) to profile Missouri winery visitors based on wine involvement, winery satisfaction, wine consumption behavior, winery activities, and socio-demographic variables, 2) Missouri wine perceptions

Provide a brief background to the topic, with some statistics or data to provide a background to the environment or situation. Explain why the study is needed from the academic and practice perspectives. Research objectives should be clearly specified.

## **2. Literature Review**

### *2.1 Profiling Winery Visitors*

A common market research approach is to group similar customers. Grouping customers allows a service provider to target a specific group or segment and develop one or more strategies that are tailored to specific market segments (Mooi & Sarstedt, 2011). The wine market is no exception. Several studies have segmented wine consumers based on their characteristics (Bruwer & Li, 2007; Bruwer, Li, & Reid, 2002; Johnson, 2003; Spawton, 1991).

Bruwer and Li (2007) segmented wine consumers and then developed the wine-related lifestyle (WRL) scale. The WRL was developed based on the literature, analysis of previous wine segmentation studies and consulting with wine experts from wine marketing, viticulture, and enology areas. Regarding the WRL, Bruwer and Li characterized it using five factors; consumption situations; ways of shopping; quality/attributes; drinking rituals; and consequences of wine. Based on these five factors, the study identified five wine consumer groups, enjoyment-oriented social wine drinkers; fashion/image-oriented wine drinkers; ritual-oriented conspicuous wine enthusiasts; purposeful inconspicuous premium wine drinkers; and basic wine drinkers. In other studies, depending on the study context, different numbers of groups were identified and each group represented distinct characteristics. Johnson's (2003) study compared his results with that of Bruwer et al. (2002) and found a different number of groups and different group characteristics.

Another wine-related area gaining popularity is winery tourism research. This field considers both wine consumption behaviors and winery tourism activities (Alebaki & Iakovidou, 2011; Charters & Ali-Knight, 2002; Marzo-Navarro & Pedraja-Iglesias, 2010; Nella & Christou, 2014). Such studies differ mainly in that they consider wine-related activities as well as their tourists' behavior. To segment the winery tourists into groups, for example, Marzo-Navarro and Pedraja-Iglesias (2010) included wine consumption habits, wine-related trips, motivation, wine activities, socio-demographic characteristics and more. They found three groups, non-wine; curious; and interested tourists with each representing different characteristics of winery tourists. In Nella and Christou's study (2014), they segmented winery tourists based on their level of wine involvement, low, medium, or high. Each group revealed different levels of satisfaction, brand attachment, attitudes toward winery, socio-demographic characteristics and more.

Another possible factor that can classify winery visitors is their level of wine knowledge. In fact, this is one of the most common factors in wine consumption research that aims to develop marketing strategies for the targeted wine market (Alebaki, Meneses, & Koutsouris, 2015; Dodd, Laverie, Wilcox, & Duhan, 2005; Famularo, Bruwer, & Li, 2010). Generally, those who know more about wine spend more on diverse types of wine (Famularo et al., 2010). There are different ways to assess winery visitors' level of knowledge, such as gauging their objective knowledge, which is actual knowledge stored in memory (e.g., terminology, product attributes, brand facts) and their subjective knowledge, which is self-perceived knowledge (Dodd et al., 2005). However, depending on a study's context, wine knowledge is not always related to purchase behavior (Alebaki et al., 2015).

Lastly, a winery is not a place that solely sells wine; important factors that influence winery visitors' wine consumption as well as their winery or wine brand loyalty include their experiences with the staff and the facilities as well as the quality of wine (Shapiro & Gómez, 2014). Gómez and Kelley's research (2013) found that when winery visitors' levels of satisfaction rose, so did the number of bottles purchased, dollars spent at wineries, and the likelihood of repurchase. As suggested by Gómez and Kelley's study (2013), for the owners and marketers of wineries to improve their services, they need to understand how satisfied visitors are with each service. It can be seen that when it comes to thoroughly profiling different types of winery visitor groups, marketers can draw better implications by providing psychological factors, such as wine involvement and satisfaction, wine consumption behaviors, tourists' behaviors and socio-demographic characteristics. The ultimate goal of successful winery marketing is to increase revenue by bringing in more loyal customers. To be successful, it is critical that marketers be able to identify groups that are likely to become loyal customers.

## 2.2 *Involvement*

Other scales of profiling consumer characteristics include the two types of involvement used by Beatty, Homer, and Kahle (1988). They examined enduring (product) and purchase (situational) involvement. According to Beatty and colleagues, enduring involvement is more related to self, hedonic pleasure, and personal importance. Purchase involvement, which is a more specific concept of situational involvement, is defined as “the outcome of an individual’s interaction with the product and the purchase situation” (Beatty et al., 1988, p. 150). Depending on whether the study concerns a personal connection with a product or the personal importance a customer attaches to purchasing a product, a different product and purchase involvement scale is used. In wine market research, Bruwer et al. (2013) profiled wine consumers based on the CIP scale as well as through additional items. Depending on a wine consumer’s level of involvement, results differed in terms of consumption level, information search behavior, and other areas.

Hollebeek, Jaeger, Brodie, and Balemi (2007) used two involvement concepts, product and purchase involvement and segmented wine consumer’s demographic and psychographic characteristics. They found that consumers put more importance on origin of wine and less on price when they are high in product and purchase involvement compared to those low-involvement consumers. Lockshin et al. (1997) also segmented wine shoppers based on three involvement scales, product, brand, and purchase involvement. Depending on the level of these three types of involvement, wine consumers revealed different types and levels of purchasing behaviors (e.g., shopping styles, shops and loyalty) and demographic variables.

Brown et al. (2007) utilized CIP and other relevant items, though they focused solely on the facet of enduring involvement. The authors segmented winery visitors’ behavior based on three extracted factors of involvement, expertise, enjoyment, and symbolic centrality. This is known as the wine involvement scale (WIS). Demographically, the three identified groups were the same, though they were significantly different regarding their frequency of visits to wineries, purchasing of wines in general and at wineries, attitudes toward wine-specific amenities, their future visit intention as well as several other wine-related behaviors. It can be seen that level of wine involvement is an important factor not only to predict and profile general consumers in retail settings, but also to understand both consumer and tourist behavior together. This is particularly important since small wineries generally rely on their revenue by selling their wines to winery visitors. Investigating wine involvement would be able to help wineries both satisfy tourist and consumer needs.

## 2.3 *Satisfaction*

One of the most widely used post-trip variables in consumer and tourist research is the satisfaction factor. A vast number of studies have used satisfaction to evaluate tourists’ tourism experience. Still, an increasing number of tourism studies have sophisticatedly identified the relationship between perceived value and satisfaction (Chen & Chen, 2010; Gallarza & Saura, 2006; Scott, Laws, & Boksberger, 2012). The primary difference between perceived value and satisfaction is that perceived value can happen during various stages of the purchase process (before, during, and after). Satisfaction is naturally considered part of the post-purchase stage and an outcome variable (Sweeney & Soutar, 2001). Perceived values have thus been used as a different concept than satisfaction, usually as an antecedent of satisfaction (Prebensen et al., 2012; Prebensen, Woo, et al., 2014; Williams, 2012). The relationship of these two factors allows identifying destination attributes that have the strongest relationship with satisfaction. The relationship between satisfaction and destination loyalty is a well-known relationship,

demonstrated by many wine-related studies (Gill et al., 2007; Nowak & Newton, 2006; Shapiro & Gómez, 2014; Stoddard & Clopton, 2015; Yuan & Jang, 2008).

Destination loyalty is generally measured with attitudinal and behavioral components, such as intention to repurchase, revisit, preference to use a particular brand, and recommend to others (Meleddu, Paci, & Pulina, 2015; Niininen & Riley, 2004; Zhang, Fu, Cai, & Lu, 2014). According to the service-profit chain model (Heskett, Jones, Loveman, Sasser Jr, & Schlesinger, 1994), industries' revenue growth and profitability are determined by customer loyalty, which is mainly achieved by customer's satisfaction. For instance, Yuan and Jang's study (2008) demonstrated that the more satisfied visitors were who had joined a local wine festival, the more likely they were to purchase the local wine and revisit the local wineries that took part in the festival. In Nowak and Newton's study (2006), satisfaction with wine tasted at the winery made visitors more likely to purchase the same brand wine. It was also found that compared to new visitors, returning winery visitors had a higher level of satisfaction with wine quality, the tasting room, and their overall experience at the winery (Stoddard & Clopton, 2015). Shapiro and Gómez (2014) identified satisfaction toward specific winery attributes, including ambience, service, tasting protocol, tasting experience, and retail execution. All of these are expected to be related to overall satisfaction, ultimately leading to sales performance and customer retention. The results were all significant, except, intention to re-purchase, which was asked as a yes or no question. It can be seen that destination loyalty is considered an important factor in evaluating the success of tourism services (Um, Chon, & Ro, 2006; Zhang et al., 2014).

Relationships among these three variables—perceived value, satisfaction, and destination Loyalty, have been demonstrated by several studies in diverse tourism contexts (Chen & Chen, 2010; Chen & Tsai, 2008; Gallarza & Saura, 2006; Hosany & Witham, 2010; Lee et al., 2007; Oh, 1999; Ramseook-Munhurrin et al., 2015). In the study by Gallarza and Saura (2006), the authors found a strong positive relationship among college students' perceived value toward a vacation break, satisfaction, and destination loyalty, including visits to the same destination and positive word of mouth. In Lee et al.'s study (2007), Japanese tourists' to Korea's demilitarized zone tour indicated three types of values functional, emotional, and overall. Each of these positively explained satisfaction, followed by a positive relationship with recommendation to others. Chen and Chen (2010) and Ramseook-Munhurrin et al.'s studies (2015) found satisfaction played a significant role as mediator. In Chen and Chen's study (2010), there was a stronger relationship when satisfaction was used as a mediator between perceived value and destination loyalty, than when viewed as a direct relationship between perceived value and behavioral relationship. In Ramseook-Munhurrin et al.'s studies (2015), the relationship between perceived value and loyalty was not significant; that is, satisfaction fully mediated this relationship.

### **3. Methodology**

Missouri has developed a new and rapidly growing industry of small vineyards and wine enterprises. There are approximately 134 wineries in Missouri. Many Missouri wineries have small vineyards while others don't have vineyards and rely on grapes from vineyards within and outside the state. This study explores wineries visitors profile and satisfaction with Missouri wines. For participants, the study sought out wineries in Missouri and access to their visitors. Seven wineries cooperated with the current research. The method of self-completion was chosen, so the questionnaires were designed to have clear guidelines, a reader-friendly format, and a simple structure. Before being distributed to winery visitors the questionnaire was pilot tested and finalized after minor revisions. A convenience sampling process took place

and respondents were asked to complete the three page questionnaire immediately after the end of their winery visit. Finally, a sample of 338 usable questionnaires was gathered. The questionnaire for this study was comprised of three sections. The first section included screening questions on participants' socio-demographic profile including gender, education, marital status, working industry, household size, monthly household income. The second section was titled "Satisfaction and Recommendation" and included nine questions about wine purchase, health perceptions and satisfaction with Missouri wines using a Likert-type scale. The third section was titled "Overall Perceptions" and included twenty items to measure visitors' perceptions of wines in general and Missouri wine in particular. Respondents were asked to indicate their level of agreement with the statements for each item using a 5-point Likert-type scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree nor Agree, 4 = Agree, 5 = Strongly Agree) on each item. The data was analyzed using descriptive statistics, ANOVA and multi regression.

## 4. Results

### 4.1 Profile of respondents

About 80% of the respondents were from Missouri and 10% were from Kansas. Nearly sixty percent of the sample was below 34 years. Gender distribution was nearly evenly split between males and females. Respondents were predominantly Caucasian (87%). About half the respondents reported household income to be under \$50,000 per year. About 20% reported household incomes above \$100,000 per year. About 48% of the respondents were college graduates. Sample demographics are shown in Table 1.

**Table 1: Sample characteristics**

	Frequency	Percent
<b>Gender</b>		
Male	166	49%
Female	172	51%
<b>Age</b>		
21 – 24	140	39%
25 – 34	79	22%
35 – 44	47	13%
45 – 54	48	13%
55 – 64	26	7%
65+	19	5%
<b>Race</b>		
Caucasian	310	87%
African-American	25	7%
Hispanic	5	1%
Others	18	5%
<b>Annual Household Income</b>		
Less than \$ 50,000	173	49%

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\$ 50,000 – \$ 99,000	108	31%
\$ 100,000 - \$ 125,000	44	13%
More than \$ 125,000	28	7%
<b>Education</b>		
High School	38	11%
Some college	146	41%
College degree	174	48%
Other	1	-

About 43% of the sample indicated they were occasional drinkers or light drinkers (Table 2). However, when asked how many glasses of wine they consumed in a week, most indicated to be either drinking occasionally (27%) or between 1 to 4 glasses per week (41%). Preference for red or white wine was evenly divided (Table 2). Nearly 86% of the respondents had tasted wines from outside Missouri. 28% preferred Missouri wines, while the majority was neutral (56%). Nearly 90% would recommend Missouri wines to someone.

**Table 2: Drinker Types and Preferences**

	Frequency	Percent
<b>Type of drinker</b>		
Occasional drinker	72	20%
Light drinker	83	23%
Moderate drinker	148	41%
Heavy drinker	55	15%
<b>Wine consumption</b>		
Occasionally drink wine	93	27%
1-4 glasses per week	141	41%
5-9 glasses per week	77	21%
10-14 glasses per week	22	6%
15-20 glasses per week	9	3%
<b>Type of wines preferred</b>		
Red	161	45%
White	164	46%
Rose	32	9%
<b>Preference for Missouri wines</b>		
Prefer Missouri wines	100	28%
Neutral preference	200	56%
Not prefer Missouri wines	57	16%
<b>Recommend Missouri wines</b>		
Yes	307	90%

Wine purchase location		
Wine or liquor store	156	46%
Supermarket	130	38%
Missouri winery	43	13%
others	13	4%

Most of the respondents purchased wine from wine or liquor stores (46%) or from supermarkets (38%). Convenient location was the most commonly cited reason for location for purchasing wine. The second most frequent reason was variety of brands (23%), and the third most frequent reason was price (19%).

#### *4.2 Differences between types of drinkers*

##### Taste and enjoyment of wine

Heavy drinkers liked the taste of wine (mean = 4.53) more than moderate and light (or occasional) drinkers (means of 4.39 and 4.24 respectively). One way ANOVA was done to test these differences. The ANOVA was significant ( $F(2,357) = 3.03$ ;  $p = 0.049$ ). These differences were more pronounced for desire to know and enjoy wine quality. Heavy drinkers were more inclined to know and enjoy wine quality than other two groups of drinkers ( $F(2,357) = 3.966$ ;  $p = 0.02$ ).

##### Wine as part of their lifestyle

Heavy drinkers view wine as being crucial to their lifestyle (Mean (heavy)= 3.40; mean (moderate) =3.11; mean (light or occasional) = 2.83). One way ANOVA revealed significant differences ( $F(2,357) = 4.703$ ;  $p = 0.01$ ). However, there were no significant differences in how respondents saw wine consumption contributing to their social status. There were also no significant differences among the three groups of wine drinkers about consuming wine with meals. However, the three types of drinkers had significant differences in how they viewed wine and its effect on relaxation. Heavy drinkers agreed more than the other two groups about how wine consumption helped them relax (mean (Heavy) = 4.28; mean (moderate) = 4.10; mean (light/occasional) = 3.77;  $p = 0.0001$ ).

##### Health benefits

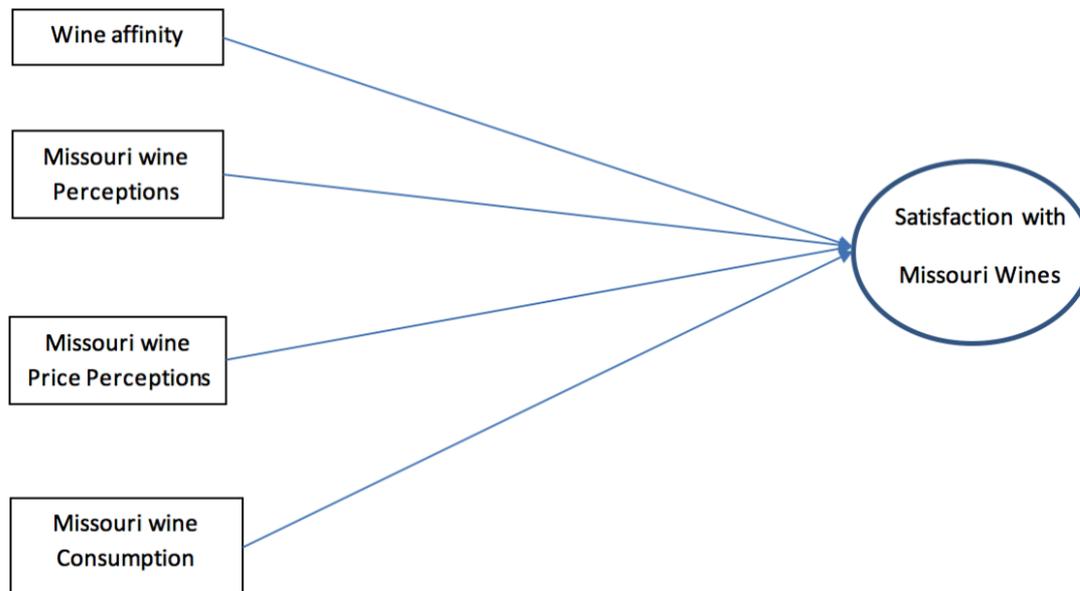
There were significant differences among types of drinkers in how they viewed health benefits of moderate consumption of wines. Moderate drinkers viewed the most health benefits from moderate consumption of wine (mean = 4.19). Not surprisingly, mean for heavy drinkers was lower (mean = 3.89). The ANOVA was significant ( $F(2,355) = 4.413$ ;  $p = .013$ ).

Wine drinkers differed in terms of not considering health benefits when consuming wine. As expected, heavy drinkers tended to not take into consideration health benefits of wine compared to moderate and light/occasional drinkers ( $F(2,356) = 3.687$ ;  $p = .026$ ). In contrast, light/occasional drinkers tended to follow a healthy diet compared to moderate and heavy drinkers ( $F(2,356) = 2.690$ ;  $p = .069$ ).

## Missouri wines

There were no significant differences in how different wine drinkers perceived Missouri wines. They also perceived Missouri wines as having good value for money. Overall, Missouri wines were seen to be excellent (overall mean = 4.01) with no significant differences among different wine drinkers. There were no significant differences how different wine drinkers consumed Missouri wines in restaurants (overall mean = 3.22) or using these wines for gifts (overall mean = 3.22). The low mean scores suggest that although Missouri wines are seen as excellent wines with good value for money there are marketing opportunities to have them used on other occasions.

### 4.3 Figure 1. Proposed Model for Missouri Wine Satisfaction



We examined four antecedents of satisfaction with Missouri wines. The first factor we examined was *affinity for wines*. Affinity for wines is extent to which a consumer likes wines and views it as part of their lifestyle. The second antecedent was *Missouri wine perceptions*. This is an indicator of how consumers viewed Missouri wines compared to wines from other parts of the world. The third antecedent was *price perceptions of Missouri wines*. This is an indicator of how consumers perceived the pricing of Missouri wines. The fourth indicator was *consumption of Missouri wines*. This variable is a reflection of their purchase and consumption of Missouri wines when consumers eat out or give gifts.

As seen in Table 3., *Affinity for wines* was measured with five items (Cronbach alpha = 0.801). *Missouri wine perceptions* was measured with three items (Cronbach alpha = 0.869). *Price perceptions of Missouri wines* was measured with two items (Cronbach alpha = 0.67). *Consumption of Missouri wines* was measured with two items (Cronbach alpha = 0.766).

**Table 3. Scale items**

<b>Wine affinity (Cronbach alpha = 0.801)</b>
Q21- I like the taste of wine.
Q22 I like to know and enjoy the wine quality.
Q23 – Wine is crucial for my lifestyle.
Q24 – Enjoying wine is a factor of social status.
Q25 – Wine goes well with meals.
<b>Missouri Wine perceptions (Cronbach Alpha=.869)</b>
Q32 – Missouri wines are packaged just as good as wines from the rest of the world.
Q33- Missouri wine characteristics are as good as other quality wines.
Q34 – Missouri wine quality is just as good as other wines of the world.
<b>Price perceptions of Missouri wines (Cronbach alpha = 0.67)</b>
Q26 – Missouri wines are reasonably priced.
Q35 – Missouri wines have good value for money.
<b>Consumption of Missouri wines (Cronbach alpha = .766)</b>
Q36 – When eating out at restaurants in Missouri I order Missouri wines.
Q37 – I often use Missouri wines as gifts for birthdays, anniversaries, holidays etc.

#### 4.4 Antecedents of satisfaction with Missouri wines

A linear regression was run with satisfaction with Missouri wines as the dependent variable. The independent variables were affinity for wines, Missouri wine perceptions, price perceptions of Missouri wines, and consumption of Missouri wines. The model was significant with a *r*-squared value of 0.234. The results of the regression are presented in Table 4.

**Table 4. Results of regression**

	Standardized coefficient Beta	t	Sig.
<b><i>Independent variables</i></b>			
(Constant)		4.214	.000
Affinity for wines	.075	1.448	.149
Missouri wine price perceptions	.148	2.552	.011
Consumption of Missouri wines	.089	1.613	.108
Missouri wine perceptions	.302	5.005	.000

a. Dependent Variable: Satisfaction with Missouri wines

The results of the regression indicate that perception of Missouri wines (Beta = .302,  $p = .000$ ) and perceptions of prices of Missouri wines (Beta = .148,  $p = .011$ ) had significant positive effects on satisfaction with Missouri wines. The impact of consumption of Missouri wines had a weak effect on satisfaction (Beta = .089,  $p = .108$ ). Affinity for wines had no significant effect on satisfaction.

#### *Effect of satisfaction on willingness to recommend*

Satisfaction levels significantly greater for those willing to recommend Missouri wines to someone. Those willing to recommend Missouri wines had significantly higher satisfaction (mean = 3.85) than those not willing to recommend (mean = 2.97;  $p = .000$ ).

### **5. Discussion and Conclusion**

Initial findings from the research reveal some interesting characteristics of the sample, the age group distribution of the sample confirms earlier work in by Bruwer et al. (2002), in which he found that the Millennial and Generation-X age groups are highly active and prominent as tasting room visitors. Table 1. shows that 61% of our study respondents were between 21-35 years old, which represents the Millennial while 20% the Generation-X group. The educational status of the total sample was high, with 89% in possession of a postsecondary qualification. The household income levels were weighted heavily to the middle and upper levels and are in all likelihood functions of the relatively high education level and small household membership size of the respondents. Our findings are valuable for winery managers like those situated in the state of Missouri. This region relies on their tasting rooms as a primary source of wine sales. For these wineries, the tasting room is often the first point of contact between the customer and the winery and plays a key role in the overall marketing strategy (Charters et al., 2009).

Our study supports and complements earlier research suggesting that focusing on excellent service, paying particular attention to ambience attributes of the tasting room, and excelling in retail operations can positively influence visitor perceptions and thereby improve sales performance (O'Neill and Charters, 2000; O'Neill et al., 2002; Dodd and Bigotte, 1997). The protocol established for wine tastings also influences sales, but only indirectly through its influence on overall customer service. Our results also highlight the relevance of demographic information to tasting room managers. In particular, consistent to findings of earlier research (Charters and O'Neill, 2001; Dodd and Gustafson, 1997), tasting room managers should realize that older visitors tend to spend more than younger consumers do in a given visit. Thus, higher spending among older visitors should not be attributed only to outstanding performance of the tasting room in delivering good customer service. There were no significant differences in how different wine drinkers perceived Missouri wines. They also perceived Missouri wines as having good value for money. Overall, Missouri wines were seen to be excellent with no significant differences among different wines drinkers. Furthermore, evaluating the on-site experiences of visitors as well as the relationship among antecedents and consequence behaviors contributes to experience-economy research in a winery tourism context. Winery owners stand to benefit from this research by now being able to target key visitor groups that contribute the most to winery revenue, as well as being able to design winery experiences that are most valued and contribute to positive post-visit evaluations.

The first critical aspect of a successful marketing strategy for a winery is to recognize its target market (Barber, Taylor, & Deale, 2010). On the whole, the empirical findings of this study confirm that it is rational to distinguish among four different types of drinkers' involvement

levels. One can easily assume that it is probably more profitable as well. Indeed, one of the main potential benefits of segmenting and profiling wine tourists is the identification of visitor groups that may offer higher commercial value for wineries (Alonso et al., 2007). Moreover, careful targeting and deep market knowledge can assist wineries increase the effectiveness of their advertising and promotional efforts (Barber et al., 2010). Hence it is advisable for winery owners to study carefully the profiles of their visitors and decide which of them match better their strategic marketing objectives. Wine interest and involvement is closely linked with the issue of seasonality, since winery visitors with a higher degree of commitment are more likely to visit wineries year round (Mitchell & Hall, 2003). The winery experience becomes an opportunity to create a relationship between the winery and the visitor. As Charters et al. (2009) note, the establishment of “connection” with consumers is a key issue in wine tourism even if different wineries need to make their mark in different ways.

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## **Does MICE improve hotel profitability in Asia? Comparative analyses of MICE event effects in major Asian cities**

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### **Abstract:**

In major Asian and Pacific cities, rapid growth of MICE (Meetings, Incentive, Convention, and Exhibition/Event) may give great economic impact on performance of hotel industry, however, a few researchers examine impact on profitability. This paper attempts to examine MICE impacts on profitability of hotel industry in eight Asian and Pacific major cities, using revenue per available room (RevPAR). We analyze influence of events and external business resources on profitability, considering impacts from macro-economic conditions. The results suggest that the scale of events and good destination brand image have a positive impact on hotel profitability.

**Keywords:** MICE, Hotel Industry, Profitability, Asian Major Cities, Event impact

### **1. Introduction**

Recently, in major Asian cities, rapid growth of international conferences and conventions has given large economic impacts on development of their hotel industry and enhanced business performance (Liu et al., 2013). The effects of the meetings, incentive, convention, and exhibition/event (MICE) development may lead to economic contributions to hosting destinations (Grado, Strauss, & Lord, 1998), and the revenue generated by rooms, banquets, and food and beverages in area hotels (Madanoglu & Ozdemir, 2016). In destination marketing and management, business travelers who join international conferences and conventions, are commercially more attractive than leisure tourists for tourism industries, as the Seoul City Government reports, MICE-related visitors tend to exceed spending of leisure tourists. MICE may provide business opportunities in off-peak seasons and generate additional revenue for hotels since MICE-related visitors can be attracted by MICE organizers in these.

It is commonly argued that international conferences and conventions may facilitate increase of amount of revenue and profit, but it is still unclear that it may improve profitability. High profitable hotels may become growth business engines of hotel industry, as, for example, the Japanese Governmental Agency of Tourism argues in the report “For the improvement of international competitiveness of Japanese MICE industries,”<sup>3</sup> that it stresses not only scale growth but also high profitability of the MICE industries for the next decades.

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<sup>3</sup> <https://www.mlit.go.jp/common/001006764.pdf>

When traits of a destination such as charm, history, culture, security, access, quality of life and environment, may attract more business travelers for international conferences and conventions than other cities and may let them spend more. In research area of destination marketing and event management, not only scale of event economy in destinations but also resources of destinations may enhance performance of hotel industries (Boo & Kim, 2009; Grado et al., 1997; Kim et al., 2011; Madanoglu & Ozgur, 2016). As Kim et al. (2011) suggests, Singapore, Hong Kong, Seoul and Beijing retain their better destination images in Asian major convention cities, while Japanese major cities attempt to require more competitiveness for venue of international conferences and conventions with the 2020 International Olympic Games in Tokyo. This paper attempts to examine how development of international conferences and conventions affects profitability of hotel industry in Asia Pacific major convention cities, Singapore, Sydney, Dubai, Hong Kong, Beijing, Tokyo, Kyoto and Sapporo, using RevPAR (Revenue per available room) as the key profitability performance index, considering characteristics of Japanese major cities in destination competitiveness.

## **2. Literature Review**

### *2.1 Destination Competitiveness for Venue of International Conference and Convention*

Major East Asian cities including Singapore, Hong Kong, Seoul, Tokyo, Bangkok, Beijing and Shanghai occupies high ranking in top international meeting cities ranking by the Union of International Associations in 2017 (Union of International Association, 2018). Previous literature has examined the economic contributions of the MICE on hotel industries although a few researchers studied in Asian cities. Growth of international conferences and conventions have given great economic, business, social, cultural and environmental impacts on destinations, thus have done on Asian major convention cities. It may also bring huge amount of business customers, revenue and profit for hotel industries, however, a few researchers investigate its impact on improvement of profit of hotel industry.

Many researchers suggested that development of MICE industries may bring economic, social and cultural impacts of onto regional economy and business (Pike, 2016). Andersson & Lundberg (2013) defined the framework for measuring the impact of an event called “triple impact assessments of a tourism event.” Total event impact can be analyzed in consideration of economic, socio-cultural, and environmental impacts.

However, in examining factors enhancing hotel performance, major previous researchers suggest that there are several main factors which improve hotel performance of hotel industry in a destination. We focus on three impact: number and scale of events (Event Impact), influence of average income and expenditure tendency of country (Macro-economic Conditions), and service capacity and brand of destinations (Business Resource).

#### *2.2.1 Event Impacts*

First, in discussion of hotel business, growth of number and delegates of international conferences and conventions may lead to growth of number of customers, direct expenditures and related business, in economic dimension of event impacts. Large scale of events and their participants improve operating conditions of hotels and enhance their performance (Sainaghi, 2010). Within increase of total revenue and profit, hotels may improve their efficiency and profitability because of scale merits and higher opportunity of investment.

H1.a. Increase of number of events in a destination is likely to enhance hotel profitability.

H1.b. Increase of number of delegates of events in a destination is likely to enhance hotel profitability.

### *2.2.2 Macro-Economic Factors*

Second, however, revenue and profit of hotels in each destination may depend on external and seasonal macro-economic conditions such as income level of their locating country or region on because many customers for hotels tend to internally visit from there more frequently. Especially, hotel performance may be influenced by macro-economic conditions, in particular, such as high level of GDP or CPI (Consumer Price Index) of a country or a region where a destination locates (Assaf et al., 2016; Chen et al., 2005). CPI may also shows purchasing tendency of consumers in a country or a region. In terms of hotel profitability, Liu & Quan (2013) suggested that economic and market factors have an impact on RevPAR growth in Asian cities. We consider this macro-economic factors for hotel revenue as “Macro-Economic factor.”

H.2.a A destination city with higher GDP tends to have higher area profitability of hotel industry than ones with low GDP.

H.2.b A destination city with higher CPI tends to have higher area profitability of hotel industry than ones with low CPI.

### *2.2.3 External business resources*

Third, performance of hotels in a destination may partially depend on its external business resource. Madanoglu & Ozdemir (2016) argue that, based on resource-based view theory from Penrose, amount of external physical business resources, such as meeting facilities in a destination may enhance performance of hotels in it. They examine the relationship between hotel profitability and the share of meeting space that hotels hold in the United States. Boo & Kim (2009) suggested a positive relationship between the size of convention halls’ exhibition areas and area hotel room night sales in the United States. Sainaghi, Mauri, Ivanov, & D’Angella (2019) suggested that there was a positive impact of mega-events on RevPAR growth in the examination of the Expo 2015 in Italy. Previous research suggests that large regional capacity to accept delegates of conferences and convention may bring a positive impact on hotel performance.

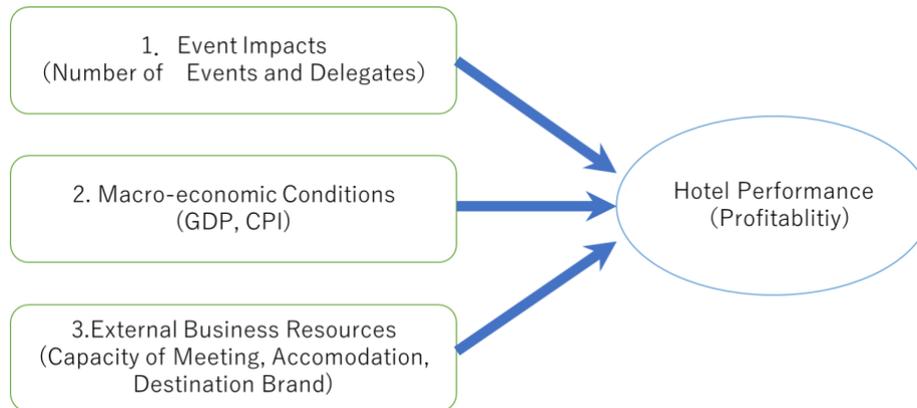
H3.a In a destination, large capacity to accommodate MICE-related tourists is likely to enhance profitability of hotels.

Not only physical business resources but also “soft” regional business resources such as brand or image of destinations are paid more attention from destination and event management researchers (Pike, 2016). While similar destinations are competing in global tourism markets, branding of a destination become effective marketing strategy to differentiate its original identity and value from rivals and retain loyalty of customers (Pike, 2016, ch.9). As Kim et al.(2011) suggest, image of convention cities in East Asian regions currently takes important role in competing in Asian convention market. Kim et al. (2016) argue that perceived excellent quality of convention city becomes brand equity and facilitate participants to join international conference and convention there.

H3.b In a destination, its excellent brand image is likely to attract much MICE related tourists and enhance profitability of hotels.

We recognize that three major factors of event impacts, macro-economic conditions, and external business resources may enhance hotel performance, especially, profitability in convention cities, shown in fig.1. Revenue of hotels may be changed by macro-economic conditions. However, hotel firms may make strategic plans to enhance profitability in two ways. First, they can make or support more marketing efforts to attract many gorgeous events and highly spending delegates. Second, hotels can attract more guests when hotels can use excellent external business resources. They solely or jointly invest to extend capacities of room supply and meeting spaces. They also develop excellent brand image of MICE destination.

*Fig.1. Main Three Factors Enhancing Hotel Performance*



### 3. Methodology

#### 3.1 Data and Method

We attempt to do explorative examination of to what extent these three factors may enhance it in East Asian and Pacific major convention cities in the next section, especially, paying much attentions to event impacts and external business resources.

##### 3.1.1 Data

To compare Asian and Pacific major convention cities, we gather secondary data about event impacts, macro-economic conditions, external business resources, and hotel performance data of eight major convention cities, including Singapore, Sydney, Hong Kong, Beijing, and Dubai, Tokyo, Kyoto and Sapporo, in every month during 2011 to 2017. We additionally want to examine characteristics of Japanese convention city in Asian and Pacific conference and convention market. First, we gather data about event impacts based on conference data of ICCA (International Congress and Convention Association), as its institutional member. It provides the number of events (MICE) and delegates of events in each of city. Adding to them, we check number of inbound tourists and their major source market of each of city from the governmental data on website. We use the number of international overnight visitors from official national or city statistics. Second, we gather macro-economic data of a country or regions in which sample city locate, using open governmental data about GDP and CPI. Economic factors such as gross domestic product (GDP) per capita and the consumer price index (CPI) were also

collected from the open database of the World Bank<sup>4</sup>. Third, we also room supply in a city, using regional, managerial and contracted database of Smith Travel Research<sup>5</sup>. As data of destination brand, we use competitive index of country of the Travel and Tourism (T&T) Competitive Index from the World Economic forum as substitute variable for brand image of city for country. Finally, we make average monthly average of RevPAR of hotels in every city, indicating proxy of area profitability of hotels, based on reports of eight Asian and Pacific major convention cities in Smith Travel Research for the years from 2011 to 2017. We gather monthly data in 84 months from 8 cities. We make 672 units of analysis from each monthly data in every city and statistically analyze them.

### *3.1.2 Method*

In order to examine effects of three major factors on average profitability of hotel in every month in a city, we do stepwise multiple linear regression analysis, using the SPSS software (Ver. 20.0). It was performed to examine the effects of (MICE) event impacts, macro-economic condition, and extent of external resources, on area hotel profitability (RevPAR.).

## *3.2 Variables*

### *3.2.1 Dependent Variables*

As profitability index of hotel performance in a destination city, we use average of RevPAR of hotels in a city. RevPAR is revenue per available room and usually used as proxy for profitability (Schwartz et al., 2017), but is not precise profitability index. However, it is high correlation with profit (Madanoglu & Ozdemir, 2016; Schwartz et al., 2017)<sup>6</sup>.

### *3.2.2 Independent Variables*

#### *3.2.2.1 Event Impacts*

We mainly use two variables for Event impacts. One is a number of events in a destination city per month. The other is average number of delegates per event, which shows one aspect of scale of event.

#### *3.2.2.2 Macro-economic Conditions*

To represent macro-economic conditions, we mainly use two variables. The one is GDP per capita of a country which each of destination city locates, and indicates average level of income of each of city. The other is the Consumer Price Index, which indicates level of living of cost in each city.

#### *3.2.2.3 External Business Resources*

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<sup>4</sup> <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=HK>

<sup>5</sup> The profile of STR database is showed in <https://str.com/>.

<sup>6</sup> As Madanoglu & Ozdemir (2016) shows, RevPAR does not count other profit from hotel service except room service and reflect total profit of hotel. However, Schwartz et al. (2017) still argues that, while GOPPAR (gross operating profit per available room) indicates accurate profitability of hotel operations, RevPAR is still proxy of profitability because of its high correlation with GOPPAR. We want to do analysis of destination profitability RevPAR from STR.

To indicate level of external business resources, we use two variables. The one is room supply per month in a city, which STR provides. This shows capacity to accommodate guests per night. The other is T & T competitive index which shows destination competitiveness of a country where a sampled city locates. We substitute this index as brand equity of destination.

### 3.2.2.4 Impacts of Internationalization

We calculate additional variables of economic value from major inbound tourists for a destination city. It was GDP per Capita of Top Source Market. In considering details, for a city, we make weighted average of GDP per Capita of top 5 countries of inbound tourist, in proportion to number of tourists of each of country. We also use number of international overnight traveler as an index of internationalization of venue.

### 3.2.2.5 Japan Dummy

To compare performance of Asian convention cities, we check effect of Japan Dummy, which indicate features of the Japanese cities as meeting venues.

## 4. Results

Based on correlation matrix in table.1, we recognize that many main variables of event impacts, macro-economic conditions, and external business resources of a city shows high correlation with and suggest effects on profitability index of hotel performance in each city. However, we exclude number of events, which indicate no significant correlation with RevPAR. We do multiple regression analysis of effects of these variables on hotel performance in stepwise style. Finally, we get three models.

Table 1. *Correlation and descriptive statistics for dependent variables = RevPAR (N = 672).*

Variables	M	SD	1	2	3	4	5	6	7	8
1. RevPAR	134.88	49.51								
2. Hotel Room Supply	2326408.99	1897820.63	-0.34***							
3. International Overnight Visitors	6019319.02	9726650.87	-0.08*	0.15***						
4. T&T Competitive Index	4.93	0.25	0.36***	-0.65*	-0.01					
5. GDP per Capita	37284.64	18375.71	0.33***	-0.66***	0.20***	0.74***				
6. CPI	103.95	8.02	0.31***	0.07*	0.07*	-0.35***	-0.41***			
7. JAPAN dummy	0.38	0.48	-0.33***	-0.35***	-0.44***	0.31***	0.16***	-0.54***		
8. Std. Average MICE Delegate	0.00	1.00	0.30***	-0.01	-0.08*	-0.08*	-0.19***	0.31***	-0.32***	
9. GDP per Capita top 5 Source Avg.	30955.30	7295.19	-0.31***	0.34***	0.49***	-0.09*	-0.11***	-0.01*	-0.14***	-0.17***

N=672, \*\*\* : p < 0.001 \*\* : p < 0.01 \* : < 0.05

Table 2. Summary of regression analyses for the variables influencing RevPAR (N=672).

Dependent Variable= RevPAR									
Variables	Model 1			Model 2			Model 3		
	B	SEB	$\beta$	B	SEB	$\beta$	B	SEB	$\beta$
Hotel Room Supply	0.00	0.00	-0.13*						
T&T Competitive Index	68.63	8.24	0.35***	53.50	7.46	0.27***	70.76	7.99	0.36***
International Overnight Visitors	0.00	0.00	-0.31***	0.00	0.00	-0.25***	0.00	0.00	-0.30***
MICE									
MICE Total Delegate	0.00	0.00	0.15**						
CPI	2.19	0.26	0.35***	0.68	0.23	0.11**	1.93	0.21	0.31***
GDP per Capita	0.00	0.00	0.24***	0.00	0.00	0.18***	0.00	0.00	0.33***
Japan Dummy	-38.67	5.62	-0.38***	-36.94	3.59	-0.36***	-45.11	3.79	-0.44***
Average Delegate per MICE				0.03	0.01	0.08**			
GDP per Capita Top Source Market				0.00	0.00	-0.39***			
Standardized Average Delegate/MICE							5.29	1.42	0.11***
GDP per Capita Top 5 Source Market Average							0.00	0.00	-0.11**
R2		0.56			0.63			0.57	
F for change in R2		4.35*			8.75**			13.91***	

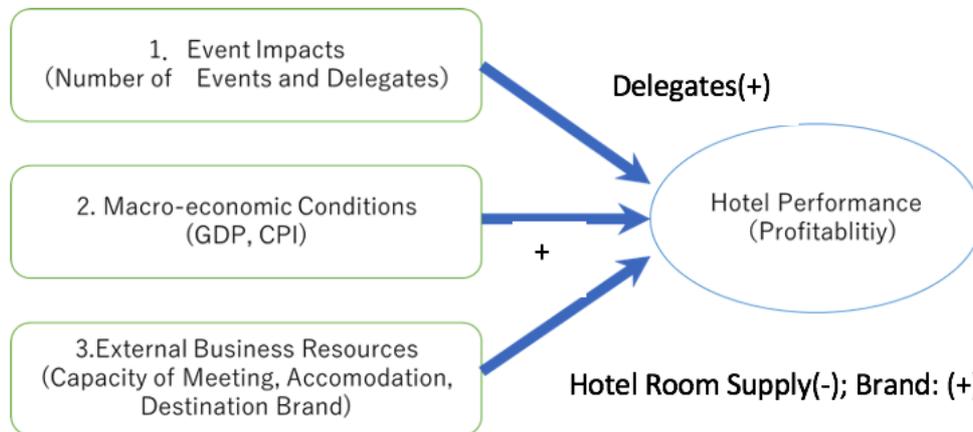
Note: N= 672

\*\*\* :  $p < 0.001$  \*\* :  $p < 0.01$  \* :  $p < 0.05$ 

First, model 1 includes main independent variables such as event impact variables (i.e., number of MICE and delegates of MICE), macro-economic conditions (i.e., CPI and GDP per capita), and, external business resource (i.e., hotel room supply, T&T Competitive Index). This model shows most of these variables show a certain effect instead of number of events. However, as event impact index, total number of delegates may enhance average profitability. Number of events (H.1.a) is rejected but number of delegates (H.1.b) is accepted. High GDP per capita and CPI for level of income indicate increase effects on high RevPAR performance of hotels in cities. Thus, H.2.a and H.2.b are accepted. In terms of external business source effects, high level of room supply decreases profitability of hotels but high competitive index may increase high profitability. H.3.1 is not accepted but H.3.b is accepted. Additionally, as the Japan dummy shows reducing effect of profitability, hotel performance become lower than other Asian and Pacific major cities. It suggest a certain downward tendency of hotel performance in Japanese main cities.

Second, the model 2 shows detail of effects of event impacts and internationalization. As average of delegates per event increase average RevPAR, scale of events is very effective for hotel performance. In terms of internationalization, number of international travelers tend reduce profitability, especially when ones from a country of lower income. Thus, to improve profitability of hotel industry, targeting tourists from countries with higher income appear to be important.

Fig.2. Effects of Main Three Factors on RevPAR



## 5. Discussion and Conclusion

### 5.1 Discussion and implications

Development of MICE in Asian and Pacific major convention cities may enhance area profitability of hotels. First of all, we confirm that high macro-economic conditions tend to enhance profitability. Second, event impact partially increases average profitability of hotels in area. Large number of event delegates significantly enhances area RevPAR of hotels, although the number of events does not affect profitability in any way. Pursuit of scale of events may be effective to enhance profitability of hotel industry in a destination city, but increase of number of events may not be effective to enhance it. However, we see the weak positive relationships between event impacts and profitability index, thus we need much more further consideration on it.

External business resources may affect area profitability of hotels with event impacts. As testing hypothesis 3.a shows good image of destination are likely to enhance profitability. However, large supply of hotel rooms in area may eventually reduce profitability of hotels because of high possibility of oversupply. With large event impacts, hotel manager should carefully make decision of investment to expand rooms, analyzing and targeting desirable MICE-related travelers.

We also find declining trend of profitability in Japanese destinations. Furthermore, in examining correlation between the Japan dummy and other variables, we find that Japanese cities are related with much supply of rooms, lower income level of major inbound tourists, and smaller scale of events than other Asian cities. However, statistical tendencies are relatively weak.

### 5.2 Conclusion

In Asian and Pacific major conference and convention cities, large scale of events and good destination brand may enhance area profitability of hotel industry. Hotel managers may require strategic planner in DMOs or MICE industry to target larger scale of events and improve better brand images of destination. Especially, the Japanese major convention cities should make more ambitious plan to attract large events and appeal their destination images globally, as

Kim et al. (2011) suggests Tokyo is not so attractive convention city in East Asian countries, instead of high safety and well managed transport infrastructure.

### 5.3 Limitations of this study and suggestions for future study

This study has limitations because it is the very first stage of explorative analysis of relationships between hotel profitability, MICE impacts and destination management. The results of this study do not include the latest trends available since the scope of the data covers the years from 2011 to 2017. The study is also limited by the fact that the data only include three Japanese cities and five Asia Pacific cities; therefore, our analysis may not cover all major Asian cities across the board. The economic conditions for the designated years and cities are additional factors that should be considered in future research. Several indices such as profitability, destination brands and external business resources should be modified into appropriate ones, Possible future research topics should include incorporating the latest data, as well as other Asian cities, taking economic conditions into consideration. Especially, we should make further consideration that industries and practices of MICE may be totally changing after Covid 19 pandemic.

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## **Testing mediating role of job satisfaction, autonomy and idea generation on resource support and creative performance**

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### **Abstract:**

This study aims to examine (1) the singular mediation effect of job satisfaction (JS) and perceived autonomy (PA) between resource support (RS) and two forms of creative behavior, Idea Generation (IG) as well as creative performance (CP), (2) the sequential mediation effect of JS-IG and PA-IG between RS and CP. It collected valid data from 180 culinary workers. The findings show that RS indirectly associated with two forms of creative behaviors, mediated by PA, and by both sequential mediators of PA-IG and JS-IG.

**Keywords:** Creative Behavior, Creative Performance, Idea Generation, Job Satisfaction, Perceived Autonomy, Resource Support

### **1. Introduction**

Employee creative behavior is a key factor to differentiate from other organization in a fast-changing environment (Campo, Díaz, & Yagüe, 2014), which leads to organization innovation (Janssen, Van de Vliert, & West, 2004). Food service is a major aspect of tourism destinations. Culinary professionals are generally recognized as experts who maintain the high quality of food and perform creatively within catering operations to achieve success in the hospitality industry (Chuang, Yin, & Dellmann-Jenkins, 2009). They are utilizing their expertise, knowledge and skills for menu creation and performing daily work duties. In addition, times and habits are changing rapidly, culinary workers take the role of creative gastronomist to develop novel dishes in both the commercial and non-commercial sectors to maintain innovation (R. Robinson & Taafe, 2008). Resource support (RS) is one of the important factors for culinary workers to perform creatively.

Physical work condition has been found a positive impact on arousing creative behavior (Young & Corsun, 2010). Organization provides adequate resource and equipment with timely maintenance service are directly affect employee work behavior and attitude. Numerous studies found insignificant relationship between organizational support and creative behavior (Shalley, Gilson, & Blum, 2000), they suggested that the relation may mediate by other related factors. Li and Hsu (2016) reviewed numerous job factors of employee creative behavior research, including organizational encouragement on skill development, indicated that the antecedents may ultimately influence creative behavior via other mediators like work motivation and work stress. Employees with high RS are willing to perform creatively if they perceived satisfaction with their job and other organizational encouragement such as perceived autonomy of freedom. The role of mediators between job characteristic (i.e. resource support) and two forms of creative behavior (i.e. idea generation and creative performance) has yet to be explored and confirmed.

This study proposes and tests the mediating effect of job satisfaction (JS) and perceived autonomy (PA) between employee perception on resource support (RS) and two different forms of creative behavior (i.e. IG and CP). This paper also tests the sequential mediators (JS-IG, PA-IG) between resource support and creative performance.

## 2. Literature Review

### 2.1 *Idea Generation and Creative Performance*

Creativity is divided into process-based, outcome-based and personality-based (Suh, Bae, Zhao, Kim, & Arnold, 2010). They defined process-based creativity as the process of generating ideas, outcome-based being the creative performance and personality-based being the creative cognitive ability to illustrate intrinsic motivation. Process-based and Outcome-based are similar concepts with interchangeable terms, which are Idea Generation (De Spiegelaere, Van Gyes, De Witte, Niesen, & Van Hootegem, 2014) and idea implementation which leads to creative performance (Horng & Hu, 2009b; Leung & Lin, 2018) respectively. This study aims to explore whether a singular mediation of JS and sequential mediation of JS-IG and PA-IG exists between the relationship between RS and creative behavior.

### 2.2 *Resource Support, Job Satisfaction, Creative Behavior*

Physical work conditions with timely equipment maintenance brings a positive impact on employee job satisfaction (Young & Corsun, 2010). Resource support (RS) from the organization, a specific aspects of organizational support, is considered as one of the factors on creative behavior, and defined as available resource related to the task including time, funds, facilities and knowledge (Amabile, Conti, Coon, Lazenby, & Herron, 1996). The adequacy of resource may affect individuals psychologically on their intrinsic value of the given tasks. Therefore, RS can be considered as an essential factor to promote employees' creative behavior. Pursuing studies (e.g. Chen, Shih, and Yeh (2011); Hernández, Salanova, and Peiró (2007)) have further considered RS as an antecedent on creative behavior or as a moderator to investigate the linkage between individual characteristic and creative behavior. Chen et al. (2011) suggested that the level of as the moderator between individual initiative and their creative behavior. Job resource also moderate the effect of work demand and their creative behavior (Hernández et al., 2007). Employees tend to perform creatively to meet high work demand when they perceived an effort-reward fairness (Janssen, 2000). These evidences provide hints that the positive impact of RS on creative behavior, may also relies on employees' job satisfaction. Employees with high RS tends to have a higher job satisfaction, which leads to engage in their work duties and willing to perform creatively. Limited resource towards the work duties are influencing employee satisfaction and performance negatively.

Employees feel meaningful and a sense of pride in their job by being able to use their artistic ability to perform variety of tasks in a challenging environment (Silva, 2006, p. 325. Employee satisfaction is an affective reaction on motivated behavior (Hackman & Lawler, 1971) influenced by intrinsic and extrinsic factors (Herzberg, Mausner, & Snyderman, 2011; Lam, Zhang, & Baum, 2001). Employee with RS may trigger ideas generating behavior for creative performance, and this linkage may mediate by their level of job satisfaction. Satisfied employees tend to engage in their work duties and have a higher CP (Spinelli & Canavos, 2000). In this regard, job satisfaction may bring mediating effect between RS and two forms of creative behaviors (i.e. IG and CP).

### 2.3 *Resource Support, Perceived Autonomy, Creative Behavior*

Job autonomy defined as power and control in decision making process (Li & Hsu, 2016). It makes employees to feel self-determined and freedom to perform creatively from external restrictions and constraints (Spreitzer, 1995). Individuals produce more creativity work or ideas when they perceive themselves to have freedom in accomplishing the given tasks (Amabile et

al., 1996). When there is high liberty in daily work environment and a sense of perceived control on their creative ideas, creativity of individuals is cultivated. Numerous studies already confirmed the impact of job autonomy on creative work behavior (De Spiegelaere et al., 2014; Jaiswal & Dhar, 2017; Wang & Cheng, 2010). It also act as moderator to affect the linkage between leadership style and employee creative behavior (Wang & Cheng, 2010), affective organizational commitment and creative behavior (Jaiswal & Dhar, 2017). The impact of benevolent leadership or affective commitment on creative behavior strengthens when there is a high level of job autonomy exists. Therefore, employees high in PA are more likely to involve risk taking and problem solving, which are expected to foster creative behavior. One of the highlights of this study aims to explore the PA as a moderator between RS and process-based creative behavior, as well as RS and outcome-based creative behavior.

#### *2.4 The Role of Idea Generation*

Creative process could be identified into four-dimensional concept for industrial and culinary development (Cooper, 1983; Harrington, 2005), five-dimension for general culinary innovation (Horng & Hu, 2009a) and seven-dimension for Michelin-starred chefs (Ottenbacher & Harrington, 2007). Although numerous of studies consider creative process into multi-dimensional concept, a large portion of the literature distinguishes the process mainly into two dimensions, namely, idea generation and idea implementation (Krause, 2004; Yuan & Woodman, 2010). Idea generation denotes to the problem identifying and solving process with creative solutions. Idea implementation refers to the process of employees who propose and execute the innovation in the workplace (De Spiegelaere et al., 2014), which leads to creative performance. These dimensions are not considered at sequential process (Scott & Bruce, 1994; Tuominen & Toivonen, 2011), idea generating behavior bring a direct impact on employee creative performance. As mentioned in section 2.2 and 2.3, JS and autonomy may mediate the impact of RS on IG and CP. Therefore, this study proposes the relationship between RS and CP sequentially mediated by JS and IG, as well as PA and IG.

#### *2.5 Conceptualization*

This study aims to use different approaches to explore the mediators between RS and employee creative behavior based on general innovation research to provide value and contribution to organizational behavior literature.

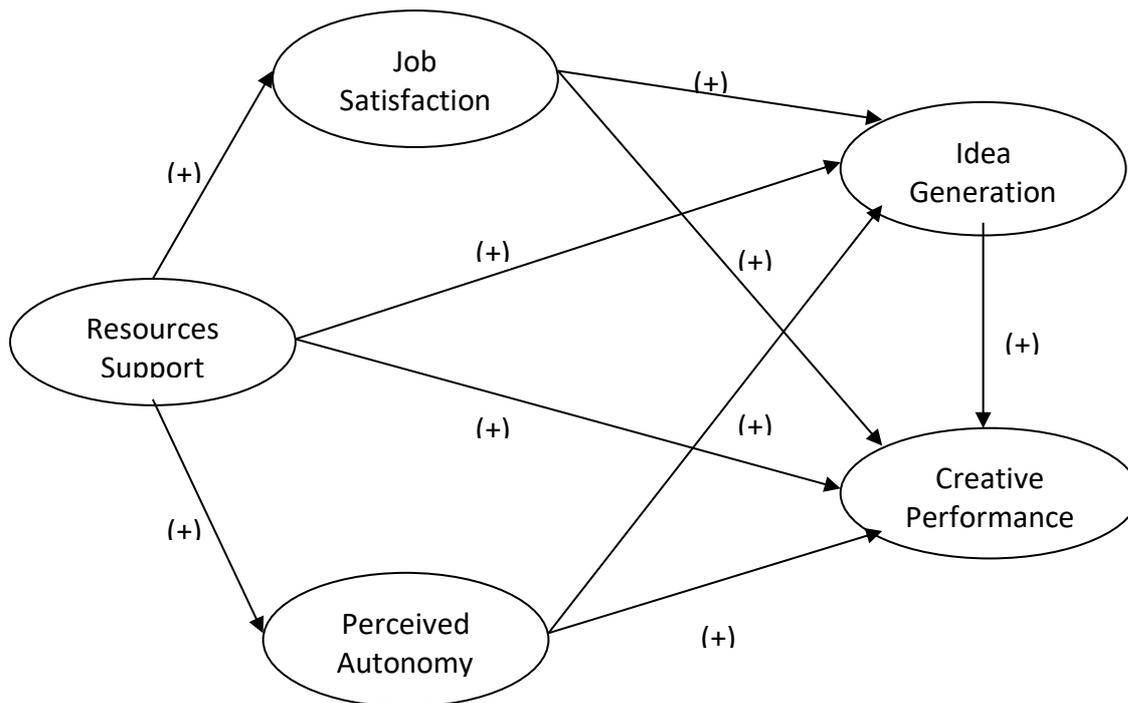


Figure 1 Theoretical Framework

### 3. Methodology

#### 3.1 Measurement

The construction of survey instrument includes two parts. The first part was a 7-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (7) (Likert, 1932) to measure all the variables. Resource support is measured using a 3-item scale adopted from (Amabile et al., 1996) and (Shalley & Gilson, 2004). Perceived autonomy is measured using 3-items scale also adopted from (Amabile et al., 1996). Job satisfaction is measured by a 3-items scale adopted from (R. N. Robinson & Beesley, 2010) to assess the respondents’ agreement on their satisfaction with job in general, work itself and their current organization. Creative behavior is a two-dimensional construct, which includes ideas generation (De Jong & Den Hartog, 2010) and creative performance (Horng & Hu, 2009b). Both dimensions consist of 3-item scale. The second part collected respondents’ demographic and job-related information.

#### 3.2 Data Collection and Analysis Methods

This study collected 180 usable survey from culinary workers in Hong Kong. Descriptive analyses were first performed to describe the demographic and work-related information. This study conducted partial least scale structural equation modeling (PLS-SEM) using SmartPLS 3.0 to test the proposed model. It is a methodological alternative of covariance-based SEM (CB-SEM) in tourism and human resource studies (Hair, Black, Babin, & Anderson, 2010).

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## **Length of industry immersion as a measure of knowledge and skills of the faculty: Basis for a hospitality management training plan**

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### **Abstract:**

The hospitality industry offers services for the satisfaction of its guests. The faculty and students in hospitality should be exposed and trained in hotels and restaurants for the exposure of the actual events in the day-to-day activities of this particular industry.

This study sought to measure the acquired knowledge and skills of faculty based on their length of their immersion which would be a basis for a training plan. This research made use of a qualitative descriptive method that was given to eight faculty members who have undergone training and immersion in a hotel in Manila. An online questionnaire that was validated by three experts was given, followed by a series of interviews for a period of two months. The gathered data was analyzed using the frequency and percentage.

The results showed that during the immersion, most of the faculty gained enough experience, knowledge and skills in the corresponding departments they were deployed but they said that the training was not enough due to the time allotted to them which was only 80 hours. They think that an 80-hour training was not sufficient to make them more skillful and knowledgeable. In addition, the hotel managers who were training them were also busy with their respective works while conducting training. This finding was the basis of a training plan that was created for future immersion of the hospitality management faculty with longer training time and wider experience, knowledge and skills.

**Keywords:** immersion, hospitality industry, knowledge and skills, training plan

### **1. Introduction**

Industry immersion is the actual workplace of a trainee where real-life situations happen. When members of the faculty are exposed in the field, they will experience the authentic day- to-day work of a typical hospitality practitioner. This kind of exposure will enable them to immerse themselves in the industry and update the needed knowledge and skills that make their teaching more valuable as they apply the theories they teach in school. This way, they can guide their students with pertinent and relevant knowledge and skills that are needed in the industry (Hernandez, 2019).

The immersion program has a duration of 10 days which is equivalent to 80 hours of comprehensive training with the industry partners. This will update the hospitality faculty on the latest trends and practices in the hospitality industry and it will also enhance the necessary knowledge and skills that students should possess before and after graduation.

The length of industry immersion plays a vital part in training the faculty members. Their work experience will provide them a different perspective of academic learning, possibilities of growth, and an opportunity to gain a thorough understanding on how to observe proper courtesy, integrity, punctuality and responsibility that they will edify to their students. The knowledge and skills they will gain will not only be limited to the industry skills learned in hotels but will also accentuate the more essential reflective thinking skills and management skills that will help them and their students in their personal development (Learning from work experience,

2019).

The Commission on Higher Education (CHED) requires a program that would promote the Higher Education Institutions in the Philippines to undergo practicum training course that will enhance practical knowledge, skills and attitudes required in the industry (CHED, 2010). The faculty immersion, just like students' on-the-job-training program, could be an effective way of developing a significant training plan for the improvement of the faculty and for the benefit of the students.

In the Philippines, faculty immersion is something new. The government made a massive educational reform program to address the mismatch of college graduates and business sector (Cruz, 2015). To fill this gap, this study sought to measure the knowledge and skills of faculty during the industry immersion as a basis for a training plan.

## **2. Literature Review**

### *2.1 Industry Immersion*

Industry immersion is the authentic exposure to various business sectors that will aid, reinforce classroom learning, and arouse a person's career direction. It motivates trainees the opportunity to explore the industry and engage themselves fully to future workplace that would uplift their personal and professional careers. The immersion is an avenue for a thorough understanding of career opportunities, familiarity with the culture of the company and working environment (Industry Immersion, 2017).

Industry immersion in the Philippines that was announced by the government talks about the higher education faculty members who are teaching in the industry-related courses such as tourism and hospitality and other related courses, who lack or have no experience in the industry. This lack of experience is the primary cause of skills mismatch because they rely more on theory than practice. Immersing these faculty members to the prescribed industry would improve the quality of education as they can directly train their students based on their own experience during the immersion (Cruz, 2015).

The industry or so-called 'the real world' has a totally different environment compared with the four corners of the classroom. A typical college graduate would have gained analytical and individual skills in school. However, the industry employers are looking for prospective employees that possess the appropriate skills who can understand, function, and perform the proper duties through teamwork and customer service skills. The learning that will be gained during the immersion is a preparation to multiple learning in the actual work environment that will help them adjust to the actual work. In addition, it would also prepare them to resolve unforeseen challenges that would improve decision-making skills (Borbye, 2009).

Through this industry immersion, the needed knowledge and skills which is very important in the hotels and restaurants would be gained and may be passed on and shared by the instructors who will be training the students in the confines of their classrooms and mini-hotels situated in their own colleges and universities.

### *2.2 Knowledge and Skills in the Hospitality Industry*

According to Phillpott (2019), the top 10 skills needed in the hospitality industry are customer service skills, cultural awareness, communication skills, multitasking skills, work ethic, language skills, professionalism, teamwork skills, problem-solving skills, and attention to detail. These skills are very important to make a hospitality practitioner succeed in this industry

which is widely geared to service.

According to Doyle (2019), employers seek employees fit for the hospitality industry who possess knowledge and skills in food service, hotel operations, food and beverage preparations, maintenance and cleaning, management, personal skills, and more. Other hospitality knowledge and skills that a future hospitality practitioner should possess in order to have an edge in the industry are commitment, communication skills, computer knowledge, enthusiasm, interpersonal skills, leadership, organization, knowledge in food safety and sanitation, knowledge in hygiene, teamwork, attention to detail, accountability, conflict resolution, and foresight.

According to Detail2 Recruitment (2019), the top 10 skills all hospitality employees must possess are teamwork, multi-tasking, flexibility, attention to detail, industry awareness, time management, communication skills, interpersonal skills, problem solving, and hazard awareness.

According to Career Builder (2017), there are four universally required traits and skills needed to succeed in the hospitality industry such as creative problem solving skills, customer service, teamwork, and food safety. While the list of knowledge and skills are quite endless and some are almost repeating. What is truly important is to make sure to highlight the most important knowledge and skills that will please the customers since this industry is all about people and service.

The length of time allotted in trainings may have an impact on the knowledge and skills that will be gained depending on certain circumstances. A shorter immersion may cause lack of the needed knowledge and skills that should be gained and a longer training or immersion period may be sufficient for the required experience. Thus, a comprehensive training plan for the faculty members should be done for a better training in gaining the necessary knowledge and skills they should be getting.

### *2.3 Training Plan*

A training plan is a “detailed document that guided the planning and delivery of instruction. Whether training people one-on-one or in groups, in person or online, a well-developed training plan allows you to prepare for and deliver thorough and effective classes.”

In developing an effective training plan, Go2HR (2019) suggested some guidelines such as analyzing needs, identifying skill gaps, prioritizing, planning and delivering the training, securing staff commitment, analyzing training efforts and their impact, and thinking long-term. These guidelines would be very helpful for creating an effective training plan like analyzing the right type of training the future stakeholders need and identifying the required skills that would match the trainees’ abilities. Before delivering the training, planning the correct type of training should be considered including the delivery options and most importantly, the budget. Changes from the trainee are expected. However, these changes are long-term investment and will not take effect overnight.

## **3. Methodology**

### *3.1 Measurement*

This study aimed to measure the knowledge and skills of the hospitality faculty based on the length of their immersion as a basis for a training plan. It made use of a qualitative descriptive method of research. Qualitative descriptive research is a comprehensive synopsis of the usual

day-to-day activities and experiences of individuals or group of individuals that produce direct descriptive summary of information (Lambert and Lambert, 2012). The participants consisted of eight faculty members from different universities who have undergone the industry immersion at Pan Pacific Hotel. An online questionnaire that was validated by three experts was given, followed by a series of interviews for a period of two months. The gathered data was analyzed using the frequency and percentage. A training plan (Appendix 1) was created for longer immersion time.

## 4. Result and Discussion

### 4.1 Profile of the respondents

The respondents of the faculty immersion were composed of eight faculty members (4 males and 4 females) from the different private higher education institution.

The instrument was answered through an online survey by eight faculty members who have undergone immersion at Pan Pacific Hotel. All eight of them experienced a two-week immersion that is also equivalent to 80 hours of training at different departments.

Table 1

*Departments Where the Faculty were Deployed*

Department	Frequency	Percentage
Housekeeping	2	25%
Food and Beverage	2	25%
Front Office	2	25%
Kitchen	2	25%
Total	8	100%

Table 1 shows that two of the faculty members or twenty five percent were trained in the housekeeping department, another 25% or two faculty members were trained in the food and beverage department, 25% or two faculty were trained in the front office department, and 25% or two faculty were trained in the kitchen. One hundred percent or all of them were able to improve their knowledge and skills in a span of their training period. During the span of their training, 25% of the faculty garnered knowledge and skills in food and beverage, 25% of the faculty honed their knowledge and skills in bread and pastry, 25% of the faculty got their knowledge and skills in bread and pastry, and the remaining 25% had their knowledge and skills in front office. All of them honed their knowledge and skills in all the departments they were trained. Industry immersion raises conviviality, teamwork, and networking. Immersion develops communication and interpersonal skills (Borbye, 2009).

### Theme # 1. On Customer Complaints

All of the participants were able to communicate and interact with the guests and developed their self-confidence in oral and written communication. However, one out of eight of the

respondents or 12.5% encountered customer complaints.

“I encountered a guest who complained on the soup that she ordered. The soup was not so hot and she wanted it to be served as steaming hot. I immediately addressed the issue by replacing her soup and serving the guest with a very hot soup.”

In any case the respondents encountered customer complaints,

“I would try to empathize with the customer, ask for an apology, and respond accordingly.” “I would try to keep calm, compose myself, and address the complaint immediately.”

“I will tell the guest that everything would be managed more carefully next time.”

“I will first apologize for what happened and do what they ask.” “I will say sorry and tell them it will not happen again.”

“I shall be very apologetic and try to keep the guest calm as possible. I shall offer them an extra service for their next visit.”

“I will stay humble and apologize and try to give them the best that I can.”

“I will be responsible for the mistake and will promise the guest not to commit the same mistake again.”

Theme # 1 talks about the article of Taylor (2019) who mentioned that the phrase ‘The customer is always right’ could be replaced with ‘going the extra mile in hospitality’ may be the more appropriate phrase in today’s world. Suggestions of staying humble and being honest may be respected by a guest especially if extended with deep apology.

Based on the 80-hour training time that was required of them, 50% answered that their training time was enough to acquire the needed knowledge and skills, 25% said that the training time was not enough, and another 25% was not really sure if the training time was enough. Do (2013), in his study said that managers who take charge of training can be stressful due to the training time to train the trainers coinciding with their own working hours.

Participants who thought that the knowledge and skills they acquired during the training were enough to be successful in the field of hospitality were only 37.5% and the remaining 62.5% thought that the knowledge and skills they gained were not enough to make them successful in the hospitality industry. One of the participants said during an interview, that an 80-hour training could be beneficial but very tiring since some of them did not actually worked full-time in the hotel but after office hours or during the weekends. Some were not allowed by the deans and coordinators to absent from their respective classes. That was one of the reasons why they felt they were burdened by the training. For those who answered that the training time was enough had their training during the Christmas break. This way, they were able to work full time in the hotel and were able to concentrate on the training.

## **5. Conclusion**

### *5.1 Conclusion*

The results of this study showed that during the immersion, most of the faculty gained enough experience, knowledge and skills in the corresponding departments they were deployed. However, some of them think that the training time was not enough due to time constraints on the part of both the training managers and the trainees themselves. These findings would be very useful in creating an effective training plan on the time the hospitality faculty would be

deployed for their immersion. Though, not all of them experienced customer complaints, they were ready to handle future guest complaints if such cases arise. Faculty immersion should be given emphasis to bridge the gap between the academe and the industry. In this regard, the deans and heads should allow the faculty to work full-time in the hotel to focus on their training, improving themselves and to impart their knowledge and skills to their students.

### *5.2 Limitations of this study and suggestions for future study*

This study is limited to all the faculty members who undergone immersion at the Pan Pacific hotel. My suggestion for the future researcher to have more additional respondents though faculty immersion is very limited given by the school and industry. For the educational institution is to give more opportunity to their faculty members to be exposed in this kind of immersion for their growth and development. For the industry partner to allow and accept more faculty members to conduct their immersion.

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## **Competencies required for hospitality employees: A review of the past decade**

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### **Abstract:**

This paper presents review research of the past decade on competence for hospitality employees. It aims to find the required competence explored by the previous studies to review and discuss what the competency research can do at the next step. The study adopted a systematic literature review to explore the hospitality competency studies from 2009 to 2019. After eligibility examination, 25 of full-text articles were extracted from the raw pool- 1,699 of records. Insightful results are discussed in the articles.

**Keywords:** Systematic literature review, competency, human resource, hospitality employee

### **1. Introduction**

According to the change of the era, the competency of the hospitality practitioners may be changed. Current hospitality is facing multiple challenges, such as high expectation guests, dynamic work conditions, abundant new technologies (Bharwani & Talib, 2017). The smart hospitality service has already integrated into the customer experience and traditional hospitality employees (Kabadayi, Ali, Choi, Joosten, & Lu, 2019). Previous studies have mentioned that the new smart technology, such as robots, automation, artificial intelligence (AI), virtual reality may affect the traditional human resource structure (Brynjolfsson & McAfee, 2014; McClure, 2017). Therefore, one of the essential elements under human resource management is the competency that may be changed.

Before exploring the competency for the new era that integrating the smart technology, the fundamental competencies of the hospitality practitioners currently should be discussed and revised or added. The previous hospitality competency-related studies were conducted from multiple angles that include different industries, e.g., chefs (Hu, 2010; Zopiatis, 2010), hotel managers (J. S. Horng & Lin, 2013), food and beverage managers (Wang & Tsai, 2012), travel agency managers (Tsai, 2017), private club managers (Koenigsfeld, Kim, Cha, Perdue, & Cichy, 2012), airport ground staff (Cheng-Hua & Hsin-Li, 2012), practitioners in the MICE or event industry (Junek, Lockstone, & Mair, 2009; Tang, 2014), managers in the hospitality industry (Suh, West, & Shin, 2012), different levels of management, e.g., staff, middle managers, senior manager (Cheng & Wong, 2015), entry-level managers (Jiang & Alexakis, 2017), top managers (J.-S. Horng, Hsu, Liu, Lin, & Tsai, 2011), different organizational departments or functions, e.g., revenue managers (Cetin, Demirciftci, & Bilgihan, 2016), foodservice research & development (R&D) employees (Ko, 2015), expatriates (Causin & Ayoun, 2011), or specific purposes, e.g., competencies for sustainable career development (Suhairom, Musta'amal, Mohd Amin, Kamin, & Abdul Wahid, 2019), technical skills for successful management (Ruetzler, Baker, Reynolds, Taylor, & Allen, 2014), leadership (Shum,

Gatling, & Shoemaker, 2018; Testa & Sipe, 2012; Wong & Chan, 2010), hospitality and tourism graduates (Gross, Benckendorff, Mair, & Whitelaw, 2017; Kim, Park, & Choi, 2017; Stansbie, Nash, & Chang, 2016; Xu, Wang, & Wen, 2019). Combined with advancements in technology, the human resource structure will be changed. Therefore, examining, reviewing, and revising the current competency model for the hospitality employees shall be emergent. However, the previous competency-related studies were rarely found the review paper and integrate all the competency, especially in the hospitality industry. A comprehensive competency review research can construct a holistic pic for contributing to understanding the current profiles of the human resource of the hospitality industry. Therefore, the purpose of the study is to explore the comprehensive competency of the hospitality employee through a systematic literature review.

## 2. Methodology

This study conducted a systematic literature review that follows the flow of Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff, Altman, & Group, 2009) to implement the study. First step- identification. This study conducted the search on specific academic journals that were selected by ScienceDirect and which has the full article that could be downloaded and read from 2009 to 2019. Moreover, those journals should be included in SCI or SSCI lists, such as *International Journal of Hospitality Management*, *Journal of Hospitality, Leisure, Sport & Tourism Education*, and *Tourism management*, etc. Furthermore, the keywords were set as “Hospitality competence”, “Hospitality competency”, and “Hospitality competencies”, each column was divided by “OR” during the data collecting. Thus, 1,699 records identified through the database. Second step- screening, the authors screened the titles, abstract, and context of whether they related to the competencies for hospitality employee 1636 of records screened that 63 have already excluded. Third step- eligibility, peer debriefing was involved for the eligibility. 104 of full-text articles assessed for eligibility and 79 of full-text articles have already excluded because those articles only contain the key terms but not constructing a competency model or the studies relate to examine the relations of the variables. The final step- included, 25 studies included in the qualitative synthesis. Finally, the content analysis was adopted to analyze the studies.

## 3. Results

This study focused on competency-related studies during the last decade. Finally, after eligible analysis, the total 25 of articles were recruited for content. The summary of the collected articles that published in four high-quality journals, such as *International Journal of Hospitality Management* (n=14, 56%), *Journal of Hospitality, Leisure, Sport & Tourism Education* (n=7, 28%), *Journal of Hospitality and Tourism Management* (n=3, 12%), and *Tourism Management* (n=1, 4%), those journals are included by SJR ranking (Scopus, 2020) and show high impact factor. (InCites Journal Citation Reports, 2020), e.g., *Tourism Management* (SJR=3.068, Q1; Impact Factor= 7.432).

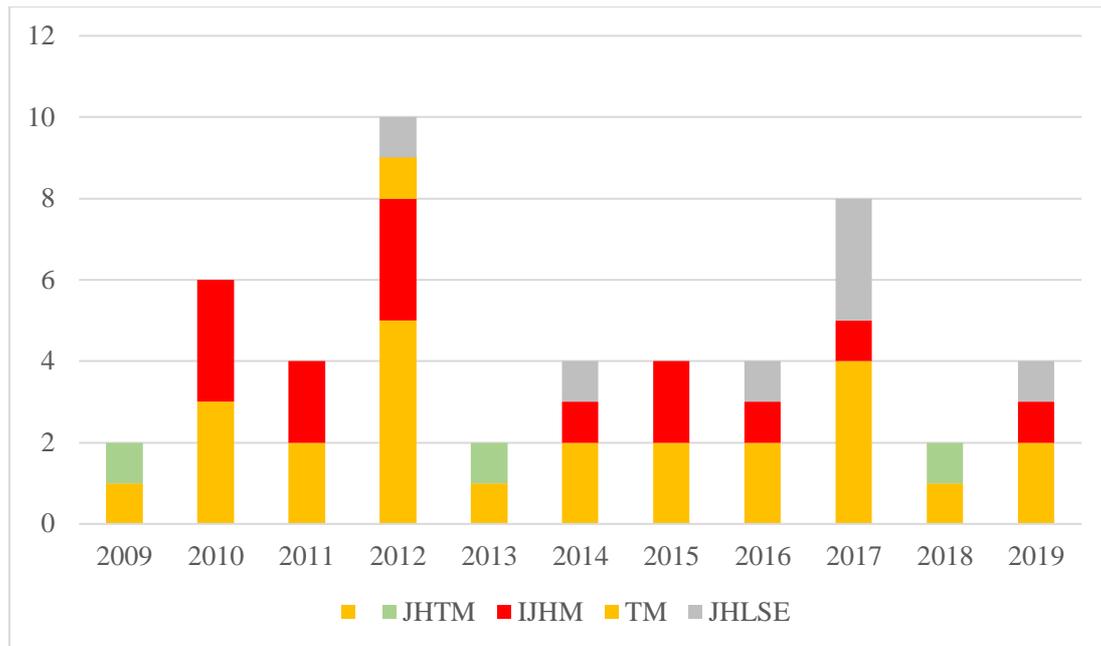


Fig. 1. Frequency of publications, 2009-2019.

The competence has been coded in several contents by peer-review, the total number of categories is 35 such as professionalism and self-management which are the most frequency context (n=20, 9.5%). moreover, under the competency- professionalism, industrial knowledge, skills and attitude, such as knowledge of industry, were integrated into it. Following are, attitude (n=19, 9.1%), interpersonal (n=18, 8.6%), leadership (n=13, 6.2%), managing (n=13, 6.2%), problem-solving (n=7, 3.3%), service (n=7, 3.3%), and another 27 categories. Table 1.

Table 1.  
Number of content

		Number of times	%	C %
1	Professionalism	21	0.09	0.09
2	attitude	19	0.08	0.16
3	interpersonal	19	0.08	0.24
4	Leadership	13	0.05	0.30
5	Self-management	11	0.05	0.34
6	Technology	11	0.05	0.39
7	managing	9	0.04	0.42
8	self-management	9	0.04	0.46
9	Problem-Solving	7	0.03	0.49
10	Services	7	0.03	0.52
11	Analysis	6	0.02	0.54
12	Cooperation	7	0.03	0.57
13	Creativity	6	0.02	0.59

14	Culture	6	0.02	0.62
15	Financial management	5	0.02	0.64
16	Innovative	5	0.02	0.66

#### 4. Discussion and Conclusion

According to the result, the professionalism is mentioned the most frequently that echoes Cheng and Wong (2015) indicated the increasing importance of professionalism in the hospitality for sustainable competitive advantage. The self-management relevant competency is also mentioned by previous studies mostly and it is not only for the occupations but also for the core competency as an individual (J.-S. Horng et al., 2011; Kim et al., 2017). The following competencies are attitude, interpersonal, management these were most important competency in the previous competency studies, not only in the different levels of management but also in the different industries (J.-S. Horng et al., 2011; Tang, 2014; Tsai, 2017).

The result may raise a proposition that the role of technology and the competency model that traditional used general and technical or knowledge, skills, and attitude (KSAs) may not enough to answer the contemporary competency. Professionalism has already included KSAs and general and technical competency; however, personal and interpersonal skills may not pretend by individuals for work or raise in a short time, but that also mentioned by the previous studies. Therefore, future research may explore the meta-competency that connects the professional, personal, concept, and technical together as the holistic model of competence (Le Deist & Winterton, 2005). Besides, as the authors mentioned in the introduction that the hospitality is facing the fast-import of smart technology or new technology. However, the technology-related competency may still weak in the previous study. Therefore, future research should consider exploring more technology relevant competency for constructing a new competency model. For the hospitality industry to search, train, or evaluate the employees and the educational organization to design a curriculum or program to cultivate the students who can stay ahead of the curve.

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## **Hotel employees' perceptions of stress under the COVID-19 pandemic**

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### **Abstract:**

The COVID-19 has caused serious negative consequences as a result of its rapid spread around the world. World Health Organization (WHO) reported on 30 July 2020 that there are more than 16.8 million confirmed cases worldwide, including 662,095 deaths. The number of cases has been expanding globally, with critically travel alert situations.

The deterioration of hotels' financial situations creates a series of actions that caused a sense of job insecurity. For example, hotels have forced their staff to take unpaid leave, advanced annual leave, and change their working positions (Edgecliffe-Johnson, 2020, March 18). These dictatorial management actions have fostered the occupational stress of hotel employees.

Thus, this study sought to examine the impacts of hotel employees' perceived occupational stressors on their consequences under the COVID-19 pandemic. The sample unit of this study is hotel employees in the United States. A total of 758 respondents were used to analyze the proposed conceptual framework through structural equation modeling.

The findings showed that occupational stressors under COVID-19 pandemic consisted of three domains: traditional hotel-work stressors, unstable and more demanding hotel-work-environment stressors, and unethical hotel-labor-practices-borne stressors. The result indicated that hotel employees who had high perceived levels of traditional hotel work stressors show a positive job satisfaction and organizational commitment. This result differs from our expectations and not consistent with previous literature (Chan, Wan, & Kuok, 2015; Yousaf, Rasheed, Hameed, & Luqman, 2019).

Unstable and more demanding hotel-work-environment stressors and unethical hotel-labor-practices-borne stressors are the new domains of hotel occupational stressors that occurred under the COVID-19 pandemic. These two stressors had lowered job satisfaction and organizational commitment. These results are consistent with previous studies that demonstrated the negative effect of occupational stress on employees' attitudes (Cheng & Yi, 2018; Yang & Lau, 2019).

This study is significant in revealing new occupational stressors and their effects on hotel employees' attitudes under the COVID-19 pandemic. In addition, this study indicated that unpredicted economic recession is one of the significant moderators on the relationship between occupational stress and their consequences.

**Keywords:** COVID-19; stressor; job performance; organizational commitment; well-being

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## **The innovation process of tourism/hospitality enterprises--Under the internet celebrity era**

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### **Abstract:**

The service industry has emerged as an experience economy with emphasis on arousing customer emotions and sensations. One of the key success factors in delivering extraordinary service experience germane to the growing emphasis on business innovation. In the context of the rise of the Internet celebrity economy, how to better innovate is a huge challenge facing service companies. This paper investigates the innovation process of enterprises within tourism and hospitality industry from three aspects: purpose of innovation, methods of innovation, and consequences of innovation. It first used a qualitative field research with semi-structured interviews to obtain data from 14 hotels and restaurants located in Guangzhou, China. Data were then transcribed and the coded into categories. We further process the data through UCINET software to depict a social network based on the in-vivo codes extracted from the field study. The social network helps to illustrate a process of enterprise innovation in with nodes and paths delineate how innovations are linked with key criteria. Results show that the consequences of innovation are not always positive and may not always be in line with a company's original goal. Also, the purposes of service company innovation vary depending on enterprise's life cycle: start-up period, growing period and mature period. This research aims to provide relevant reference to decision-making for service companies that want to innovate. It helps tourism and hospitality enterprises to not only to better develop appropriate innovation strategies, but also to cope with innovation failures.

**Keywords:** tourism/hospitality enterprises, innovation process, qualitative research. social network analysis

### **1. Introduction**

With the advent of the service economy, the service industry has become increasingly important in the production of society, and has gradually become the center of socioeconomic life and the focus of market competition. Innovation, an important way for enterprises to maintain their competitive advantages and achieve sustainable growth, has attracted more and more attention from operators. A major problem to be solved urgently is how to improve the core competitiveness of service industry enterprises and promote social and economic development in the service economy era through correct and reasonable innovation. At present, most of the research on innovation focuses on manufacturing or emerging technology industries and mainly involves the definition and classification of related concepts, organization and process management, performance evaluation, and dynamic benefits of related factors. Domestic scholars have not conducted in-depth and systematic research on the

specific innovation process of the service industry. In order to better provide effective and reliable decision analysis to service industry managers, it is extremely urgent and necessary to conduct in-depth research on the innovation process of the service industry.

This study will focus on the innovation process of service companies. The innovation process includes three aspects: the purpose of innovation, the methods used in the innovation process and the results achieved by innovation. Specific questions including: What are the innovation goals of service companies? What methods will be used in the innovation process? What will be the result of innovation? What is the entire innovation process of service companies? Through the in-depth understanding of several innovation cases of service enterprises, this study summarizes and analyzes the innovation process of service enterprises from three aspects: purpose, methods and results. This study will enrich the relevant research on the innovation process of domestic service industries and provide more references for the innovation decisions of service companies.



**Figure 1 The innovation process model**

## 2. Literature Review

### 2.1 Enterprise Innovation Process

At present, most of the research objects on enterprise innovation process focus on emerging industries or technology industries, and the research content focuses on the dynamic effects of factors such as the ability evaluation of innovation processes, process management, and process influencing factors.

There is less research on innovation processes in service or tourism companies. Some scholars believe that the service innovation process is a more complicated process than technological innovation, including complex internal and external interactions (Sundbo, & Gallouj, 2000). And enterprise service innovation can be divided into customer-oriented incremental service innovation and competitor oriented radial service innovation, both of which lead to greater market performance and in turn, better financial performance (Cheng, & Krumwiede, 2010).. It is worth noting that, compared with traditional product and process innovation research, service-oriented service innovation research considers organizational innovation more, and the results of innovation do not necessarily appear as tangible products, but as a conceptual, process sexual innovation activities have obvious intangibility.

### 2.2 Enterprise Innovation Purpose

Research on motivation of innovation is mainly based on individuals and organizations. For corporate, research focuses more on the innovation motivation of manufacturing, technology industry, and national enterprises in enterprises, and relatively little research on innovation motivation of service enterprises.

Research on Chinese enterprises' Eco-innovation shows that different motivations have different effects on the performance of ecological innovation (Dong, & Cai, 2012). Five specific firms are detailed in Linsu Kim's study to help illustrate that, in spite of a lack of

financial and organizational resources, small firms can find ways to overcome their shortcomings. (Linsu Kim, 1997) Past case study has also found that when the knowledge base of an industry is wide and constantly expanding, there will be expert companies specialized in specific knowledge modules, and the starting point or trajectory of innovation will change from individual companies to the knowledge exchange network between organizations. (Powell, 1996).

### *2.3 Enterprise Innovation Methods*

In 1984, Barras proposed the "reverse product cycle theory", which is not only an in-depth study of innovative methods and methods for the service industry, but also a groundbreaking and pioneering work. Later, based on the integrated innovation method, some scholars unified the innovation of products and services, and identified six types of innovation models: fundamental innovation, improved innovation, progressive innovation, specialized innovation, reorganized innovation, and form Innovation (van der Aa, Wietze, & Elfring, Tom, 2002). However, there are few studies on service innovation methods in China.

## **3. Methodology**

### *3.1 Data collection*

This study collected data from 14 service enterprises, and the data acquisition methods are mainly field research and offline interviews, supplemented by data collected online. Through in-depth interviews with the principals or employees of 12 enterprises, 12 pieces of effective interview data were obtained. Among them, interviews of 10 companies were conducted during field surveys, namely Van Gogh SENSES Bistro, SONG Chinese Cuisine, Guangdong Nanmei Osotto Hotel, Coconut Dessert, Four Season Hotel, Xiangtianxia Hot Pot Restaurant, Miyama café, Grand Mercure Hotel Guangzhou, Tan Ice-cream and MAYS. We also conducted offline interviews with C-trip and Ecwalk employees, but did not conduct field research. In addition, Sanqi Guizi Shili Hehua and Backstreet restaurant were not interviewed, so we obtained relevant data through field survey and Internet search data.

### *3.2 Data analysis*

In data analysis, first, the recordings during the interview are transcribed, and relevant data recorded during the interview and data search are supplemented. Second, according to the three parts of the innovation process model, extract the corresponding sentences in the original text that are consistent with the purpose, methods, or result of the innovation, and then briefly explain them, that is, the three-level title. Finally, the group members discuss the coding of the text, and merge phrases or words with the same or similar meaning level by level, that is, the first level title and second level titles. The results after data processing are shown in Form 1.

Form 1 The first and second level title after data processing

Innovation purpose		Innovation methods		Innovation result	
the first level	the second level	the first level	the second level	the first level	the second level
Pursuit of leadership		Innovation in decoration and design	Facilities	Increase of reputation	Popular on social media
Taking responsibility within the industry			Themes and style	Receiving honor	Honors in catering
Making up the market			Decoration		Other honors
Differentiation	Competing	Innovation in product	Product	Increase of revenue	Increase in flow of people
	Owner's preference		Concept		Increase in business
Spreading ideas	Brand image		Product appearance	Increase of customer loyalty	
	Sharing ideas/Concepts	Service	Being imitated		
	Customers' experience	Innovation in product management	Background operating system	Maintaining the leading status	
	Culture		Product system	Not obvious	
Customer management	Retaining customers	Collection of formats	Management model		
	Increasing customers		Formats		
			Multifunctional aggregate		
		Extension of business			

After text encoding, each enterprise will be re-corresponded with its innovation purpose, methods and results to present the complete innovation process of each enterprise, and visualized with the help of UCnet software to further analyze the common features existing in the innovation process of each enterprise.

### 3.3 Enterprise classification process

In order to further understand the innovation behavior characteristics of service enterprises in different development stages, this study further classifies the enterprises according to their development stages.

According to the theory of enterprise life cycle, Churchill N · C and Lewis V · L develops a model that delineates five stages of firm development. These stages are: (1) existence--concerned with garnering customers and delivering the product or service contracted for; (2) survival--firms have demonstrated that they are workable business entities, but the key question

becomes whether there is enough money for the firm to break even and stay in business; (3) success--here the decision facing owners is whether to exploit the company's accomplishments and expand or keep the company stable and profitable, providing a base for alternative owner activities; (4) take-off--concerned with how to make the firm grow rapidly and how to finance this growth; and (5) resource maturity--companies have the advantages of size, financial resources, and managerial talent and will be a formidable force in the market if they retain their entrepreneurial spirit. (Lewis, V. L. , & Churchill, N. C. ,1983)

In view of the continuous improvement of the enterprise life cycle theory, this paper combines the above models and other theories to classify the 14 companies in this survey. In the end, it was divided into four stages: entrepreneurship, growth, maturity and recession. And enterprises in each stage have their own characteristics. The classification results are as follows.

Form 2 The classification of enterprises

Enterprises' development stage	Enterprises
Start-up period	Miyama café Grand Mercure Hotel Guangzhou Tan Ice-cream
Growing period	MAYS SONG Chinese Cuisine Sanqiu Guizi Shili Hehua Coconut Dessert Van Gogh SENSES Bistro
Mature period	C-Trip Ecwalk Guangdong Nanmei Osotto Hotel Backstreet Restaurant Xiangtianxia Hot Pot Restaurant
Recession period	None

## 4. Results

### 4.1 Results for unclassified companies

The coded first and second-level titles are used to describe the characteristics of the innovation behavior of service industry enterprises, and they are converted into a directed value matrix result through UCnet software (see Figure 13-24). The thickness of each line is determined by the strength of the relationship (the number of companies that choose this path). The size of each node in the graph is determined by the degree, represented by numbers on nodes. "Out degree" refers to the total number of nodes directly pointed to by the node, which is used to observe the tendency of enterprise innovation purpose. "Betweenness degree" refers to the number of times a node acts as the shortest bridge between two other nodes, which is used to observe the tendency of enterprises to choose innovative methods. "In degree" refers to the total number of nodes directly pointing to this node, which is used to observe the innovation results that enterprises often achieve.

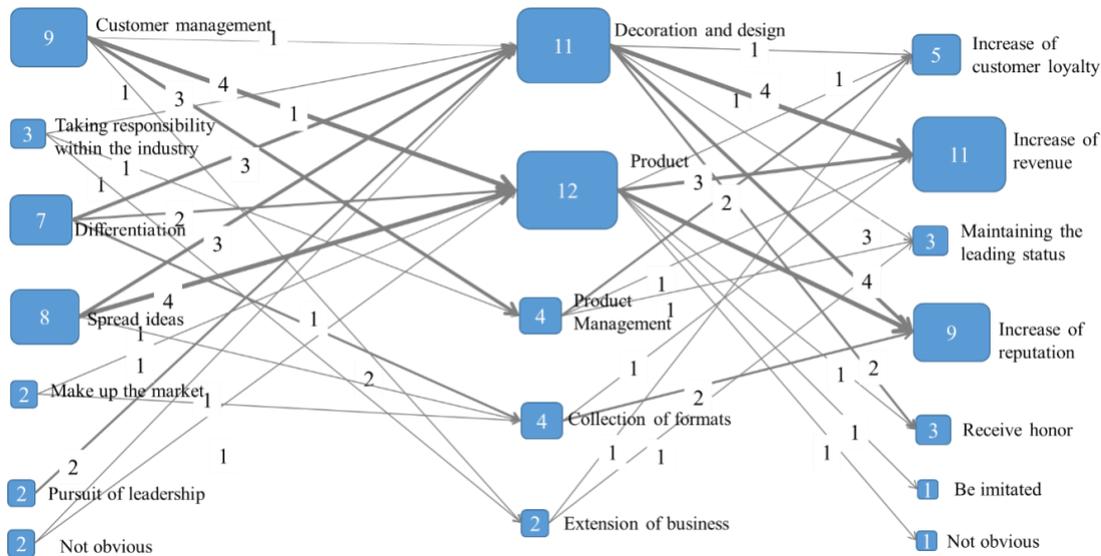


Figure 2 Visualization results of the first-level titles of enterprises

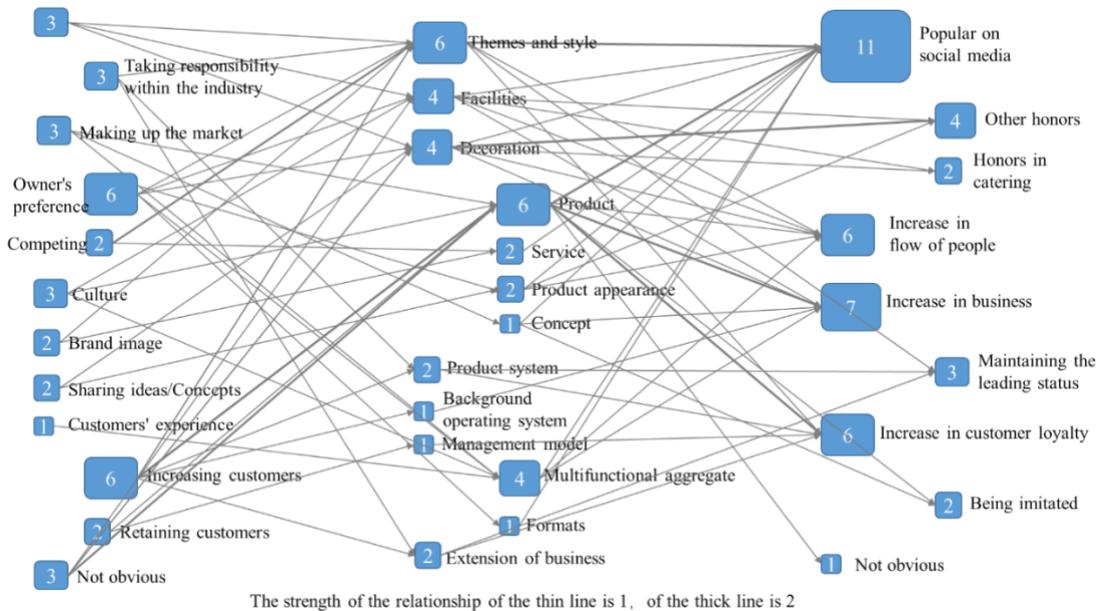


Figure 3 Visualization results of the second-level titles of enterprises

The study found that the purposes of service company innovation and the innovation methods used to achieve a certain purpose are diverse. The results obtained by using the same innovation methods are usually more than one, but not all results are positive and may not all results are in line with corporate innovation goals. According to the number of occurrences in the innovation path, the first-level titles of innovation purpose, innovation methods, and innovation result are ranked from large to small. Innovation purpose: customer management, spreading ideas, differentiation, taking responsibility within the industry, pursuit of leadership / make up the market / not obvious. Innovation methods: innovation in product, innovation in decoration and design, innovation in product management/ collection of formats, extension of business. Innovation results: increase of revenue, increase of reputation, increase of customer loyalty, receiving honor/ maintaining the leading status, being imitated/ not obvious.

Innovation in product, the most frequently used innovation methods in the first level titles, has the second level titles focuses on the innovation in product appearance. It is customer-oriented innovation, with customer management being the purpose of innovation. In addition, the phenomenon that an enterprise becomes popular on social media is an important manifestation of the increase in corporate visibility, and it often appears in the innovation results along with the “increase in flow of people” and “increase in business”. Even if becomes popular on social media is not necessarily in line with the company's original innovation purpose, the flow of people and business that accompany it will still bring revenue growth to the company in the short term. Therefore, most enterprises do not resist becoming popular on social media, but they will take other measures to transform the short-term benefits brought by it into long-term benefits in long-term operations.

The main results for all interviewed companies are as Form 1.

Form 1 Main results for all interviewed companies

Innovation purpose	Main innovation methods used	Main innovative results achieved
Differentiation	Innovation in product, Innovation in decoration and design, Collection of formats.	Increase of revenue, Increase of reputation, some enterprises can obtain industry honor.
Customer management	Innovation in decoration and design, Innovation in product managemet, Innovation in product, Extension of business.	Increase in customer loyalty, Increase of revenue, Increase of reputation, Maintaining the leading status, Being imitated.
Taking responsibility within the industry	Innovation in decoration and design, Innovation in product managemet, Extension of business.	Increase of customer loyalty, Maintaining the leading status.
Pursuit of leadersip	Innovation in decoration and design.	Increase of revenue, Receiving honor.
Spreading of ideas	Innovation in decoration and design, Innovation in product, Collection of formats.	Increase of revenue, Increase of reputation, some enterprises can obtain industry honor.
Make up the market	Innovation in product, Collection of formats.	Increase of revenue, Increase of reputation, Being imitated.
Not obvious	Innovation in decoration and design, Innovation in product.	Increase of revenue, Increase of reputation, Not obvious.

4.2 Results for companies at different development stages

4.2.1 Brief Analysis of Results of UCNET Software

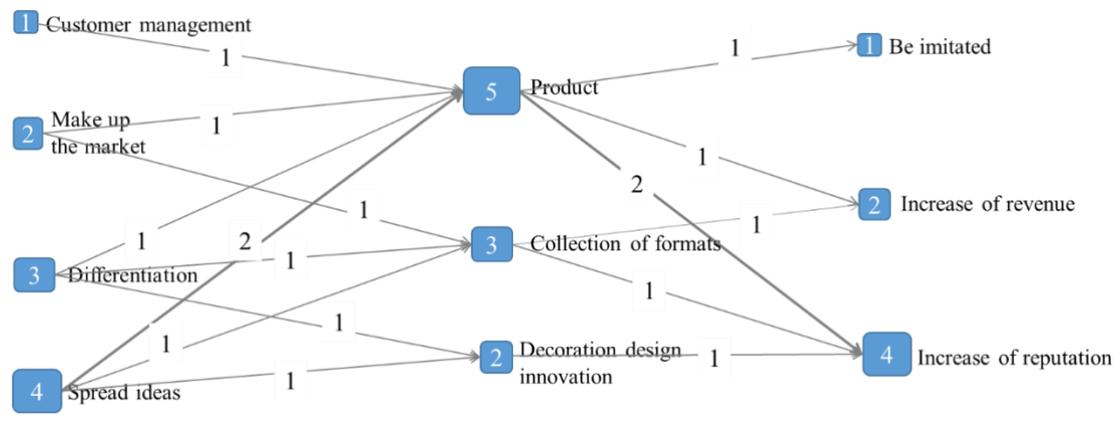


Figure 4 Visualization results of the first-level titles of enterprises in start-up period

Visualization results of the first-level titles of enterprises in start-up period show that “Spreading ideas” is the innovation purpose mostly chosen by companies, followed by “Differentiation”, “Making up the market” and “Customer management”. “Innovation in product” is the innovation methods that mostly chosen by companies, followed by “Collection of formats” and “Innovation in decoration and design”. “Increase of reputation” is the innovation result that mostly appear, followed by “Increase of revenue”. “Spreading ideas – Innovation of product” is the innovation process between purpose and methods that mostly chosen by companies. Regarding the innovation process between methods and results, “Innovation in product – Increase of reputation” is mostly seen.

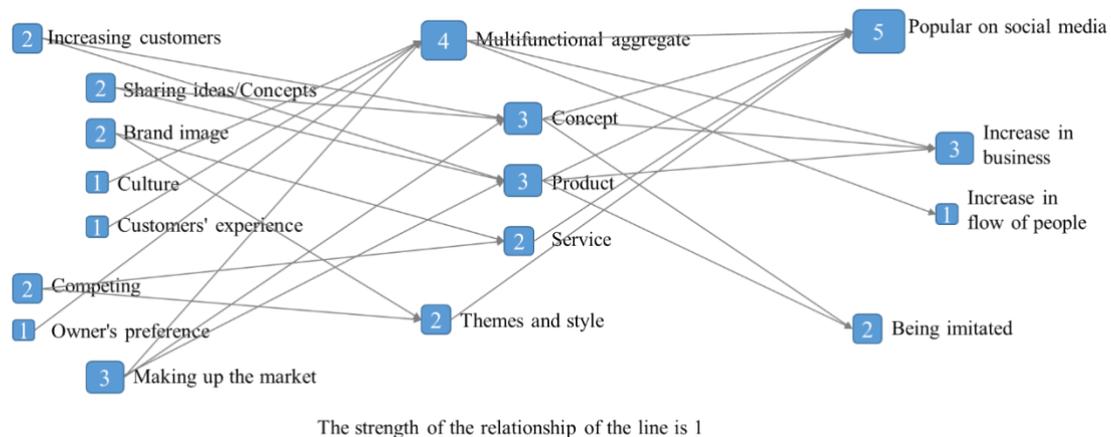


Figure 5 Visualization results of the second-level titles of enterprises in start-up period

Visualization results of the second-level titles of enterprises in start-up period show that companies have an even choice in the innovation purpose. “Multifunctional aggregate”, “Product” and “Concept” are the innovation methods mostly chosen by companies. “Popular in social media” is the innovation result mostly seen, followed by “Increase in business”. In a

whole, subdivision of the first-level titles has made innovation processes of enterprises more scattered and thus typical innovation paths could hardly be found.

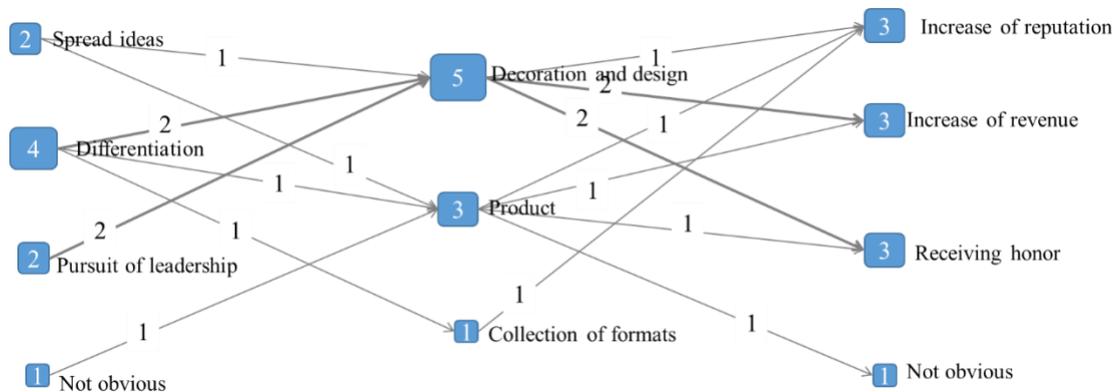
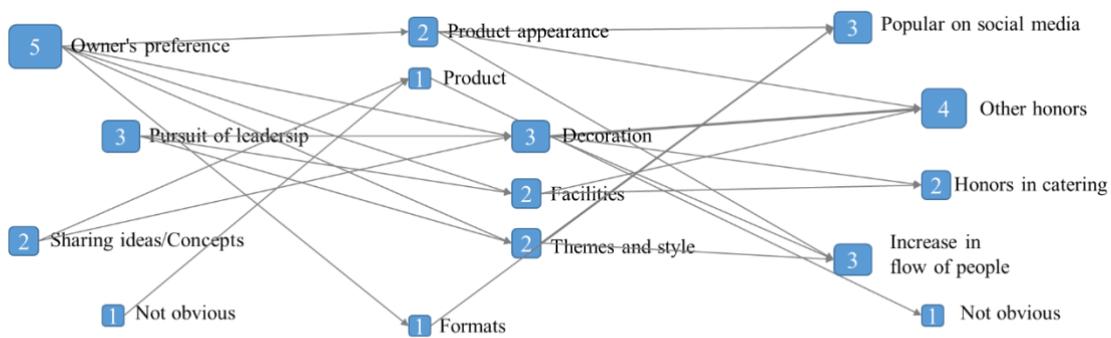


Figure 6 Visualization results of the first-level titles of enterprises in growing period show

Visualization results of the first-level titles of enterprises in growing period show that “Differentiation” is the innovation purpose mostly chosen by companies, with other purposes are chosen quite evenly. “Innovation in decoration and design” is the innovation methods mostly chosen by companies, with “Innovation in product” following and “Multifunctional aggregate” the least. Regarding innovation results, “Increase of reputation”, “Increase of revenue” and “Receiving honors” appears same number of times. “Differentiation – Innovation in decoration and design” is the innovation process between purpose and methods that mostly chosen by companies. As for the innovation process between methods and result, “Innovation in decoration and design – Increase in revenue/Receiving honors” are more often to be seen.



The strength of the relationship of the thin line is 1, of the thick line is 2

Figure 7 Visualization results of the second-level titles of enterprises in growing period show

Visualization results of the second-level titles of enterprises in growing period show that “Owner’s preference” is the most typical innovation purpose, with “Pursuit of leadership” also frequently chosen by companies. “Decoration” is the innovation methods that mostly chosen by companies, with “Product appearance”, “Facilities” and “Themes and style” also frequently chosen. Regarding the innovation results, “Other honors” appears most often, followed by “Popular on social media” and “Increase of flow of people”. In a whole, subdivision of the first-level titles has resulted in the more scattered innovation methods, with “Decoration – Other honors” appears to be the most typical innovation process between methods and result.

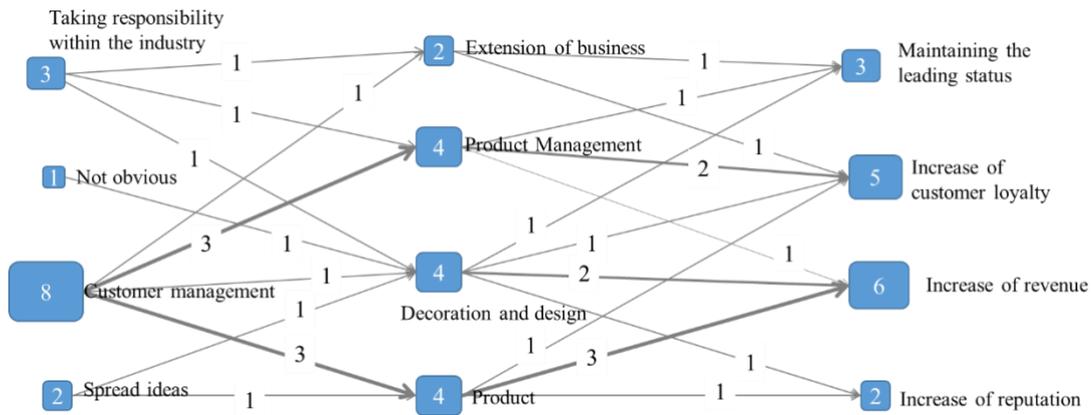


Figure 8 Visualization results of the first-level titles of enterprises in mature period

Visualization results of the first-level titles of enterprises in mature period show that “Customer management” is the innovation purpose most often chosen by companies, followed by “Taking responsibility within the industry” and “Spreading ideas”, with some companies don’t have specific purpose. “Innovation in decoration and design” is the innovation methods that mostly chosen by companies, followed by “Innovation in product” and “Innovation in product management”. “Increase of revenue” is the most common innovation result, with “Increase of customer loyalty” following it. “Customer management – Innovation in product/Innovation in product management” are more often to be chosen by enterprises as the innovation process between purpose and methods. While in process between methods and results, “Innovation of product – Increase of revenue” and “Innovation in product management – Increase of customer loyalty” are more common.

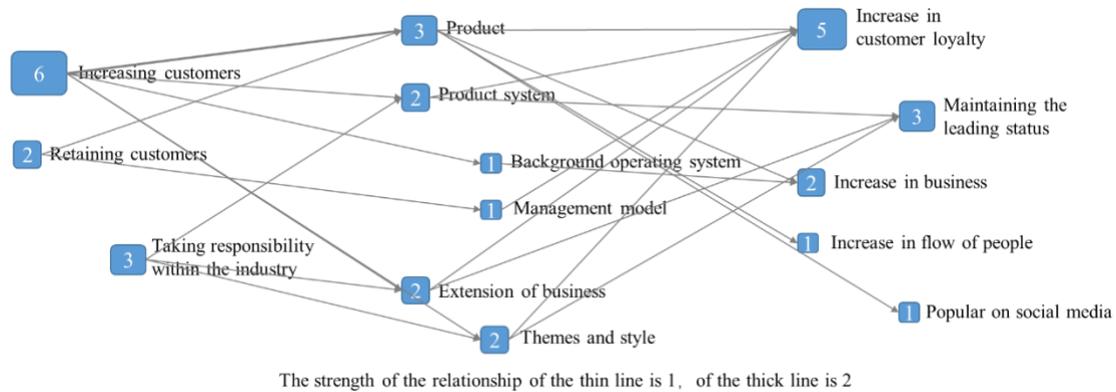


Figure 9 Visualization results of the second-level titles of enterprises in mature period

Visualization results of the second-level titles of enterprises in mature period show that “Increase of customer” is the main purpose of enterprises’ innovation, while “Retaining customers” and “Taking responsibility within the industry” are not often preferred by companies. Regarding the innovation methods, “Product” is most popular methods compared with others. As for the innovation results, “Increase of customer loyalty” appears most often, followed by “Maintaining the leading status”. Generously, subdivision of the first-level titles leads to more concentrated innovation purpose and more scattered innovation methods of

companies. A typical process that we see between innovation purpose and methods is “Increase of customer – product”, which is preferred by a number of enterprises.

#### *4.2.2 In-depth Analysis of Visualization Results of the First-level Titles*

From the perspective of the complete innovation process, the enterprises in the three different development stages are quite different and have their own distinct characteristics.

Most of enterprises in start-up period choose to achieve the purpose of spreading ideas by making innovation in product. This is possibly because startups are mostly creative and adventurous. Entrepreneurs who want to substantiate the ideas that they want to convey would usually choose products as the material carrier to carry out the ideas thus innovation of product become an important methods. Also, compared to enterprises in mature period, enterprises in start-up period are more limited on funds, which methods they can hardly afford innovation in other aspects except for core products. At last, results of product innovation for those enterprises mostly come out to be the increase of reputation. Although this result seems to deviate from the essential purpose, there is no denying that it is beneficial to the start-ups as it lay a solid foundation for their future sustainable development. Only when their reputation enhance can they better survive in the market and carry out more follow-up work such as launching activities and new products. A good example of start-ups is Miyama café, who brings a considerable amount of flow to the store by creating unique themes and exquisite wedding products, and independently develop desserts and drinks. Miyama café has become popular on social media, which lay the foundation for their future development and the achievement of their ultimate goal of spreading a unique wedding culture.

Enterprises in growing period usually aim to achieve differentiation and disseminate ideas, with some of them aim to pursuit leading role in the industry, which is actually consistent with the development goals and characteristics of the companies at this stage. Companies at growing stage have survived in the initial competition and they hope to stand out in the industry. In this stage, they take differentiated competitiveness as the core, and striving to disseminate corporate ideas to further improve corporate influence. Compared to the enterprises in start-up period, enterprises in growing period have more sufficient funds, which methods they can afford innovation activities of larger scale. Result of this study show that they are more likely to choose innovation in decoration and design, which is manifested as a pioneering design innovation among peers and reflects the company's new marketing ideas. Results of receiving honors and increasing revenue, which are led by the innovation of decoration and design, are definitely beneficial for enterprises that want to grow further.

For enterprises in mature period, which have accumulated a certain number of customers through long-term development, they strike great importance in customer management to consolidate their position in industry and delay the onset of the recession. To achieve this, they are likely to maintain customers by innovating in products and product management. What needs to be aware of is, innovation of products here is completely different from that in start-up period, which is research and innovation of core products, while product innovation of mature companies focuses more on vertical or horizontal extension based on the original business or products. What's more, mature companies have more opportunities on trials of errors because of sufficient funds. They provide old customers with better customer experience by continuously broadening the business areas involved and launching more comprehensive products. At the same time, new products and business can enhance check of a single customer, which bring enterprises the increase of revenue. C-trip performs well in this. To hold on its existing customers, C-trip keep innovating in product. With delightful product and services

such as visa application and expedited protection being developed, C-trip has successfully made its customers more loyal and its revenue increase considerably.

#### 4.2.3 In-depth Analysis of Visualization Results of the Second-level Titles

Overall, the whole innovation processes shown in visualization results of the second-level titles, including start-up period, growing period and mature period, appear to be scattered, with almost no typical innovation path to be found.

Innovation purposes of start-up enterprises are varied and scattered, while that of growing and mature enterprises are more concentrated. This is because most of star-up companies are still at the exploratory stage and they innovate for a variety of reason. However, for companies in growing period and mature period, the decision-making process is relatively procedural and has a relatively fixed paradigm, so these companies have a more unified purpose of innovation.

In terms of innovation methods, mature companies have relatively diversified innovation methods, and background innovation such as innovation in backstage operating system and management model have emerged. Such innovation methods are mainly convenient for employee operations and corporate management, and are difficult for customers to detect. On the one hand, mature companies have sufficient funds to try various innovative methods. On the other hand, companies at this stage hope that they can use new and non-popular innovative methods to stimulate corporate vitality and delay the arrival of the recession.

In terms of innovation results, it can be found that the results of innovation in the start-up and growth stages are centered on short-term effects, such as: being popular on social media, improvement flow of people or business and bringing honors. While the results of innovation in mature companies focus on maintaining leadership status, enhancing customer loyalty and other long-term effects.

In addition, the innovation process of mature companies focuses on customer-related aspects. The main purpose of innovation is to retain customers and increase customers. The most commonly achieved innovation result is increase of customer loyalty. There is almost no customer-related purpose or result in the process of corporate innovation during the growth stage. It reflects the importance of customer loyalty to the long-term development of the company as the company gradually expands, and this can explain why mature companies prefer to innovates with this focus.

Form 4 Brief Conclusion for First-Leveled Typical Purpose, Methods and Results of Enterprises in Different Periods

	Start-up Period	Growing Period	Mature Period
Innovation Purpose	Spreading ideas	Differentiation / Pursuit of leadership	Customer Mangement
Innovation Methods	Innovation in Product	Innovation in decoration and design	Innovation in Product / Innovation in product management
Innovation Results	Increase of reputation	Receiving honors / Increase of revenue	Increase of revenue / Increase of customer loyalty

Form 5 Brief Conclusion for Second-Leveled Typical Purpose, Methods and Results of  
Enterprises in Different Periods

	Start-up Period	Growing Period	Mature Period
Innovation Purpose	No typical purpose	Owner's preference	Increase of customer
Innovation Methods	Multifunctional aggregate	Innovation in decoration	Innovation in product
Innovation Results	Popular in social media	Other honors	Increase of customer loyalty

## 5. Discussion and Conclusion

### 5.1 Discussion and conclusion

It is found that the purpose of enterprise innovation is diverse, and the innovation methods and results of the same innovation purpose will be different. The innovation result of an enterprise in the short term may not be consistent with its goal, but it can be maintained or be transformed by effective measures, to achieve the initial innovation purpose of the enterprise.

In each stage of the company's life cycle, due to the impact of objective conditions such as the company's situation, capital reserves, and customer accumulation, the choice of innovative methods and the results brought by the market are different. The innovation purpose of the start-up period is mainly to spreading ideas, and the result achieved is mainly to increase reputation. Although it is different from the purpose at the beginning, it can lay a good foundation for subsequent development. Most growth-stage companies aim to achieve differentiation and spread ideas, and hope to stand out from the industry after surviving from the entrepreneurial process. Most of them use decoration and design innovation as an innovative method to receive honors and increase revenue. After a long period of development and accumulation, companies at mature period pay more attention to customer management. They tend to use product innovation and product management innovation to bring about increased revenue.

The innovation process of enterprises at all stages is relatively scattered. Relatively speaking, growth-oriented and mature companies have more programmatic decision-making processes, so their innovation goals will be more concentrated. While mature companies have sufficient cash flow and hope to use non-popular innovation to stimulate corporate vitality. Therefore, the innovation methods adopted will be more dispersed and diversified.

### 5.2 Limitations of this study

The shortage of this study is mainly the insufficient number of samples, and the lack of in-depth research on different types or in different life cycles of service enterprises. In addition, because the coding and analysis of the text are based on the interview results of the internal personnel of the enterprise and the joint discussion of the group members, there is inevitably a certain subjectivity. The final results have certain reference significance, but its universality still needs to be improved.

Therefore, future research can be based on this research, for a specific industry or companies in a specific enterprise life cycle, and collect a larger sample size to obtain more universal results. Extending from this research, future research can continue to explore the consistency between the innovation results and the innovation purpose.

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**Do you still want to work in hotels? A quantitative analysis of hotel and tourism undergraduate students in Hong Kong**

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**Abstract:**

This study aims to explore students' intention to work in the hotel industry and significant factors affecting their intention to stay or leave the hotel industry. Based on the survey responses provided by 189 undergraduate students majoring in hotel and tourism management in Hong Kong, the results show students are less likely to work in the hotel industry if they are more aware of the characteristics of hotel jobs. However, students are more willing to work in the industry if they have a stronger belief to receive better payments or benefits and have more opportunities to get promoted in hotels.

**Keywords:** Hotel and Tourism Education; Millennials; Career Intention

## **Teaching and learning interpersonal communication: Perspectives of hospitality students**

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### **Abstract:**

Interpersonal communication skill is one of the key competencies in hospitality. However, research indicates that hospitality graduates have inadequate interpersonal skills when they join the industry. This study explored the current teaching methods used along with the factors that affect teaching and learning of interpersonal communication skills among hospitality students. The study employed a mixed research method through online self-assessment test and focus group discussions. Most of the students assessed themselves to have average level of interpersonal communication skill in the areas of verbal communication, listening, emotional intelligence, and working in groups. Teacher's personality and competence, authenticity, resources, class environment, size and duration are perceived to facilitate teaching of and learning interpersonal communication skills through integration of traditional, online, and learner-centered methods. The results have implications to curriculum design, identification of learning outcomes, teacher training, academic support, and linkages.

**Keywords:** teaching and learning, interpersonal communication, teaching methods, hospitality, factors affecting learning

### **1. Introduction**

Interpersonal communication is generally defined as the process through which people express, interpret, and coordinate messages to create shared meaning, meet social goals, manage personal identity, and carry out relationships. It is also considered as a soft or people skill. Crawford and Weber (2016) published a study entitled, *Developing Soft Skills for Future Hospitality Leaders: A Case Study*. The article presented the importance and application of soft skills, including interpersonal communication, in the hospitality industry. The study also presented the evolution of competencies for hospitality management trainees from 1980s. Over the years, the competencies that remain relevant are soft skills of communication, customer focus, interpersonal skills, and leadership. Interpersonal communication has long been recognized as a crucial success factor in hospitality industry (Plangpamool, n.d.). Literature has consistently stressed the importance of effective interpersonal communication skills in the workforce. Educational institutions have the huge responsibility of producing employable graduates who meet the requirements of the industry. However, some studies indicate that there remains a mismatch between what the students learned and what the industry needs. In a study conducted by Lolli (2012), his findings revealed that the entry-level hospitality leaders believed that interpersonal communication skills are very important. However, the respondents perceived that their college curriculum did not prepare them enough to be competent interpersonal communicators. Lolli (2013) furthered this argument in another study claiming that entry-level hospitality leaders rated the importance of interpersonal communication skills as higher compared to their level of preparedness.

This study is conducted on the assumption that the classroom experience of hospitality students must be geared towards attainment of this essential soft skill. As future shapers of the industry, it is highly relevant to assess the students' current interpersonal communication skills, explore

the teaching methods used, and determine how the hospitality curriculum can facilitate teaching such skills in the classroom or instruction level. Giving a voice to students, as the primary stakeholders, in describing what transpires in their learning experience inside the classroom is expected to provide an authentic picture of what happens inside hospitality classrooms, what methods are teachers of hospitality used and what and how students learn from these methods. Moreover, results will help the schools prepare the students to acquire the skills and narrow the gap between the academe and the hospitality industry. Research results will aid in curriculum and instructional design. The results may be used as a springboard for designing specific courses and planning teaching activities that will reinforce learning of interpersonal communication skills. The study sought to answer the following research objectives:

1. to assess the students' current interpersonal communication skills in terms of verbal communication, listening, emotional intelligence, working in groups
2. to identify the methods used in teaching interpersonal communication
3. to identify the factors that affect learning interpersonal communication
4. to propose activities to enhance teaching and learning of interpersonal communication

## **2. Literature Review**

### *2.1 Interpersonal communication in hospitality*

Among the eight competencies perceived by hospitality undergraduates, communication skill ranked first while teamwork skill was fifth. Communication skill specifically pertained to confidence, speaking, writing, and communicating in English. As for teamwork, the skill includes building relationships, interaction, and working effectively to collectively reach a goal (Mohamad, Osman, & Isajak, 2018). This is supported by the research findings of Grobelna (2015) that 86 percent of the competencies in hospitality account for soft or people skills and that 80 percent of hospitality manager's time is spent in communication.

Sisson and Adams (2013) argued that hospitality programs should put more emphasis on teaching soft competencies and revise curriculum to satisfy the needs of hospitality graduates. Furthermore, Lolli (2013) underscored that educators must set more selective criteria in planning and designing curriculum and setting learning outcomes that concern interpersonal communication skills particularly listening, body language, verbal language, and conduct. Mohamad et al. (2018) recommended looking into mechanisms that will provide more opportunities for practice and enhancing the perceived skills. Based on the framework of Grobelna (2015), the challenge regarding communication skills may be addressed through various teaching methods like working in pair, projects, problem solving tasks, case studies, study tours, and field visits. The following strategies were recommended to fill the gap: alignment of theory and practice by adapting teaching methods to more real-life practice (Rodriguez-Anon as cited by Grobelna, 2015), applying case study, group and team work, and project work (Luka as cited by Grobelna, 2015), and use of role playing, simulations, and videotaping supported with feedback (Lolli as cited by Grobelna, 2015).

### *2.2 Listening, Verbal Communication, Emotional Intelligence, and Working in Groups*

The scope of interpersonal communication skills in this study covers four essential interpersonal competencies required in hospitality: listening, verbal communication, emotional intelligence, and communicating in groups. In 1994, Brownell's study on listening

environments suggested that strong listening environment should be created by effective hospitality leaders. This fosters high employee participation, excellent guest service and organizational commitment. In another report, Brownell (2009) underscored the increasing importance of listening for hospitality employees despite the increasing utilization of computer and other technology. Her paper highlighted the role that listening play in customer service specifically in the areas of providing accurate information and developing strong relationships. The ability to speak and write effectively in English are very important in the hospitality industry. Rahim (2011) analyzed the training and internship needs assessment of verbal communication among hotel practitioners. The results indicated low verbal communication ability of the interns compared with the requirements of the industry. The study recommended a balance between general English proficiency and English for Specific Purposes (ESP) courses to match the needs of the students. The need for more practice was also emphasized. Some of the specific needs discussed are listening to customers' enquiries, explaining hotel procedures, and giving oral reports. Emotional intelligence, known as EQ or EI, is defined as the ability to recognize, understand, and manage emotions intrapersonally and interpersonally. Koroglu and Koroglu (2012) reiterated that emotional intelligence is one of the most essential skills in hospitality, specifically in tourism industry. These skills include identifying, using, understanding, and regulating emotions (Mayer and Salovey as cited by Koroglu and Koroglu, 2012). The research focused on the relevance of emotional intelligence in the tourism industry in the context of the job performance of tour guides. Nguyen, Ladkin, and Osman's (n.d.) qualitative research on emotional intelligence, on the other hand, dealt with hotel employees. They focused on examining the understanding and application of emotional intelligence. The results indicated the employees' high awareness about emotional intelligence and its applications in dealing with customers and colleagues. The research participants in this study highlighted that they learn better from experiences or real-life situations compared to trainings.

### *2.3 Teaching methods in hospitality education*

Hospitality education is a more industry-linked discipline, utilizing more hands-on and experiential methods. While much research has been conducted on rating effectiveness of teaching, there remains to be limited literature presenting how hospitality teachers deliver instruction in their respective classrooms (Deale, O'Halloran, Jacques, & Garger, 2013). Liasidou (2016) explained that a hospitality courses like hotel management are divided to theory and practice classes and are presented using a variety of teaching methods.

The teaching methods consistently and frequently discussed in related studies included lecture, discussion, group activities, field trip, demonstration, presentation, case study, role play, and group project (Deale et al., 2013; Liasidou, 2016; Bhinder, 2019; Aynalem, Abebe, Guadie, & Bires, 2015; Loreto, 2018). Other methods used moderately to less often in hospitality classrooms were assignments, brainstorming, games, symposium, inviting guest speaker, and industry immersion. Among these methods, lecture is the most commonly used. Studies of Loreto (2018) and Liasidou (2016) highlighted lecture as the most effective method in teaching theories, however, participants in the study of Aynalem et al. (2015) perceived lecture as the least interesting method. On the other hand, Deale et al. (2013) considered lecture as a practical method to address increasing class size and scarcity in resources. They claimed that lecture can be effective for both theory and practice if combined with activities like experiential learning and demonstration. In the hotel management program, both teachers and students in the study of Loreto (2018) identified group work, case study, lecture as the most frequently used and most effective outcomes-based teaching and learning methods. Result revealed that active learning experience through group or cooperative facilitates discussion and interaction among

students and emphasize value of teamwork. Demonstration, hotel immersion and field trips were viewed as relevant practices for skills acquisition. Tourism students in the study of Aynalem, et al. (2015), preferred field trip, discussion, problem-solving and brainstorming. Meanwhile, faculty members of hospitality mostly used presentation, assignment, and demonstration (Bhinder, 2019). Other outcomes-based methods used in teaching interpersonal communication include production of process-oriented portfolio through interactive writing, workshops, peer review, and class discussions (Cunningham, Bartesaghi, Bowman, & Bender, 2017) and use of digital video (Marshall & Cullen, 2003). Students who satisfied the portfolio requirement were able to have distinct engagement and participation in class. Through the interactive writing process, they developed an understanding that writing is a form of interpersonal communication (Cunningham, et al., 2017). The use of digital video for library science students focused on mastering verbal and nonverbal techniques for interviews. The content of video consisted of skills, case studies, and interactive sections. Both students and teachers had a positive learning experience using digital videos and considered this method as a flexible, goal-oriented, and reflective method (Marshall & Cullen, 2003).

Overall, a common theme in related studies suggests the use of a variety of innovative and active learning and learner-centered methods using both traditional and technology-oriented resources.

#### *2.4 Factors affecting teaching and learning*

In a related study conducted by Loreto (2019), students identified class size, classroom management, questioning techniques, more opportunities for practice, more electives or extra courses, group work, student-centered approach, and use of real life experiences as the factors that affect teaching interpersonal communication skills. These factors are in conjunction with previous researches that looked into effective teaching and learning, identifying the teachers' personality and competence as a significant factor, along with the others. The "overwhelming majority" of literature on the advantages of small class size, as noted by Mathis (2016), presents that class reduction is a positive and effective strategy. In relation, student participants of Tran's (2013) study attributed their low quality of learning to large class size, limited class time, lack of teacher's innovation and preparation, and poor resources, among others. Another similar study of Salvador and Await (2013) listed teacher's behavior and teaching methods, classroom setting, and information provided to students as factors that has much effect in students' learning behavior. This is also consistent with Liasidou's (2016) findings indicating that the personality and style of the educator play an important role in providing students with positive learning experiences. In the same study, results specified that the verbal communication of the lecturer, content, and interaction give the students more motivation to learn. Furthermore, Deale, et al. (2013) and Aynalem et al. (2015) identified students' preferences, backgrounds, and abilities as additional factors. Another significant factor is the characteristics of the students. Today's generation of college students, sometimes termed as digital natives are described by Sarkar et al. (2017) as active and collaborative learners. Digital native students have short attention span, expect immediate feedback and they prefer a conducive atmosphere that integrates use of technology, providing room for connectivity and productivity.

### 3. Methodology

As a descriptive study, the study employed a mixed methods research using both qualitative and quantitative methods. Qualitatively, focus group discussions (FGD) were conducted while an online test was administered to gather quantitative data.

One hundred forty-six students enrolled in Principles of Communication class for academic years 2018 and 2019 formed part of the respondents of the online test. All students who were enrolled in the class answered the online test. They were purposively selected to be the respondents of the study given their background knowledge in interpersonal communication. A total of 29 students participated in the focus group discussion which was divided into three sessions. Data collection was conducted during the first and second semester of academic years 2018 and 2019.

The online test is a self-assessment questionnaire adopted from [skillsyouneed.com](http://skillsyouneed.com) included questions regarding application of interpersonal communication skills in different situations. The test has four parts covering listening, verbal communication, emotional intelligence, and working in groups. Each part included statements where respondents indicated the frequency of practicing or applying specific behavior under each of the four interpersonal communication skills, based on a five-point Likert scale ranging from always, often, sometimes, rarely, and never.

For the three sessions of FGD, an FGD guide was used in the facilitating the discussions. The first two sessions had 10 participants each while the third session had nine participants. An introduction about the research was provided along with the mechanics of FGD. The questions revolved on the learning experiences of the participants linked to their interpersonal communication skills with respect to the teaching methods used.

Scores in the test were analyzed descriptively using frequency count and percentage. Results of the quantitative data collection were used to design the FGD guide. Data gathered from the focus group discussions were analyzed thematically based on the research objectives.

### 4. Results

#### *4.1 Interpersonal Communication Skills of the Participants*

Looking at the scores per skill, emotional intelligence earned the highest average score while verbal communication had the lowest score though all four skills are on the average level (Table 1). Most (70.55%) of the participants have an average level of interpersonal communication skills. Only eight percent fell in above average level (Table 2). Tables 3 to 6 presents the participants' scores in each of the four interpersonal communication skills tested namely listening (Table 3), verbal communication (Table 4), emotional intelligence (Table 5), and working in group (Table 6). Majority of the participants were on the average level, except in verbal communication where only 72 or 49.31% of the participant were rated average. A significant portion (54 or 36.99%) fell in the below average level. Few participants attained an above average level for all skills. The assessment level was based on the results of the online test from [skillsyouneed.com](http://skillsyouneed.com). The scoring criteria of the assessment is divided in three levels: below 50 is below average, 50 to 69 is average, and 70 and above is above average. Tables 2 to 6 shows the summary of individual scores of the participants in each interpersonal communication skill.

Table 1

*Group interpersonal communication skills assessment by skill*

Skills	Average Score
Emotional Intelligence	58.03
Working in Group	57.43
Listening	56.77
Verbal Communication	53.63
Overall Average	56.84

Table 2

*Individual interpersonal communication skills assessment*

Level	Frequency (N=146)	Percentage
Below Average	31	21.23
Average	103	70.55
Above Average	12	8.22
Total	146	100.00

Table 3

*Listening skills assessment*

Level	Frequency (N=146)	Percentage
Below Average	25	17.12
Average	109	74.66
Above Average	12	8.22
Total	146	100.00

Table 4

*Verbal communication skills assessment*

Level	Frequency (N=146)	Percentage
Below Average	54	36.99
Average	72	49.31
Above Average	20	13.70
Total	146	100.00

Table 5

*Emotional intelligence skills assessment*

Level	Frequency (N=146)	Percentage
Below Average	26	17.81
Average	95	65.07
Above Average	25	17.12
Total	146	100.00

Table 6

*Working in group skills assessment*

Level	Frequency (N=146)	Percentage
Below Average	48	32.88
Average	72	49.31
Above Average	26	17.81
Total	146	100.00

#### 4.2 Methods used in Teaching Interpersonal Communication Skills

Table 7

*Teaching methods and interpersonal communication skills learned in class*

Teaching Method	Skills learned			
	Listening	Emotional Intelligence	Verbal Communication	Working in Groups
Lecture	ü			
Discussion/Question and Answer	ü	ü	ü	
Pair work / Group activity	ü	ü		ü
Field trip	ü	ü		ü
Games	ü	ü		ü
Case study		ü	ü	
Role play	ü	ü	ü	ü
Presentation	ü	ü	ü	ü
Demonstration	ü			
Technology-oriented (movies, videos, songs, online exercises)	ü	ü	ü	
Invitation of guest speaker in class	ü	ü	ü	
Individual project		ü		

Group project	ü	ü
Writing assignments (essays and reflections)	ü	ü
Practical/Experiment	ü	ü

Table 8

*Proposed methods to teach interpersonal communication skills*

Interpersonal communication skill	Proposed teaching methods
Listening	Interactive lecture with discussion, questioning, and activities, more frequent use of media (videos, movies, songs), more group work, more opportunities to talk to foreigners, field trips
Verbal Communication	Assigned readings, vocabulary lessons, small group discussions, outside activities (tour guide), show examples or models of good essay
Emotional intelligence	More field trips, volunteer or outreach program, more guest/industry speakers, activities on self-awareness, role plays
Working in groups	Projects, group activities
Integration of skills	Use of more technology and media, games, reflective writing, combination of methods, volunteer program or service learning, field trips

**5. Discussion and Conclusion***5.1 Discussion**5.1.1 Interpersonal Communication Skills of Hospitality Students*

As described by [skillsyouneed.com](http://skillsyouneed.com), the results indicate that the participants have an average or a basic grasp of key interpersonal communication skills and there is a need for more practice to develop the skills. Verbal communication skill appears to be the weakest among hospitality students. The participants unanimously expressed that verbal communication is a challenge to them, particularly citing the use of English as their main concern. Their confidence in writing and speaking in English is limited by their vocabulary and ability to construct essay and express themselves. The results are parallel with the results of Rahim's (2011) study which analyzed the training and internship needs assessment of verbal communication among hotel practitioners. The results also yielded low verbal communication ability among the respondents.

While the other three skills registered a slightly higher average score, they remain to be at the basic level. In essence, there is a need to improve all the four skills as students take move up in their curriculum. A multi-disciplinary approach in instruction is a potential action to address this and improve the interpersonal communication skills of the participants. Teaching and learning activities in different course should be aligned to the development of these skills. Teaching methods will be instrumental in improving the students' interpersonal skills. It is also interesting to look into the different skill levels of the participants. While most are in the average level, there are few who are in the below average and above average levels. These

must also be considered in planning and designing teaching and learning activities. One area that can be explored is the idea of peer coaching. The above average students could provide support to their peers in the lower levels. In terms of group work, the results may also be useful in grouping the students in activities and projects.

### *5.1.2 Teaching Methods*

The methods used in the participants' classes are consistent with the results of related studies. Participants discussed that the different teaching methods used in their classes are not specific to only one skill, but most of the time address more than two skills. When asked which methods cater to one of the four communication skills, they identified the method and which skill it addresses more (Table 7). Under listening, the first method recalled by the majority is lecture. This method appears to still be the most used though some participants described it as a boring method. When asked if they perceive lecture to be relevant, all the participants agreed that it is a relevant method because it can give information and concepts they need to learn. As discussed in the study of Deale et al. (2013), students still preferred lectures because lecture organizes the content and prepares the students well for tests. However, participants expressed that lecture can be less boring and more interesting if used with other methods. Students and teachers who were part of several related studies expressed the same concern. Participants also emphasized the importance of the teacher's nonverbal communication skills in delivering a lecture. They are particular with the teacher's tone. They narrated two cases on how tone affects their learning: monotonous delivery bores them and makes them lose interest while sarcastic tone offends them and affects their self-esteem. In relation to Liasidou's (2016) findings, the emphasis was noted on the verbal communication of the lecturer. Use of technology-oriented methods are also considered good practice for the participants. One participant noted that he could watch and listen to videos as many times as he needs until he understands the message. The nature of digital videos to provide better familiarization on a lesson was also appreciated by the respondents in the study of Marshall and Cullen (2003). However, use of online methods appeared to be limited since not much was mentioned except for Google classroom, online test, and YouTube videos. Other methods that helps develop listening skill are demonstration, field trips, discussion, role play, presentation, guest speaker, games, and group activity. For emotional intelligence, several methods were also identified, however, the outstanding methods catering to this skill are guest speakers, writing reflections, field trips, and practical classes. There was a discussion on how listening to guest speakers' real-life experiences makes them learn from the speakers' mistakes. On the other hand, field trips to hotels and other hospitality industries are fun and interesting learning experience. The authenticity of the practical kitchen class gives the participants more motivation thus develop their emotional intelligence. This is where they develop their skill as a team player, self-regulation, and in conflict management, along with other group activities in class and some group projects. "We can observe what our partner feels...we can solve the problem together" (P1). "In kitchen class, we have to take away conflicts about our past, family, or friend...if you're happy, you put your feeling in your food, it's going to be great" (P6). Dealing with non-Thai teachers also develops their adaptability, open-mindedness, and understanding. One participant mentioned that he also learned from situations in case study while the majority has not been exposed to this method yet, since they are only on their first year. Working in group is also very evident in their kitchen class. While most of the participants prefer being assigned group projects, one participant expressed that individual projects must also be assigned so they learn to be more responsible and independent and they do not have to deal with group members that do not cooperate. Deale et al., (2013) advised that projects need to be extend outside the classroom and should engage the students in more authentic experiences. With regard to verbal communication, the three

dominant methods discussed are writing, presentation, and discussion or question and answer. One group of the participants presented opposite view on the use of essay to practice or improve their written communication. More than half of the participants perceived that essays do not really improve their writing skill since in answering some essay questions which are limited to facts discussed, they just have to rewrite concepts learned in class and there is actually no room for them to express their opinion or write about something interesting to them. On the other hand, the remaining participants in the group consider essay writing as a good practice. One participant argued that they have limited opportunities to practice writing skill and writing essays in class allows them to develop their writing skill. A common theme that emerged in the discussion is the participants' appreciation for writing reflection papers and film reviews. Cunningham et al., (2017) recommended a process-oriented framework in writing that might address this concern. With the use this reflective writing approach, there is a room for both theories and application in the students' writing assignments which are conducted through workshops, peer review, and discussions.

### *5.1.3 Factors affecting Learning*

The participants identified and agreed on the following factors that affect their learning of interpersonal communication skills.

*Class size.* Participants believe that smaller class size will allow them more opportunity to practice their skills and the teacher can monitor their performance better. Smaller classes also give them more confidence to participate in class discussion. In large class, few students have the opportunity to participate, and usually they are the more confident ones or there's not enough time for more students to speak up. As Mathis (2016) explained, smaller class size improves the self-esteem of students since teachers have more time to individualized instruction, interact with students, and provide a better class environment. Participants also expressed that in smaller class size, they can develop better interaction and relationship with their classmates.

*Class schedule.* Participants view that their current schedule where theory classes that are set at three hours per session does not maximize their learning experience. "The longer we study, the more tired we get so the learning or information we obtain is not as much as it should be" (P9). As digital natives, this group of learners have shorter attention span (Sarkar et al., 2017). Another concern raised is the way the schedule of their different subjects is planned. Some classes finish late and then, the class for the following day is scheduled early morning.

*Teacher's personality.* Participants are keen about having teachers who are kind, approachable, flexible, and with sense of humor. In addition, they described an effective teacher as kind, energetic, caring, open-minded, a good listener, and demonstrates respect and empathy. "Some students learn differently, have different knowledge, experience, or skills set, if the teacher can change their approach to students who don't understand, that could help" (P18). This is parallel to the research findings of Liasidou (2016) which also indicated that personality of the educator play an important role in defining the students' learning experiences. Similarly, Loreto's (2019) study emphasized the importance of the teacher's interaction and rapport with hospitality students.

*Teacher's competency.* This includes the teachers' questioning techniques, classroom management, and communication skills. Participants explained that teachers should ask more open "why" questions as this gives them opportunity to think and speak more. They also reiterated how a teachers' nonverbal cues, particularly paralanguage, body movements, and

facial expressions affect their learning. One of the participants added that a good teacher as someone who can control the class well.

*Use of authentic, real-life experiences.* Another factor is the quality of examples provided during the discussion. They value authentic, real-life experiences. Going on field trips let them see the real situations in hotels, malls, or restaurants. This is one of the reasons why they appreciate listening to guest speakers who are industry practitioners. Studies of Bhinder (2019) and Aynalem et al. (2015) ascertained that hospitality industries can take part in providing students authentic and immersive experiences through sharing materials, field trips, internships, or subsidizing programs.

*Teaching resources or support media.* Participants talked about the use of other resources apart from PowerPoint presentations. Use of other media like movies, songs, videos, and games were brought about.

*Environment.* Participants described a conducive learning environment as one with good and positive teacher-student connection or relationship. In the second group of FGD, one participant cited how environment affects his use of English wherein it is limited only to classroom discussion. Once they step out of the classroom, they are back to speaking in Thai. The participant said that this kind of environment hinders the opportunity to improve verbal communication.

#### *Proposed Teaching and Learning Activities*

As presented in Table 8, the participants' recommendations include more frequent use of the different teaching methods especially interactive lectures, field trips, games, and inviting more guest speakers. One out of the three groups of participants recommended integrating service learning or volunteer programs in their subjects as this will give them more hands-on experience in dealing with people. In another group, they expressed their concern about their verbal communication ability. One of the participants proposed that they should be assigned more reading materials where they can improve their vocabulary. The group agreed that this will help them improve their writing and speaking skills. The use of more technology-oriented and online methods were also put forward but some of the participants in the third FGD expressed their reservation in using online tools, they admitted that they easily get distracted by other applications and they tend to lose focus on the learning material. There was a discussion about use of subtitles in learning videos, the group agreed that subtitles will not help improve their listening skill but there must be a way to show the technical, unfamiliar words in some parts of the videos.

#### *5.2 Conclusion*

There is no best teaching technique (Lei as cited in Deale et al., 2013). Different teaching methods that are in place cater to teaching and learning interpersonal communication skills to hospitality students. However, there is a need to personalize and integrate a variety of methods to allow students to maximize their learning experience as 21<sup>st</sup> century learners. Methods that facilitate more skills should be used more frequently. Specifically, students' verbal communication, both oral and written must be given more emphasis and more opportunities for practice and application. Traditional teaching method like lecture is still relevant and is better used with other more active and student-centered methods. With digital native-students in hospitality school, the teacher remains to be relevant in the learning process. The role of a teacher as a facilitator and knowledge mediator is more crucial in this generation of learners. With the students' need for varied and active teaching methods and resources, the competency of teachers in addressing these needs should be strengthened. Alongside improvement of the

curriculum, course syllabus, teaching and learning resources, and student experiences, equal priority should also be given to the professional development of teachers and partnership with industries to respond to the several factors affecting the learning of interpersonal communication. The results have implications to academic support, industry linkages, curriculum design, identification of learning outcomes, and teacher training.

### 5.3 Limitations of this study

The sample size only involved students of one hospitality school. Testing a larger sample may yield more representative results. In addition, more focus group discussions, class observations, and review of assessment tools will provide a better picture of the teaching and learning process in hospitality classrooms.

For future studies, the participants may take an exit test on interpersonal communication by the time of their graduation to compare their scores, check for improvement and determine their readiness to join the workforce. Comparison of the perceptions of teachers, students, and industry representatives is also worth looking into in follow up studies. Assessing the effectiveness of the teaching methods identified in this study is another recommendation for future research.

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## **Understanding hospitality and tourism students' online learning experience through the lens of the 3P model – The love and hate**

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### **Abstract:**

The COVID-19 pandemic has changed the teaching and learning of higher education institutions as most universities and colleges closed campuses and switched to online mode. Previous studies confirmed that online learning was just as effective as, or even better than traditional classroom learning. Is that true? This study investigates the actual online learning experience of hospitality and tourism students of on-campus programs by adopting the 3P Model of Teaching and Learning. The preliminary findings are reported in this abstract.

**Keywords:** COVID-19, online learning experience, hospitality students, learning outcomes

### **1. Introduction**

Hospitality and tourism higher education programs are designed to cultivate students to be future leaders of the hospitality industry and to equip them with the industry knowledge as well as the soft skills of interpersonal, communications, and teamwork. Active learning techniques and class activities are frequently adopted to enhance students' engagement (Kim & Jeong, 2018). In early 2020, universities and colleges worldwide have started to close their campuses due to the COVID-19 pandemic. Some universities began conducted all classes online from the start of their semesters, while others transited from face-to-face to entirely online. The switch from face-to-face to online teaching and learning presented challenges to students and faculties as the learning environment is very different in the online world.

This study aims to investigate the online learning experience of hospitality and tourism students from traditional face-to-face degree programs; and how students' characteristics influence their attainment of learning outcome, their willingness and desire to engage in online classes, and their choice of learning mode should they consider pursuing further education in the future. The 3P Model of teaching and learning (Biggs & Moore, Harverila, 2011), developed to describe the factors which influence students learning outcome in the traditional classroom context, will be used to analyze students' online learning experience.

### **2. Literature Review**

#### *2.1 3P Model of Teaching and Learning*

3P model was first introduced by Biggs and Moore (1993) and was adopted as the theoretical framework of their study, which had identified variables that affect students' learning outcomes. The 3P refers to "Presage", "Process", and "Product" (Biggs & Moore, 1993). The 3P model formulated the preconception that helps to track students' individual learning behavior and outcomes (Gokalp, 2013). The "Presage" section contains pre-existing variables such as students' intellectual capabilities, prior knowledge, education as well as cultural background,

and course structure and teaching methods (Cybinski & Selvanathan, 2005), whereas “Process” section refers to students’ motivation and learning behaviors. In the part of “Product”, the academic results, students’ learning outcomes like the satisfaction of learning and productivity are evaluated (Gravoso, Pasa, & Mori, 2002; Wang, 2003). A modified model of these 3Ps has been proposed by Haverila (2011), which examines students’ perceived learning outcomes in an online learning context.

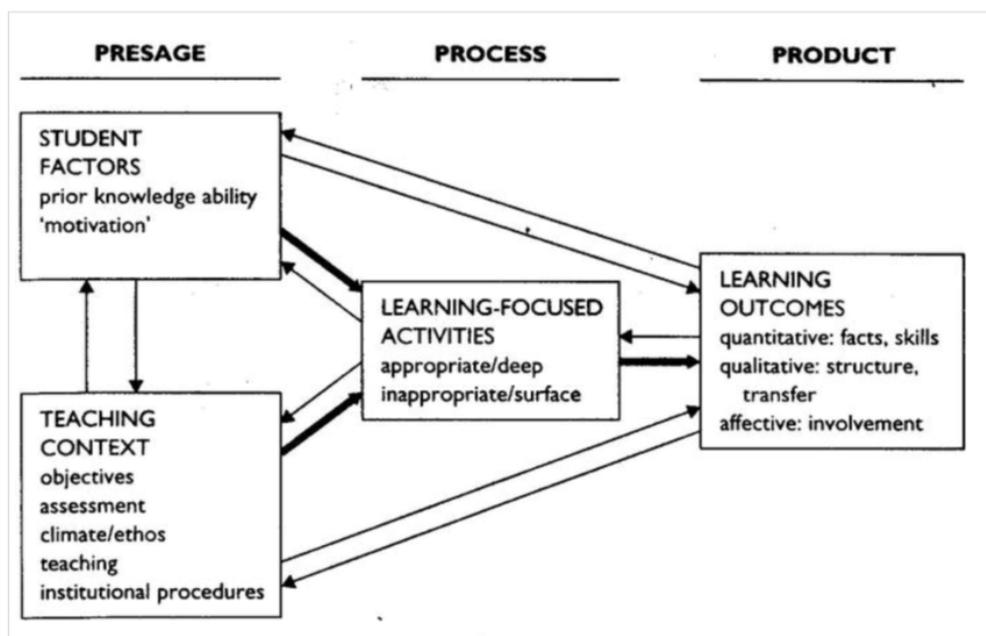


Figure 1 '3P Model'- Conception of Learning and Teaching (Biggs & Moore, 1993; Haverila, 2011)

## 2.2 Online Learning

Learning online provides students the flexibilities to study anywhere and anytime. Some students appreciated that learning online could save their money and time, such as the costs of traveling from home to school (Lefkowitz, 2020). Also, making good use of some digital tools like virtual reality in online teaching would allow students to observe others’ projects or ‘going for a field trip’ online, without limitation of time or place.

Lorenzo and Moore (2002) maintained that quality in online education is commonly interchanged with learning effectiveness. Some studies supported that online learning could be as effective as learning in face-to-face lectures, and sometimes even better (Ateah et al., 2011; Mandy, Milton, & Mandy, 2004; Williams & Webb, 2013). However, it’s argued that in terms of learning complex concepts or skills, students would face more difficulties while conducting distance learning (Abrami & Bures, 1996; Harasim, 2000). Hospitality and tourism students are expected to learn how to use knowledge from existing theories in practice (Li & Liu, 2016), which is hard to be trained in an online learning context.

The higher education institutions have been strongly impacted by the COVID-19 pandemic (The New York Times, 2020). Faculty had faced technical as well as logistical difficulties (Li & Lalani, 2020). Amid the challenges, some education institutions found new prospects for further development (Lefkowitz, 2020). It is believed that the education would be reformed

after experiencing the COVID-19 pandemic, hybrid teaching would most likely become the trend after the rapid change this year (Horn, 2020; Li & Lalani, 2020).

### 3. Methodology

This is a qualitative study that applied grounded theory as the methodological approach. According to Lingard, Albert, & Levinson (2008), one of the critical features of grounded theory is iterative. Grounded theory was proposed by Glaser & Strauss (1967). It could generate theories based on social phenomena, which driving from a systematic analysis of data (Khan, 2014). Data collection and analysis would be continuously conducted, whereas the investigation would lead to the next cycle of data collection.

This study focuses on the online learning experience of hospitality students from higher education on-campus programs. Samples of the study were students enrolled in School of Hotel and Tourism Management (SHTM), The Hong Kong Polytechnic University's face-to-face degree programs during the COVID-19 outbreak when all the classes were switched to online mode. Primary data for this exploratory research were collected by adopting semi-structured in-depth interviews from June to August 2020. Purposive sampling was utilized to recruit key informants for the in-depth interviews. As of July 2020, 25 interviews were completed, and each lasted for around 45 minutes. Saturation sampling was adopted that observations and interviews would stop when no new, dominant issues were emerging in the dataset.

For those replied in Cantonese and Mandarin, the answers have been translated into English for coding. Following the recommendation of Aguni and Solarino (2019), to ensure the findings of this research could be trustworthy and conceptually replicated, in-vivo coding was adopted at the first stage and collated the data by using the memo feature in Quercus.

### 4. Results

The preliminary findings below were captured from in-depth interviews contributed by 25 respondents, and the relations between *student factors*, *teaching context*, *learning-focused activities*, and *learning outcomes* would be further discussed in the later stage.

#### 4.1 Student factors

According to the responses, students' previous online learning experiences do influence their adaption towards the change of teaching mode this time. However, their level of education does not necessarily impact students' experience of online learning.

#### 4.2 Teaching context

No interviewee opted for deferring their studies due to the COVID-19 outbreak, because of their career or further study plans which urge for quicker degree completions. However, around one-third of them considered that if they were being granted the exactly same degree anyway, they would choose to complete the learning online instead of on-campus after experience online learning this time. This helps them to save money from renting residences near schools, more flexible on attending classes, and gain a better understanding of the taught knowledge because of recorded lecture videos and timely search of something they don't understand during the class.

Around half of the respondents highlighted that the types of assessments should be adjusted while transiting from on-campus to online mode. It's understandable that the school intends to ensure the teaching quality by stating the same level of assessment criterion. Nearly one-third of the respondents proposed that the group project for online courses shall be changed to either individual presentations or individual written essays, due to the inefficient group communication and far social distance.

In terms of the teaching quality, students reported an unsatisfactory downgrade from what they had been used to. Teachers who were new to teaching online and didn't receive the requisite support to offer a substantial experience, regarding the software, live interactions with students, consistent to what Horn (2020) pointed out in his study.

#### *4.3 Learning-focused activities*

The majority of the interviewees stated that after experiencing online learning throughout the whole semester, they would still definitely choose face-to-face programs instead of online ones. The top three reasons were “*face-to-face interactions*”, “*more passion to learn*”, and “*timely feedbacks from instructors*”. All of them stated that they accepted the school's special teaching arrangement for providing original face-to-face lectures online unwillingly at the very beginning.

Compared to their learning experience on-campus previously, some compromised did happen to those interviewees during their online learning throughout the COVID-19 outbreak. For instance, “*inaccessible references off-campus*”, “*less efficient discussion in-class and for group projects*”, “*worse internet connection dampen their enthusiasm on in-class engagement*”.

#### *4.4 Learning outcomes*

Based on the current dataset, around 55% reported that their mental health or well-being during the COVID-19 outbreak influence their learning outcomes in terms of academic results and their passion on in-class engagement.

## **5. Discussion and Conclusion**

### *5.1 Research contributions*

This study helps the hospitality faculties gain a better understanding of how students from on-campus programs perceive online teaching, the differences of their learning experience as well as outcomes, so as to adjust the curriculum design of online programs, or improve the teaching quality, or provide institutional support which adapts to students' actual needs and wants; and thus, facilitate hospitality education development.

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## **Antecedents of dedication-constraint based trust for knowledge adopted in hospitality-related virtual communities**

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### **Abstract:**

As the development of mobile networking continues intensely, the use of Computer-mediated Communication (CMC) is heavily motivated, namely by instant messengers like 'Line', 'Facebook Message', 'WeChat', etc., which then raises an academically-sound question, 'What are the factors leading to the intention of use of Computer-mediated Communication as a media to acquire knowledge or technical assistance for an end-user?' For such, this research will focus on learning goal oriented, as well as the dedication-constraint Framework, hence scrutinizing a user's intention in his or her continuous knowledge adoption. The model was evaluated by using data collected from Line, Facebook Message and WeChat. This work contributes to our understanding of the knowledge adoption processes of specific domain knowledge in hospitality field by extending theory of learning goal oriented, and deepening understanding of dedication-constraint based trust and swift guanxi. This has implication for both hospitality VC users and knowledge provider.

**Keywords:** Goal-oriented learning, Trust, Dedication-Constraint Framework, Knowledge Adoption, Swift Guanxi

### **1. Introduction**

This study applies the dedication-constraint framework of social exchange theory to gain a better understanding of why shared knowledge is adopted in online communities. If an online community member's purpose of communication is to obtain knowledge or to have a question answered, then the issue arises of whether he or she is brave enough to share knowledge with other members, despite being unfamiliar with those others. The dedication-constraint framework is applied to explain this phenomenon, and to explore how online groups can enable greater trust and knowledge sharing. The terms "instant communication" or "instant messaging" refer to the use of social media or online messaging services to meet new people (Zhou, Fang, Vogel, Jin, & Zhang, 2012), chat, share knowledge, or solve problems of various kinds. By asking questions and chatting, service users can acquire and exchange knowledge, which shows that this kind of online interaction serves as an important channel for knowledge adoption (Daniel, Agarwal, & Stewart, 2013; H.-W. Kim, Chan, & Kankanhalli, 2012; S. S. Kim & Son, 2009). However, unlike in real-life communities, the members of online or virtual communities cannot easily discern the identities of the other members. As a result, challenges arise from users' uncertainty over who they are interacting with when they seek to answer questions or exchange information. Unlike in face-to-face encounters, people engaged in online interactions may question the identities of those with whom they interact. When the identities of online group members are questioned or suspected, the knowledge they convey may be questioned as well, which can make the interaction seem pointless (Bagozzi & Dholakia, 2006; Tsai & Bagozzi, 2014). Especially in cases where the information being shared concerns a

business or the management of a company, seeking answers from the wrong media group members can cause business-related mistakes, and may even involve fraud. Therefore, if the members of virtual communities fail to establish tactile, trusting relationships, their ability or willingness to truthfully communicate and exchange knowledge will be constrained. They will feel that they are in danger of receiving inaccurate information, as the quality of the knowledge they obtain cannot be verified (Ma & Agarwal, 2007; Tsai & Bagozzi, 2014).

This study investigates how the trust that is built through conversation and interaction between members in online communities affects their willingness to exchange knowledge and apply what they learn. The knowledge-sharing behavior observed through an online survey is interpreted with reference to the dedication-constraint framework. As most interaction in instant communication groups happens online, where no physical interaction is present, this study is enabled by applying “swift guanxi” as a disturbance factor. For instance, some particular members of an online group may show clear intentions of learning new knowledge, and they may join the community for professional reasons, seeking to get answers to their questions by interacting with other active members. Through this process, they build relationships with the others in the group and develop interpersonal trust. This kind of trust increases their sense that the knowledge they receive is legitimate. With greater levels of trust, the members are more willing to actively participate in exchanging and searching for knowledge through the community, and are more likely to obtain what they need (as is proposed in the theory of the continuous search for knowledge). Through the continuous exchange of quality knowledge, the group members build a sense of trust in and belonging to their virtual communities. They become more willing to share and trust the knowledge that they receive from other members, thereby displaying dedication-based trust. As the members develop more confidence about the real identities of other members, they may have little or no hesitation in trusting and adopting the knowledge they acquire from their online community. To further examine how this process occurs, or how it is enabled, this study investigates the following factors:

- (1) Trust and “swift guanxi” between members of instant messaging communities (in terms of both dedication-related and constraint-oriented trust), and how these kinds of trust affect knowledge adoption and continuous learning.**
- (2) The effects that individual motivations for learning (or learning goal orientations) have on interpersonal trust within instant messaging communities.**

## **2. Literature Review**

### *2.1 Intentions for Continuous Knowledge Adoption*

Instant messaging, as a channel to exchange information and knowledge, has become a highly important form of social and professional interaction (Ma & Agarwal, 2007; Wasko & Faraj, 2005). Maruping and Magni (2012) proposed two main motives for participation in instant messaging communities: (i) People may be seeking a learning environment, where the various members share an interest in a specific topic, and feel free to raise questions and seek advice to develop their own abilities and knowledge. With such intentions, the members are willing to interact and learn from one another. They can engage in an ongoing process of learning and improvement. During their conversations with other members, they can both receive answers to their questions and help to generate new knowledge. By such means, the members can improve themselves by adopting knowledge from others. (ii) People may be seeking a conversion environment, where the members of an instant messaging community help each other to test ideas and achieve shared goals. In such an environment, group members who share

similar ideas or perspectives can support one another, or work as a group to reach their goals. Such support may give them the courage and motivation to innovate and take risks in trying new ideas. Where group members can engage in such shared tasks, they may develop a strong sense of trust and a willingness to exchange their knowledge wholeheartedly. Their motivation for exchanging ideas and information stimulate them to generate shared knowledge and achieve the creative potential of a virtual community. Previous research has found that an atmosphere of shared goals and ideas increases the likelihood of innovation. Even when the group members encounter failures or make mistakes, they grow more willing to rely on each other in solving problems by reviewing their cases and identifying solutions. This kind of trust and dedication allows the members to feel that they are not alone in facing hardships, as others who care are willing to help.

## *2.2 Dedication-Constraint Framework*

If the group members can cooperate and develop close relationships, the resulting sense of trust and sharing can be beneficial to all of the members(S. S. Kim & Son, 2009). Instant messaging communities foster a learning environment where knowledge can be shared with community members over a long period. Therefore, such communities provide an environment that helps their members to discuss questions and share answers. In addition to maintaining the operations of their instant messaging communities, the managers of these communities shape the benefits their members get from learning new knowledge through chatting with one another.

This study uses the dedication-constraint framework to explain the relationship between goal-oriented learning, the trust between members of instant messaging communities, and the persistence of knowledge management within virtual knowledge communities. According to social exchange theory, dedication is a kind of desire, and emotional trust can have mutually beneficial effects when people cooperate with one another(Chou & Chiang, 2013; S. S. Kim & Son, 2009). Constraint is a concept related to online trust, in that trust is a constraint that discourages people from leaving a group(Chou & Chiang, 2013; Komiak & Benbasat, 2006). This study applies the concept of the dedication-constraint framework along with the benefit framework to measure dedication-based trust. The study also applies a constraint framework to measure constraint-oriented trust. Dedication-based trust enables group members to influence knowledge-management behavior within a community. Such influence is usually exercised by members who are more familiar and trusting among themselves, and by individuals who are willing to actively explore the specific kinds of knowledge that are shared by the group. Therefore, members are likely to stay in their instant messaging communities, continuing to exchange knowledge, maintaining their previously established relationships, and further exploring or re-developing the knowledge shared there.

### Goal-Oriented Learning

The achievement of learning goals involves certain kinds of behavior. It involves naming questions or needs and proposing ways to search for answers or deal with concerns. The benefits of learning can be extended by planning and managing such learning behavior to achieve additional relevant knowledge. A high-level of goal-oriented learning requires positive and active participation in the process of learning. It also requires a high level of willingness to engage in challenging work, or to enter new fields and learn new skills(Hurtz & Williams, 2009; Wan, Compeau, & Haggerty, 2012). Learners with clear learning goals can more directly and actively move toward completing their learning tasks and achieving their own objectives. However, unfocused or inactive learning makes for low rates of achievement in reaching learning objectives or acquiring new skills. Learners with unclear goals require more time to

achieve their learning objectives(Wan et al., 2012). People with poorly defined learning goals find it difficult to accomplish pre-set goals or tasks, and they need more time to reach those objectives. The degree of goal-oriented learning affects the contribution that an instant messaging community can make in acquiring and sharing beneficial knowledge.

### *2.3 Swift Guanxi*

Relationships in instant messaging communities involve personal conversation, communication, and interaction. These relationships also involve sharing resources that the members have accumulated through their own experiences, or through their colleagues, relatives, or friends. Working relationships also involve economic, professional, or even political aspects, all of which can benefit the interactions of community members. In practical terms, online relationships involve a kind of interlock, where each person involved takes the benefits that he or she desires. However, for the purpose of this study, community relationships are classified as either “traditional relationships” or “swift guanxi” relationships(Ou, Pavlou, & Davison, 2014; Zhou et al., 2012). The so-called “traditional relationship” is an interactive association in which people must face each other in a physical sense. These relationships generally take a long time to gradually develop, until trust is generated. The cost of these relationships in terms of time is comparatively large, and other social costs may be involved. The term “swift guanxi” is applied to explain a phenomenon arising in instant messaging communities, such as the phenomena of trading behavior between buyers and sellers(Leung, Lai, Chan, & Wong, 2005), or the behavior of knowledge managers(Ramasamy, Goh, & Yeung, 2006). Swift guanxi develops among members of instant messaging communities because these people share a high level of participation and personal identity in the process of sharing messages and helping each other. The intensity or frequency of contacts helps to build relationships and develop the intention to further exchange and adopt knowledge together.

## **3. Methodology**

This study uses the dedication-constraint framework of social exchange theory to analyze how knowledge-community members accumulate emotional commitment and constraint-oriented trust through environmental and personal factors. Emotional and constraint-based trust that is accumulated through the benefit-constraint framework increases the community members’ intentions to continuously adopt knowledge from their instant messaging communities. And investigates the “continuing behavior of dedication-based and constraint-based knowledge.” The members of instant messaging communities adopt processes of continuous knowledge-seeking, and this study examines and measures the roles that dedication-based trust, constraint-based trust, and swift guanxi play in this process. Based on the foregoing literature review and theoretical analysis, the research structure for this study is shown in Figure 1.

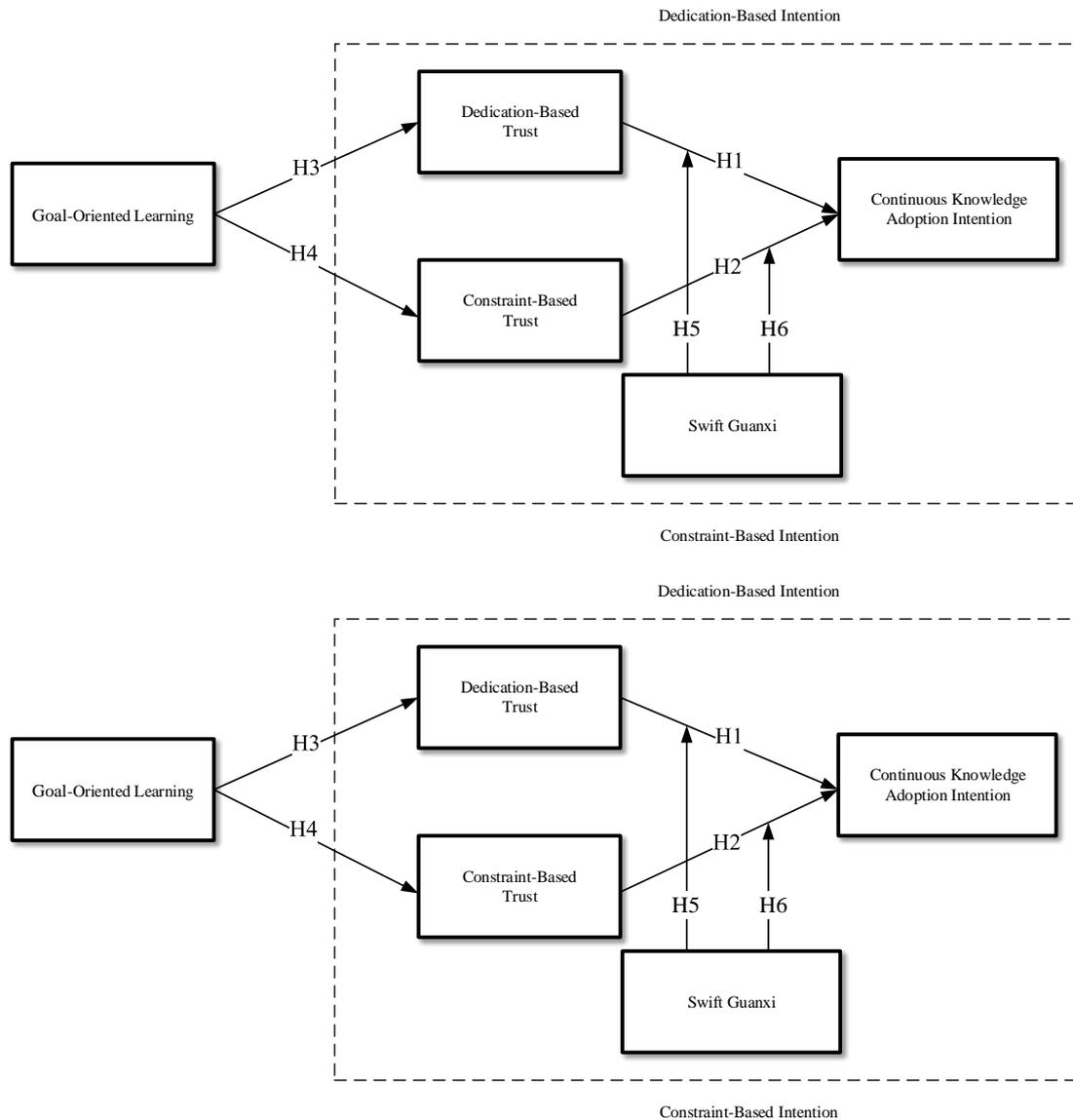


Figure 1: Research Structure and Hypotheses

This study examines the factors that influence continuous knowledge adoption by members of instant messaging communities. The research hypotheses can be divided into two parts. The first group of hypotheses concern the roles played by dedication-based trust and constraint-based trust among community members. It is proposed that emotional trust and constraint-based trust are accumulated through the learning of goal-oriented knowledge, which in turn affects the continuous adoption of knowledge by the instant messaging community. Hypotheses 1~2 concern the roles that “dedication-based trust” and “constraint-based trust” play in producing “knowledge.” Hypotheses 5~6 concern the positive impact that “swift guanxi” has on “dedication-based trust,” and the effect that “constraint-based trust” has on “continuous adoption of knowledge.” The second group of hypotheses concern the environmental and personal factors involved in developing commitment among community members, particularly in terms of dedication and constraint. Hypotheses 3~4 concern the roles that “dedication-based trust” and “constraint-based trust” play in developing “goal-oriented learning” in instant messaging communities. The dedication-constraint framework suggests that the commitments accumulated by group members include the positive effects of both

“dedication-based trust” and “constraint-based trust.” For the design of the questionnaire, the above-described questions were first collected, and then the correction and modification of meanings was carried out. To ensure the reliability and validity of each question, the forms of empirical measurement were adopted from the literature.

### *3.1 Hypotheses*

The research model includes how continuance knowledge adopted intention is affected by dedication-constraint based trust (H1-H2), which in turn are influenced by goal-oriented learning (H3-H4), and moderator effect between dedication-constraint based trust and continuance knowledge adopted intention (H5-H6).

#### *3.1.1 Hypotheses Between Dedication-Constraint based Trust and Continuance Knowledge Adopted Intention*

The study by Ma and Agarwal (2007) indicated that the more an online group member participates, interacts, and exchanges knowledge in a community, the quicker his or her requirements for knowledge are satisfied. In addition, by developing their willingness to learn from others in their online communities, members’ place greater reliance on their communities, which allows them to benefit from other people’s experiences and insights. In summary, the interaction of members in an instant messaging community can become a learning practice that is both feasible and sustainable. This is especially the case where the group members are encouraged to adopt and make use of information exchanged within their communities. Higher levels of participation in asking and answering questions allow the members to acquire even more knowledge. Trust can be explained in many ways in terms of ability, relationship, or emotion. In terms of the mechanisms explored by dedication-constraint theory, trust can be explained as having two aspects, namely dedication-based trust and constraint-oriented trust. Dedication-based trust involves a hope that the members of the community will maintain a long-term, high-quality relationship. Constraint-oriented trust, in contrast, involves the restrictions that develop in a relationship, by which the investments people make in their community make it increasingly difficult for them to withdraw their trust and engagement (Chou & Chiang, 2013; S. S. Kim & Son, 2009; Zhou et al., 2012). Previous studies have shown that trust is an important factor that affects the knowledge shared and contributed by members of instant messaging communities (Chou & Hung, 2016; Park & Lee, 2014; Ridings, Gefen, & Arinze, 2002). In analyzing trust formation, this study considers trust as having two components, emotion and cognition. The study seeks to extend previous knowledge on the contributions that dedication-based trust and constraint-based trust have on goal-oriented learning. On the basis of the preceding discussion, the following research hypotheses can be proposed:

**H1: Dedication-based trust among members of an instant messaging community positively affects the members’ intentions to adopt continuous learning and knowledge sharing.**

**H2: Constraint-based trust among the members of an instant messaging community positively affects the members’ intentions to adopt continuous learning and knowledge sharing.**

### *3.1.2 Hypotheses Between Goal-Oriented Learning and Dedication-Constraint based Trust*

The literature on goal-oriented learning indicates that effective learning communities have a background of relevant knowledge that the members have already considered or mastered in advance. These communities have goals in learning, and a process of searching for and managing the knowledge they acquire. By learning how to achieve their goals (Hurtz & Williams, 2009; Wan et al., 2012), instant messaging communities' function as means of sharing information, and as forums that enable learners to gain a clearer understanding of the knowledge that is relevant to their fields. The information that the members share is gradually transformed into actionable knowledge, and this accumulated knowledge is internalized to solve new problems. Therefore, goal-oriented learning allows community members to actively explore new knowledge and develop new problems or answers. This process involves sharing the experience of learning with other community members (Chou & Hsu, 2018). The members also encourage each other through their interactions and discussions as a community. Advancing their ideas together helps the members of an instant messaging community to grow more willing to adopt knowledge within the community, and to achieve their learning goals more effectively. Therefore, based on the above-described considerations, the following additional research hypotheses are proposed:

**H3: The degree of goal-oriented learning by members of instant messaging communities positively influences their levels of dedication-based trust.**

**H4: The degree of goal-oriented learning among the members of instant messaging communities influences their levels of constraint-based trust.**

### *3.1.3 Hypotheses on Swift Guanxi Between Dedication-Constraint based Trust and Continuance Knowledge Adopted Intention*

This study explores swift guanxi mainly as a type of online relationship where the participants develop an intension to work together continuously, to share their thoughts and knowledge, and to apply what they learn. Maruping and Magni (2012) explained that many people are clearly aware of the importance of learning. Due to their own experiences, abilities, or relevant skills, they are familiar with the need to seek help, knowledge, and ideas from others. To gain support, to ask questions, get answers, and contribute their own knowledge, they must first establish relationships. In recent years, online transactions and cross-border e-commerce transactions have become essential. Due to the use of online networks, new methods for collecting ideas from people across different countries allow the knowledge shared among contacts to greatly expand. When people are unclear about a topic or a product, they want to ask questions. Increasingly, they turn to their instant messaging communities for answers. Finding answers in a quicker and more convenient way helps all of the community members to more actively adopt the knowledge provided by others and thereby to empower themselves (Chou, Hsu, Shiau, Huang, & Chou, 2018; Maruping & Magni, 2012). Therefore, on the basis of the foregoing discussion, the following research hypotheses is proposed:

**H5: The swift guanxi of members in instant messaging communities has a negative impact on the community's levels of dedication-based trust and its intension to continuously adopt shared knowledge.**

**H6: The swift guanxi of members in instant messaging communities has a negative impact on the community's constraint-based trust and its intention to continuously adopt shared knowledge.**

#### 4. Discussion and Conclusion

We will use a questionnaire-based approach to collect data from Line group members, Facebook message (group), and WeChat group users and then adopt partial least squares (PLS) to test the proposed hypotheses, including measurement model and structural model. This study integrates social exchange theory with dedication-constraint based trust and swift guanxi, which aims to provide new insight into professional virtual community knowledge sharing and adopted phenomena. We explain these phenomena through the dual goal-oriented learning for dedication-constraint trust, which serves as the adopted mechanisms from expected value into knowledge adopted intention. This study proposes that factors such as goal-oriented learning, dedication-based trust, constraint-based trust, and fast relationship formation (swift guanxi) all have significant effects on the ways that instant messaging communities share and use knowledge. According to the study's structure, if the above-described set of hypotheses is confirmed, then these factors are shown to be relevant to the group members' willingness to adopt shared knowledge. Therefore, if these effects or correlations are shown to function among networks of cross-border workers, then the managers of such transnational online communities should pay more attention to strengthening and facilitating such collaboration and knowledge sharing. For theory, the proposed model expands uses and gratification theory by integrating social exchange theory that offers a duo model on dedication-constraint based trust to adopt the virtual community's knowledge. And which motivation and learning goal achievement should be consolidated members willing to adopted or take the risk to adopt it, to explain knowledge adopted decision process in the hospitality-related virtual community context. As to practice, our model proposes a useful guideline for hospitality professional owner VC members to better share their experience and resource in VC to other VC members to adopted and activities from their swift guanxi achievement to enhance their adopted intention by dedication-constraint based trust perspective.

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## **Outcome vs. process: The impact of food photo type in restaurant online reviews on consumers' purchase intention**

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### **Abstract:**

User-generated photos play an important role in online reviews, yet they have been overlooked in academic research. This study attempts to investigate the role of two types of food photos: cooked food and food under cooking process, on consumer purchase intention, as well as the underlying mechanism. Using two experiments, this study finds that online review with food preparation photo exerts a stronger positive influence on purchase intention due to higher perceived food quality and experiential value. Moreover, respondents with a hedonic motivation showed a higher purchase intention after viewing an online review with food preparation photo due to higher experiential value, and respondents with a utilitarian motivation showed a higher purchase intention after viewing an online review with cooked food photo due to higher perceived food quality. The study results provide important implications on visual content marketing and social media marketing of restaurant industry.

**Keywords:** online reviews, food photo type, perceived food quality, experiential value, hedonic motivation, utilitarian motivation

## **Travel mobility motifs: Application of network science**

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### **Abstract:**

This research proposes a notion of network motif as a modern approach in network science and detects daily movement motifs of international travelers. In order to address the research purposes, this study analyzed mobile sensor data including 3,694,856 data points from 90,140 international travelers who visited Seoul, South Korea. As a result, the results not only demonstrates the applicability of travel network motifs but also identifies the top 12 motifs reflecting around 70% of total travel trajectories. Considering length of stay as a temporal constraint, this research identifies the heterogeneity of the travel daily motifs. These insights are important for DMOs to develop tourism planning and management, which serves as the foundations of smart tourism destination.

**Keywords:** network science, network motif, tourism big data, and travel mobility motif

### **1. Introduction**

The advancement of technology (e.g., mobile phones and social media websites) enables destination marketing organizations (DMOs) to access “big data” and obtain intelligent information about travel behaviors (Li, Xu, Tang, Wang, & Li, 2018). The insights allow DMOs to better understand travel experiences, which facilitates developing a destination recommendation system. Recently, the notion of smart city and/or smart tourism has gained considerable attention in the hospitality and tourism fields. The recommendation system built on big data and analytics can be a foundation to make smart city/smart destination successful. Numerous hospitality and tourism scholars have endeavored to uncover travelers’ movement patterns from perspectives of inter- and intra-destinations. Several methods such as survey and GPS have been applied to collect data representing travel movement. However, these methods have substantial challenges requiring high temporal and financial costs. Social media information (e.g., geotagged photos) allows researchers to cover broader scales and obtain rich contextual information about travelers. Nevertheless, such data can be sparse and irregular in time and space (Lo, McKercher, Lo, Cheung, & Law, 2011). Therefore, this paper introduces another big data source, mobile sensor data, that potentially overwhelms known limitations and suggests a series of big data analytics to discover tourism insights.

More importantly, this paper proposes a new discipline, namely, network science, which studies network models based on mathematical theory to investigate, analyze, and characterize network behavior (Newman, 2018). It argues that networks (or systems) can be represented by graphs composed of a group of nodes (vertices) with links between them (edges) based on graph theory (Newman, 2003). As part of modern network science, this study particularly emphasizes network motif, which is described as patterns of interconnections or subgraphs that appear in an observed network substantially more often than in compatible randomized networks (Stone, Simberloff, & Artzy-Randrup, 2019). Network motifs are sub-graphs (small network) that display a pattern of interactions between nodes in a larger network. Understanding motifs is vital because they may expose functional properties based the structural characteristics of network system. This idea can be applied to understand travel

behaviors at the destination better. Among numerous patterns of travel movement (a larger network), network motif analysis helps tourism researchers detect important patterns of interconnections based on travel flow that appear considerably more noticeable than randomized patterns of movement. Unlike daily human mobility, travel movement should consider length of stay (LOS) as a temporal constraint that largely affects travelers' spatial behaviors at the destination (Oppermann, 1997). As the LOS differs, spatial dispersion from the main gateways (or major tourist attractions) varies (Kang, 2016).

Therefore, the main purposes of this paper are to identify travel daily motifs of international visitors in a destination (Seoul, South Korea) and discover different travel motifs according to different LOS. The findings of this research are critical to developing hospitality and tourism knowledge by applying a new discipline, network science and proposing travel mobility motifs. These insights provide important implications for DMOs to developing efficient and sustainable strategies of destination management by managing important travel motifs (key travel movement patterns) visiting various places/attractions (Bauder & Freytag, 2015). Ultimately, this knowledge should serve as a fundamental concept of smart tourism.

## 2. Literature Review

### 2.1 Network science and network motif

Network science states that most systems in nature can be depicted by complex networks that comprise nodes (or vertices) and links (or edges) connecting nodes (Baggio, 2017). Complex networks enable scholars to address important research problems discussing the formation and dynamic structure of a network and the effect of the network structure on dynamic network behaviors, which have been overlooked in traditional studies (Wang & Chen, 2003). The underlying assumption of network science is built on the idea that interactional patterns (or processes) between individuals/objects of the principal system can be entrenched in a regular and universal structure, such as a Euclidean lattice. The key aim of network science is to identify unifying principles that facilitate describing the fundamental features being uncovered and to form dynamic behaviors in the network system to understand better not only the topological objects of a network but also the framework from which dynamical systems are derived (Newman, 2018). Along with the technological advancement (e.g., increasing size and quality of data and high computing process), the recent discovery in complex networks suggests the observations of large-scale complex network named scale-free network theory, that is, the distribution of connectivity (or degree) presents a power law format: most nodes have very few connected links, but few nodes have numerous connections. A power law signifies no typical degree or scale to a network, hence labeling it as scale-free network.

The notion of network science has been applied in tourism and hospitality disciplines and provides guidance in characterizing the distinctive structure of complex real-world networks (i.e., the entire system and its constituents) involving various types of relationships. (Lozano & Gutiérrez, 2018). A keystream of the research applying network science is that of mobility patterns of travelers. A tourist's flow can be represented as a directed graph, where a node denotes a location visited, and an edge indicates the movement sequence. Travel flow between countries and cities as well as within cities has been detected in directed and/or undirected networks considering spatial proximity. The network analysis helps tourism researchers identify spatial distribution of tourism mobility by analyzing the network features in a multi-destination net (D'Agata, Gozzo, & Tomaselli, 2013), understanding movement patterns of drive tourists (Shih, 2006), and exploring the mechanisms of tourism attraction network by applying the quadratic assignment procedure (Liu, Huang, & Fu, 2017). In addition to travel

behaviors in country and city levels, several researchers focused it on specific attractions such as natural recreational areas (Orellana, Bregt, Ligtenberg, & Wachowicz, 2012).

In human mobility, popular trajectory in the complex network can be labeled as *mobility motifs*, which were initially described as “patterns of interconnections occurring in complex networks at numbers that are significantly higher than those in randomized networks” (page 346) (Yang, Wu, Liu, & Kang, 2017). Fundamental research by Milo et al. (2002) attempted to go beyond global features of scale-free networks by understanding the basic structural elements particular to each class of networks and developing an innovative approach to detecting network motifs consisting of recurring, substantial patterns of connections. They applied the network motif algorithm to several networks including gene regulation, food webs, neuron connectivity, and World Wide Web and uncovered (1) a three-node motif: feed-forward loop and (2) a four-node motif: bi-fan, which mostly appear in each network. Built on the influential study (Milo et al., 2002), Kovanen, Karsai, Kaski, Kertész, and Saramäki (2011) proposed the framework of temporal motifs to identify groups containing similar event sequences, where the similarity denotes not only network topology but also temporal order of events. The notion of network motif was applied in exploring human mobility. Schneider, Belik, Couronné, Smoreda, and González (2013) analyzed mobile phone and survey datasets and detected 17 unique motifs that explain up to 90% of daily human mobility patterns. Yang et al. (2017) proposed travel motifs by analyzing Flickr data and uncovered tourist behavior patterns. Yang et al. (2017) identified various motifs according to different numbers of attractions travelers visited. In this sense, the tourism literature stated that travel movement represented by spatial-temporal behavior can be represented as a discrete sequence of movement between places, which characterizes general flow patterns (Bujosa, Riera, & Pons, 2015). This research proposes travel mobility motifs described as patterns (or travel flow) of interconnections between destinations/attractions occurring in tourism networks at numbers that are significantly higher than those in randomized networks

Furthermore, tourism studies have identified numerous factors determining spatial behaviors of tourists (Lau & McKercher, 2006) such as human factors (e.g., destination familiarity, past experiences, and travel lifestyle), physical factors (e.g., distribution of attractions), and time. Oppermann (1994) revealed differences in travelers’ spatial behaviors. As the LOS increases, spatial dispersion from the main gateways (or major tourist attractions) expands. Similarly, Lee, Morrison, and O’Leary (2006) concluded that LOS that defines economic values is an important factor affecting activity patterns and travel expenditure at the destination. Wu and Carson (2008) regarded LOS as a temporal dimension and discovered structures of travel flow illustrating the gradual dispersion at the destinations by international travelers. Several researchers recognized LOS as a constraint on spatial travel behaviors (Kang, 2016). Differences in spatial structure (or association) of tourist attractions based on spatial network analysis were discovered according to different LOSs (e.g., short, medium, and long). The extant literature concluded different spatial dispersions (or distance) and a number of attractions that travelers visit across different LOSs. Thus, an understanding of different travel flows considering LOS is critical for developing travel mobility motifs, which ultimately suggest more sustainable and successful destination management.

### 3. Methodology

#### 3.1 Study area

This research investigates Seoul in South Korea, which is the capital and largest metropolis of South Korea (see Figure 1). Based on GDP, Seoul is the 4th largest metropolitan economy

(US\$635 billion) over the world after Tokyo, New York City and Los Angeles. Seoul includes a number of historic, natural, and modern attractions, which is the most visited city by international travelers (approximately 12,451,891 in 2015) (Korea Tourism Organization, 2019a).

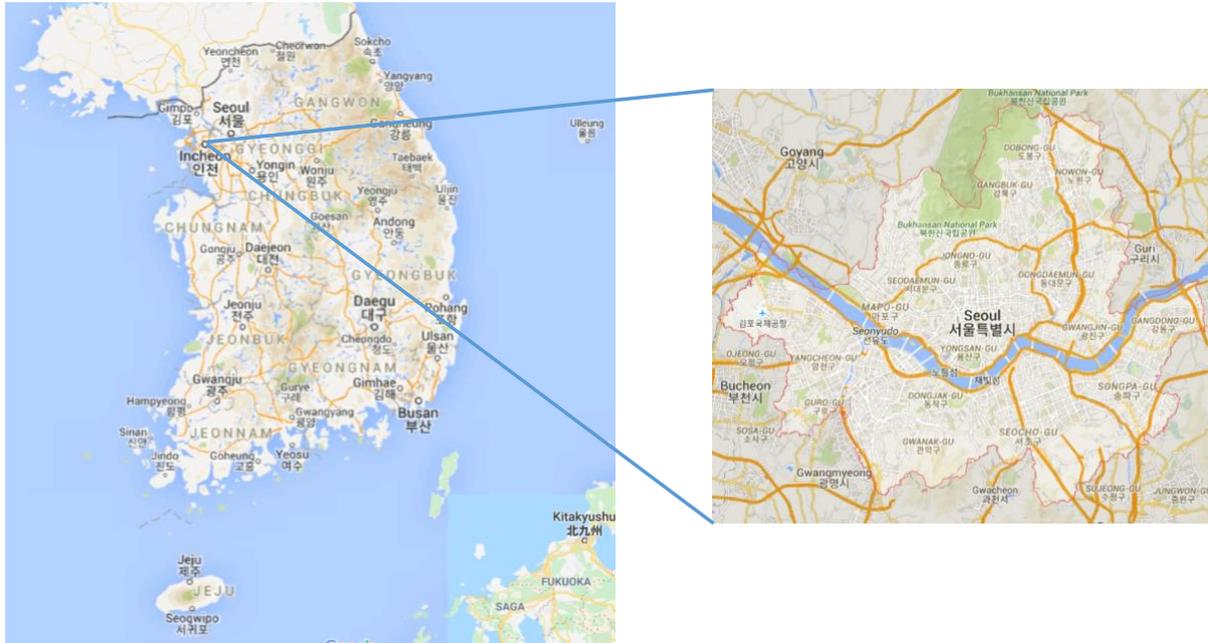


Figure 1. Study area - Seoul in South Korea

### 3.2 Features of mobile positioning dataset

Researchers can collaborate with the largest telecommunication company in South Korea, allowing them access to a massive-scale mobile positioning dataset. This dataset contains the footprint trajectory of 90,140 international travelers who visited Seoul, South Korea for 15 days (August 1, 2018–August 15, 2018), including 3,694,856 data points. An example of the dataset is shown in Table 1.

Table1. Example of individual mobile positioning dataset

Date	User ID	Nationality	Start time	End time	Longitude	Latitude
20180801	R000001	***	00:14:00	08:57:00	126.***	37.***
20180801	R000001	***	09:47:00	10:41:00	127.***	37.***
...	...	...	...	...	...	...
20180815	R192302	***	11:35:00	12:29:00	127.***	38.***
20180815	R192302	***	21:53:00	23:35:00	128.***	38.***

Each record in the mobile positioning dataset represents a period of stay of a user at certain locations. The record contains user information (unique user ID and nationality) as well as time (date, start time, and end time) and location information (longitude and latitude). Location information in the dataset was tracked at the level of virtual reference stations (VRS). Start and end times indicate the tourist's stay period within the area of a VRS. Time intervals between consecutive records provide information on tourist movement between places visited because the dataset only records the mobile phone when it connects continually to the VRS for more

than 9 min. For example, according to the first two rows in Table 1, User R000001 visited locations (126,\*\*\*, 37.\*\*\*) and (127.\*\*\*, 27.\*\*\*) between time windows of [00:14:00–08:57:00] and [09:47:00–10:41:00], respectively. This finding implies that the travelers have stayed in the first VRS for 8 hours and 43 minutes and that the time interval [08:57:00–09:47:00] is assumed to be the moving period of the tourist. Figure 2 presents the individual phone trace.

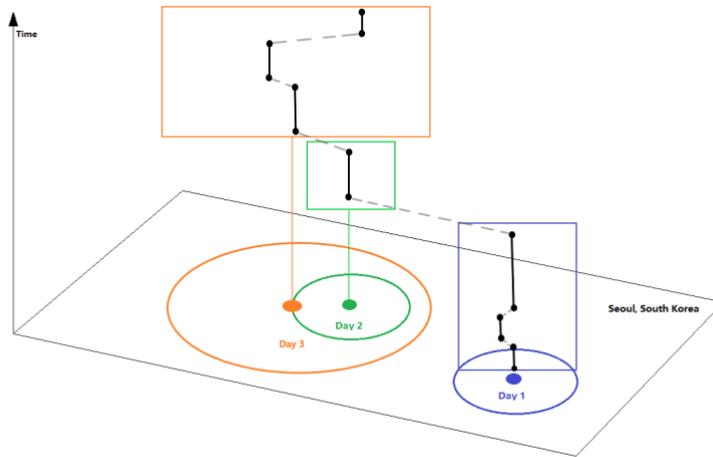


Figure 2. An example of individual mobile trajectory from Day 1 to Day 3.

Note: The X–Y plane represents geographical locations in Seoul and the Z-axis represents the timeline. A solid segment means a VRS record (nodes in network motif) and the dashed line means the movement period between two VRS (edges in network motif).

Once international travelers arrive at an international airport, the location-based system tracks their movement until they leave Seoul, South Korea (e.g., Figure 2). Thus, the maximum LOS in South Korea should be 15 days. The average stay duration of international travelers in South Korea is 8.36 days, and approximately 93% of travelers visit South Korea for less than 20 days (Korea Tourism Organization, 2019b). Accordingly, it can be said that our datasets include sufficient sample profiles to meet the representativeness of international travelers visiting South Korea.

### 3.3 Data analysis

Figure 3 illustrates the sequential procedures of tourism big data analytics for network motif analysis. The procedures consist of trajectory construction, daily trajectory, and motif analysis. Details of each step are described in the following sections.

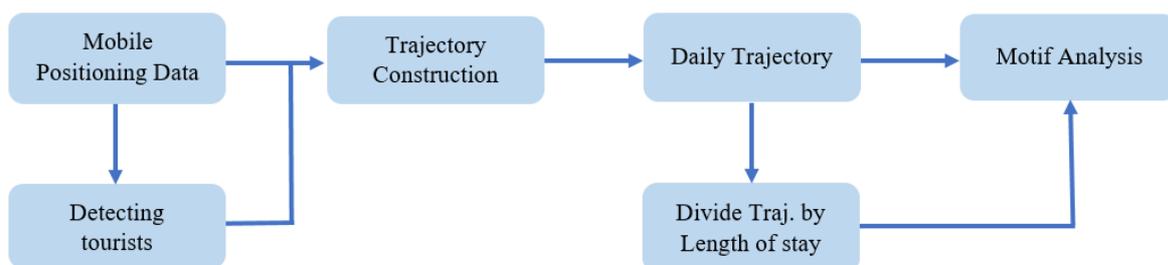


Figure 3. Analytical framework of the study

### 3.3.1 Trajectory construction

Trajectory analysis was conducted to assess tourist movement behaviors. Given the nature of mobile positioning data, the individual's sequence of movement can be extracted by tracing all records of VRS visited with the same user ID. The traveling trajectories of visitors can be constructed after sorting the traveling sequence according to their start and end times for every VRS revealed. Each person's time-ordered traveling trajectory can be written as a sequence of VRS visiting records:

$$T = \{R000001: [(VRS1, date1, start1, end1), \dots, (VRSn, daten, startn, endn)], \\ R000002: [(VRS2, date2, start2, end2), \dots, (VRSm, datem, startm, endm)], \\ \dots \\ R192302: [(VRSx, datex, startx, endx), \dots, (VRSy, datey, starty, endy)]\}$$

Where T denotes trajectory; VRS refers to virtual reference station; date indicates the visiting date; and start and end are the start time and end time of the visit, respectively.

Each tourist in T may have duplicate VRSs in the trajectory, but start time and end time should be different and shows the loop behaviors. In addition, if two adjacent records in the sequence are in the same VRS spot, which may happen when the tourist leaves a place for a while and then returns, then the adjacent records would be combined to simplify trajectory analysis. If two adjacent records share the same VRS location and the same date, then the records would be combined. The start time of the record is the start time of the earlier record, and the end time of the record is the end time of the later record. The movement period would be included in the record.

### 3.3.2 Daily trajectory

Considering nature of travel mobility that people have different LOS, it is critical to discern travelers who have various LOS and estimate daily trajectory accordingly. For example, if tourist A plans to stay in Seoul for 10 days and tourist B wants to visit Seoul for 3 days, travelers' moving trajectories are highly likely to be distinguished (Jin, Cheng, & Xu, 2018; Oppermann, 1994). In this case, the daily moving pattern is an appropriate method for analyzing the similarity between trajectories. Markov chain method in previous studies is used to study the mobility of local people whose homes are usually regarded as the starting point of their daily movement (Schneider et al., 2013). However, tourists may change their accommodations during their visit, which makes identifying their starting point difficult. More importantly, considering arrival and departure days, travelers' trajectories are largely varied due to variations of their time for arrival to and departure from Seoul. Hence, the researchers focused particularly on certain days when total trajectory information of travelers is available for the whole day time in Seoul. Suppose that a traveler visits Seoul for three days. The daily trajectory has been analyzed for the second day to track their behaviors in 24 hours. Note that this analysis assumes that visitors wake up after 06:00 and return to the hotel before 03:00. Thus, the first VRS record in a day, whose end time is later than 06:00, is treated as the starting point. The last VRS record in a day, whose start time is before 03:00, is regarded as the ending point.

### 3.3.3 Motif analysis

In network science, many complex systems can be represented as networks formed by points and connections between points. These points are called nodes and the connections are known as edges between nodes. In trajectory analysis, tourist movement patterns can also be

transformed into a complex network (Schneider et al., 2013). VRS spots are nodes connected by moving tourists. A subgraph is defined as another graph formed by a subset of the nodes and edges from the big graph. A motif is a subgraph that occurs more frequently than a randomly chosen subgraph (Milo et al., 2002). In this paper, the daily moving pattern of tourists is regarded as the motif of the entire trajectory graph.

Motif analysis simplifies the daily trajectory as a sequence of VRS ID, which is relabeled in the order of the appearance of the VRS in a person's record on that day. For example,

$$\begin{aligned} & [(10,10), (5, 5), (10, 10)] \\ & [(23, 53), (46, 96), (23, 53)], \end{aligned}$$

can be simplified as

$$[0, 1, 0].$$

It describes that the first and third places (or VRS) traveler visited are same whereas the second spot is different. That is, a daily motif of the individual traveler shows a morphology as “turning back” with same start and end points of his/her journey.

After calculating the daily motif pattern of every tourist (192,302 tourists), the frequency of motifs was summarized and compared according to different LOS. The influence of weekdays and weekends on motifs will be discussed in the results as well. The daily motif patterns are written as follows:

$$\begin{aligned} M = \{ & R000001: [[0, 1, 0], [0, 1], [0, 1, 2, 0], \\ & R000002: [[0, 1, 2, 3]], \\ & R000003: [[0, 1, 0, 2, 3, 4, 5], [0], [0, 1]], \\ & \dots \\ & R192302: [[0, 1, 0], [0, 1, 2, 0], [0, 1, 2, 3, 2], [0, 1]] \} \end{aligned}$$

where the trajectory within [] refers to daily motif patterns

## 4. Results

### 4.1 Profile of respondents

Figure 4 presents the number of tourists who visited Seoul, South Korea from August 1, 2018 to August 15, 2018. Two local peaks, namely, 8/3 (Friday) and 8/13 (Sunday), can be observed in the figure. The largest number of international travelers visited Seoul on 8/13, and a local minimum was observed on 8/6 (Monday).



Figure 4. Number of daily visitors in Seoul

#### 4.2 Temporal movement patterns

This analysis shows the percentage of international visitors who traveled to Seoul during specific periods. The researchers counted the number of visitors moving from a place (i.e., VRS) to another in each period and divided the result by the total population of visitors staying in Seoul during that period. The result reveals that the moving percentage starts increasing gradually at around 7:00 and decreases to a relatively stable state at around 22:00 (see Figure 5). Between 11:00 and 22:00, the moving percent remains at around 70% and drops rapidly afterward.

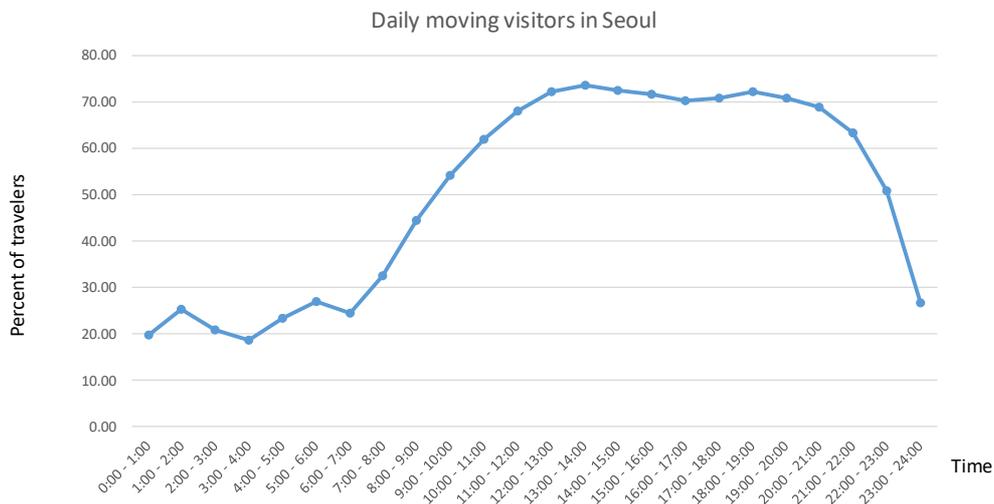


Figure 5. Daily moving visitors in Seoul

#### 4.3 Daily travel distance

This statistic highlights the distribution of the average moving distance of visitors in Seoul (see Figure 6). The bin size is 5 km, which suggests that 47.21% of visitors have a moving distance of 0–5 km. About 85% of travelers had equal and/or less than 10 km a day for their trips. Most

travelers tend to move within the distance for a basic fare of public transportation (Korea Tourism Organization, 2019).

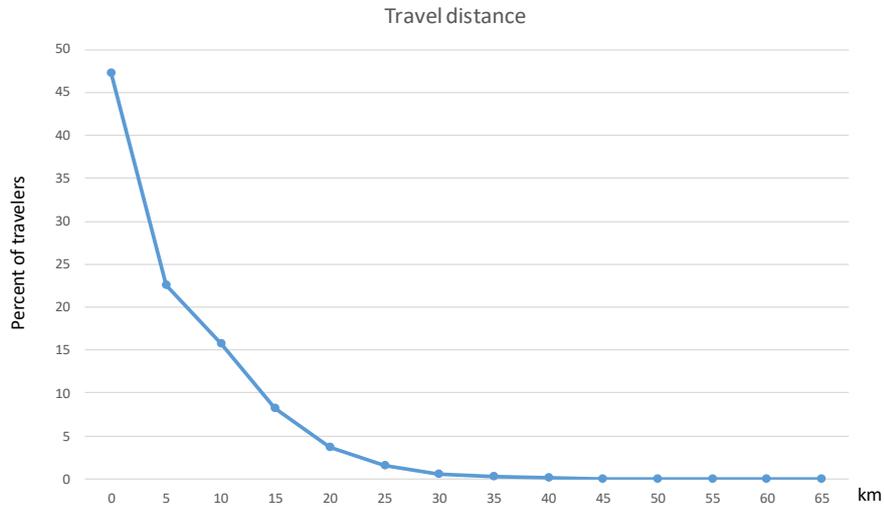


Figure 6. Average moving distance of visitors in Seoul

#### 4.4 Successive records in the daily trajectory

The duration of successive records in the visitor daily trajectory demonstrates the daily time a visitor spends moving between spots (see Figure 7). The figure consists of the moving time (in min) in the X-axis and the percentage of visitors on the Y-axis. The majority of visitors (about 80%) exhibit successive movement equal and/or less than 400 min per day. The mean of moving is around 303 min. The peak locates at around 250 min/day while visiting Seoul, South Korea.

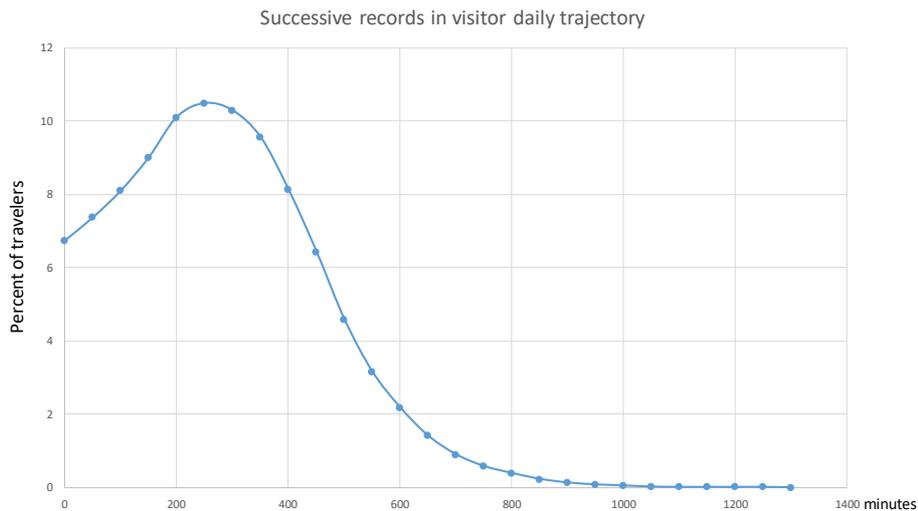


Figure 7. Duration of successive records in visitor daily trajectory

#### 4.5 Average visiting duration for each VRS

Figure 8 presents the time spent visiting a VRS averaged across visitors assigned to that VRS. The mean of visiting duration is 129.5 min. This means that international travelers stay at a VRS, on average, for about 2 hours and 10 min for their travel activities. The majority of visitors tended to visit a VRS between 50 and 60 min.

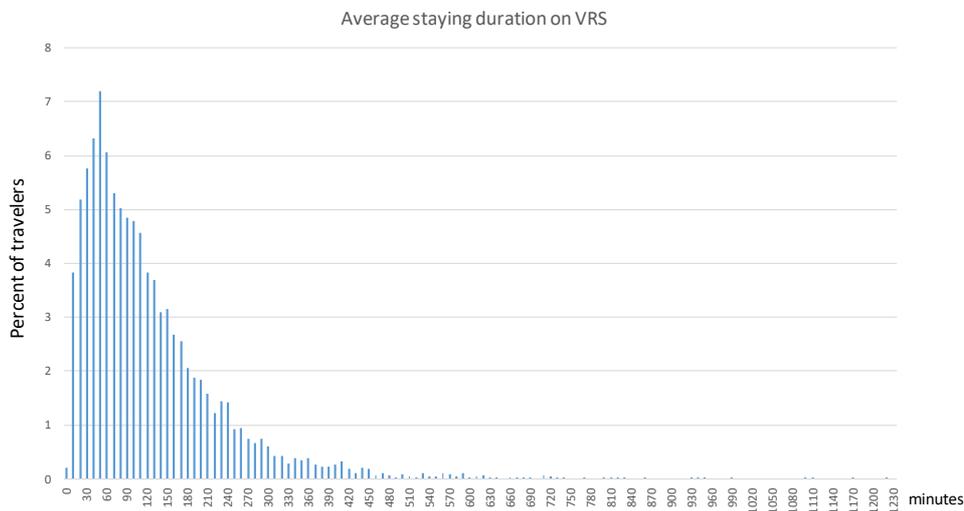


Figure 8. Average visiting duration for each VRS

#### 4.6 Mobility motif

The researchers initially uncovered 172,427 daily trajectories or travel motif patterns from 90,140 international travelers. Among the numerous travel motifs, this paper focuses on the first 12 motifs whose frequency of travelers is more than 1%, thereby reflecting approximately 70% of total travel motifs, which is labeled as travel daily motif (see Figure 9). About 84.5% of daily motif patterns show only a single count, which means individual travelers exhibit extremely heterogeneous behaviors. Comparing to previous studies, tourists' routines are relatively much more diverse than those of residents' motif analysis (c.f. Schneider et al., 2013).

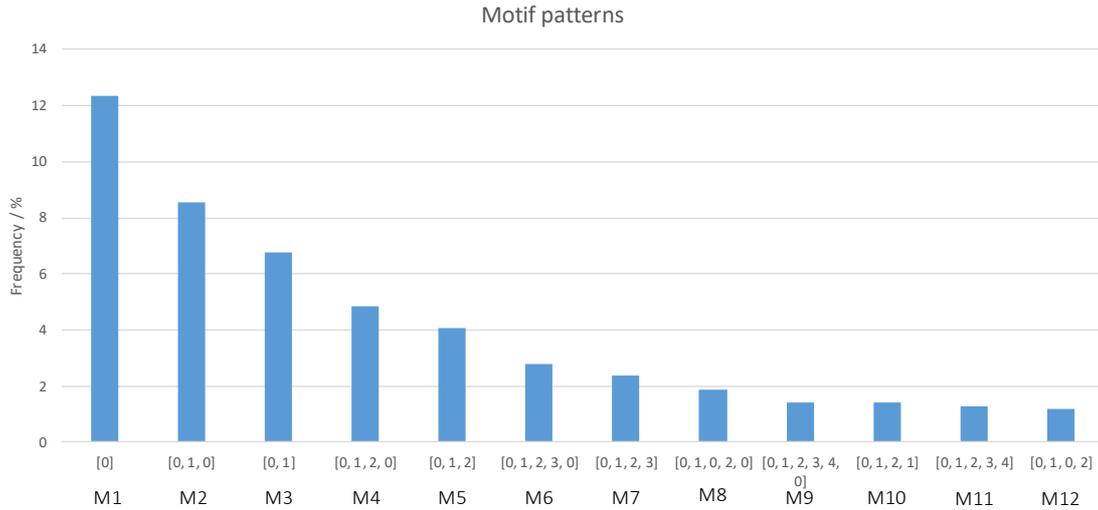


Figure 9. Results of top 12 motif patterns

The z-score of the top 12 motifs was calculated to assess the variability of motif patterns. The z-score is determined by Eq. (1):

$$z \text{ score} = \frac{F_G(m) - F_{R,Avg}(m)}{\sigma(F_G(m))} , \quad (1)$$

where,  $F_G(m)$  is the frequency of motif  $m$ ,  $F_R(m)$  indicates the frequency of motif  $m$  in a random graph  $R$ , and  $F_{R,Avg}(m)$  and  $\sigma(F_G(m))$  are the mean and standard deviation of frequency in random networks, respectively. The calculated z-score of the top 12 motifs are over 11.38, thereby demonstrating that the motif patterns occur substantially higher than those in randomized networks.

Overall, international travelers tend to visit less than six different places in their travel movements. More specifically, about 12% of travelers visit a single place a day (M1). The researchers delved into the data set and realize Chungmuro in Jung-gu as the most popular place. Assuming that starting point as accommodation, travelers are likely to visit one (M2 and M3) or two (M4, M5, M8, M10 and M12) additional places, which stand for about 30% among top motif patterns together. M8 shows a travel morphology as “chain” where travelers who return to the initial location after visiting a single place and then continue to travel to other place (approximately 2%).

In addition to the general travel motif, this paper explores travel patterns that consider tourists’ LOS in Seoul. This paper assumes that LOS would affect the tourists’ choice of motifs. Figure 10 presents the travel daily motif (second day of stay in Seoul) according to different LOSs. Note that (1) the travel daily motif analysis is conducted for up to seven LOSs because international travelers who visit Seoul from one to seven LOS represent around 84% and (2) The full results of third, fourth, fifth, and sixth days will be presented during the conference presentation owing to limits of pages.

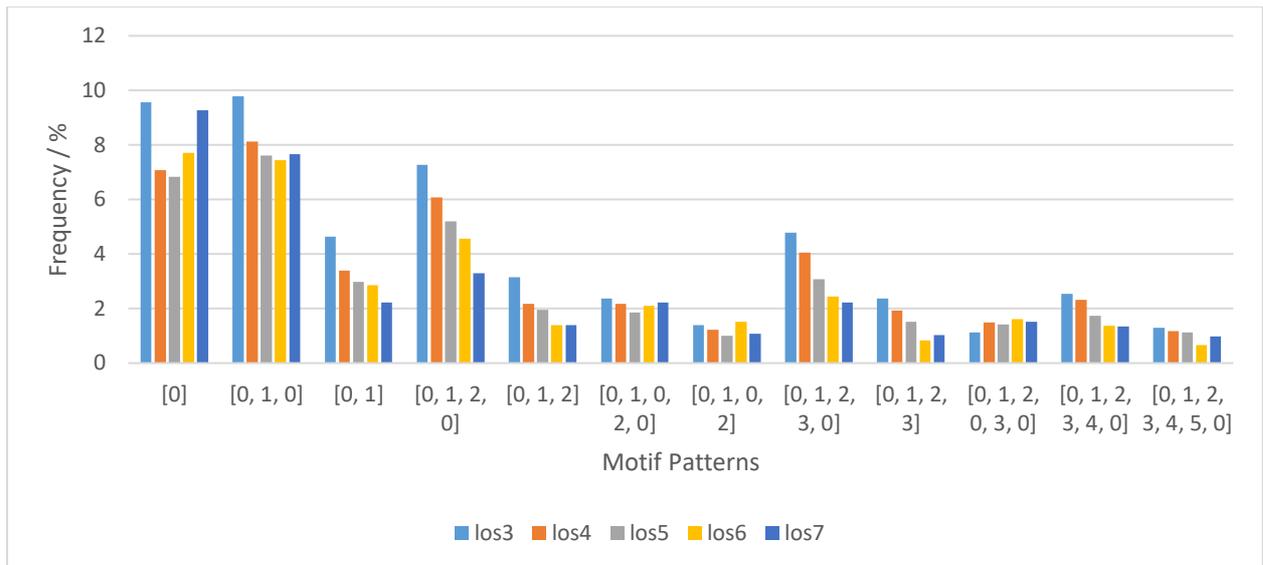


Figure 10. Second day motif pattern frequency on five different length of stay groups (LOS = 3–7).

The frequency of most motifs varies with the LOS. The frequency usually decreases as the LOS increases, which indicates that the motif diversity of tourists who stay in Seoul for a longer time rises compared with other tourists staying in Seoul for a shorter period. As expected, this analysis shows the total frequency drops as the LOS increases.

Lastly, we calculated the average number of different places (i.e., VRS) visited by tourists with respect to their LOS and days of stay (see Figure 11). The maximum number of VRS visited occurs on the second day of travelers who visit Seoul for five LOS. The maximum average is 5.62169, which implies that travelers who stay in Seoul for five days tend to visit approximately six different places on the second day. The minimum average is 2.61644 for the 14th day of LOS 15. The graph shows that people visit more places on their second day of stay but their visiting aspiration decreases gradually as they stay longer in Seoul.

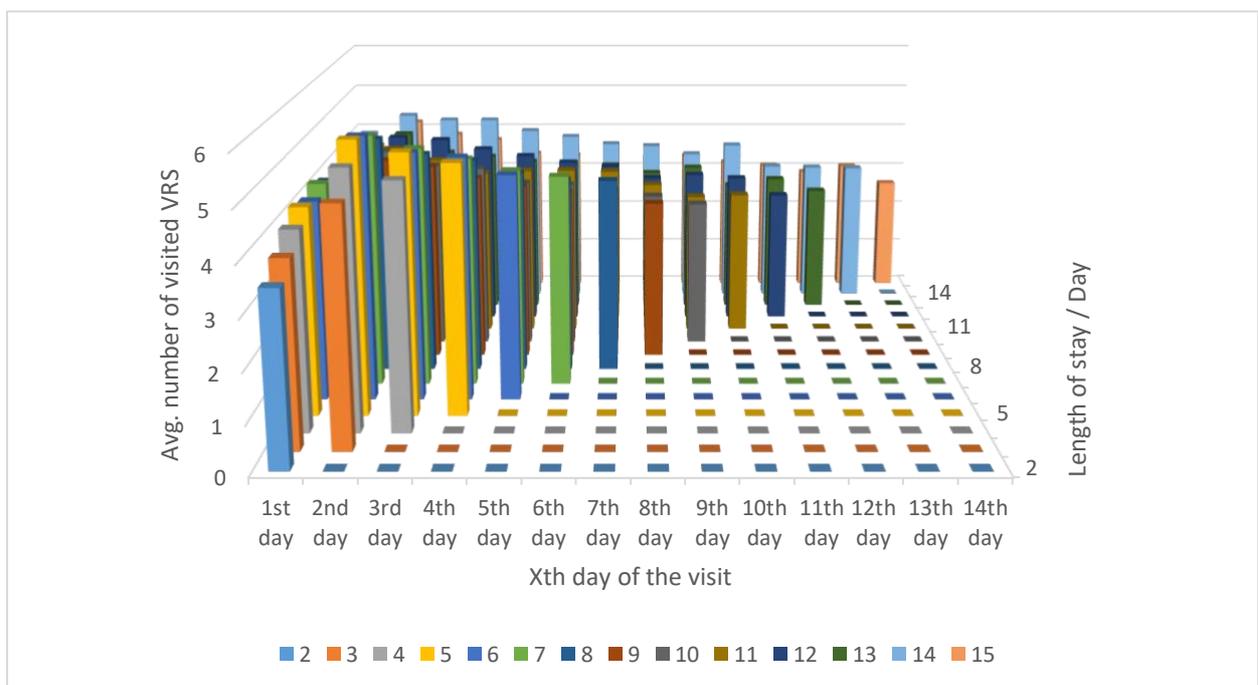


Figure 11. Average number of places visited according to daily motif category

## 5. Discussion and Conclusion

This paper applies a network motif as a modern approach in network science and detects international travelers' daily motifs while visiting Seoul, South Korea. This paper provides important contributions to tourism and hospitality knowledge. To the authors' best knowledge, this paper is the first tourism research that adopts the concept of network motif proposed by Milo et al. (2002) in biology in understanding travel movement patterns. This paper not only proposes a notion of travel network motifs but also identifies the top 12 motifs reflected around 70% of total travel trajectories. Recognizing the impact of LOS on travel behaviors (Jin et al., 2018), this research identified distinctive daily motifs as well as different numbers of places travelers visit depending on different LOS. As a result, this study suggests network science as a new discipline to identify the structure of complex systems in terms of travel mobility. This paper also provides innovative methodological implications. Along with the advancements of technology (e.g., mobile technology) enabling researchers to access massive digital footprint data, this research suggests a series of big data analytics for uncovering new insights. This method should be applicable to other types of big data (e.g., geo-tagged information from flickr or twitter) for future hospitality and tourism researchers. The findings of this research may be beneficial for DMOs to develop dynamic strategies of destination planning and management, such as product development (e.g., travel packages and design of new attractions) and enhancement of transportation systems as well as the allocation of monetary and non-monetary budgets. These insights derived from big data and analytics can be fundamental to achieving a smart city/smart destination. While this research made important contributions, there are several limitations. First, the data reflect travel behaviors in Seoul, South Korea. In order to assess the generalizability of the findings, it is suggested for future researchers to assess travel mobility motif in various contexts of destinations. Second, this research just analyzed movement data associated with behavioral approach in understanding travel behaviors. The researchers emphasize the importance of data integration that combines data of behavioral and psychological (perceptions) aspects. In this sense, future researchers who conduct big data approach are strongly suggested to obtain information about travelers' experiences, such as survey and/or interview.

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## **Research on the pictorial review in hospitality**

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### **Abstract:**

Photos and texts are the main presentation formats of the content of online reviews. Compared with textual reviews discussed by the industry and academia, pictorial reviews have received less attention. This article adopts content analysis with manual coding to explore the specific content of pictorial reviews, in an attempt to lay the foundation for continued research on pictorial reviews in the future.

**Keywords:** online review; pictorial review; hospitality

### **1. Introduction**

Sharing visual representations of travel experience has become an important part of travel activities in an increasingly digitized society (Konijn, Sluimer, & Mitas, 2016). User-generated photos are proof of an actual experience, especially in experience-oriented hospitality domain in which visual images are a powerful representation of customers' interactions with a product (Ma, Xiang, Du, & Fan, 2018). Photo sharing has become an important form of users' documentation and communication regarding their experience with hospitality products (Garrod, 2008; Oeldorf-Hirsch & Sundar, 2016). This study aims to explore the content shown by pictorial reviews.

### **2. Literature Review**

Photos are another means of documenting one's experience, in addition to text. Photos provided by users are a visual means for them to present their actual experience and increase the authenticity of presence (Ma et al., 2018). Photos play a major role in recording and sharing experience, particularly in hospitality and tourism in which experience and service are the core products (Garrod, 2008). Compared with text, photos have a greater positive effect on customers' willingness to purchase, improve customers' positive reviews, and create a memory effect (Chowdhury, Olsen & Pracejus, 2008). Besides, it has been indicated that customers relied more on textual information to make decisions, and pictorial information provided only the verification of actual purchase behavior and played a role in strengthening textual information (Mudambi & Schuff, 2010). Studies on the effect of photos with respect to online reviews are relatively rare. Pictorial reviews provide information regarding products in a more direct and vivid manner than textual reviews (Taylor & Thompson, 1982) and inform potential customers about previous buyers' experience (Forman, Ghose, & Wiesenfeld, 2008). Pictorial reviews exert a considerable effect on customers' information-gathering process and

subsequent purchase intention (Lo et al., 2011). Furthermore, reviewers' photos were shown to facilitate message elaboration, thereby amplifying the effects of review quality (Lee & Shin, 2014) and predicting review helpfulness (Ma et al., 2018).

### 3. Methodology

Raw data of the pictorial reviews in hospitality was crawled from Ctrip.com (<http://www.ctrip.com>). Content analysis with manual coding was adopted in this study, and it been pointed out that human judgment and manual coding are more accurate than automated text mining (Netzer et al., 2012). According to the concrete content or size of space occupied by specific objects in a photo, elementary coding was operated.

### 4. Results

Geographical location, surrounding environment, hotel facilities excluding in-room facilities, beds, bathrooms, some food provided in the room, such as fruits, drinks, and snacks, catering, the outside scenery viewed from the room and person were coded, then categorized into public facilities, in-room facilities, catering, view, and person figure.

### 5. Discussion and Conclusion

This article expanded the research scope concerning online reviews, incorporated pictorial reviews into research, defined and extracted pictorial reviews with the content of public facilities, in-room facilities, catering, view or person figure. And future research should combine the influence of textual review and pictorial review on customer rating and helpfulness to extend the analysis on online review.

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## **Investigating the emotional contagion between employees and guests: Evidence from online reviews in COVID-19 pandemic**

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### **Abstract:**

This study was inspired by online reviews of customers staying in hotels during the COVID-19 pandemic. The preliminary analysis of the review data shows that employees' emotions during the pandemic have a significant impact on the rating of the hotel by customers. Therefore, the current study uses the method of big data mining and manual content analysis to identify the mechanism of emotional contagion between employees and customers, and emphasizes the importance of employees' emotions during the crisis. Thus, from the aspect of staff management, it provides reference for the hotel to deal with the crisis.

**Keywords:** Emotional contagion, the COVID-19, User generated content

### **1. Introduction**

It's estimated that the COVID-19 virus has already infected more than 14 million people and caused 597,583 deaths (World Health Organization, 2020). The number of international tourists has decreased by 67 million, and the loss of tourism revenue is about 80 billion US dollars (the United Nations World Tourism Organization, 2020). It's a big issue for hoteliers to undertake measures to reduce the infectious risk and to manage the crisis successfully. Crisis response strategies need to be formulated according to the urgency, infectivity and scale of the crisis (Ritchie, 2004). Appropriate and effective responses can reduce tourists' anxiety (Sigala, 2011).

This study was motivated by recent online hotel reviews, which highlight the importance of emotions displayed by employees during the pandemic. It is verified that the contagion of positive emotions between employees and customers can not only improve customer satisfaction, increase return rate (Hennig-Thurau et al., 2006), but also increase their supportive attitude towards products (Howard and Gengler, 2001) and service. Thus, we propose our research purposes, identifying positive emotions displayed by employees of hotels, exploring dimensions of customers' experience, and constructing the mechanism of emotional contagion on customers' experience.

## **2. Literature review**

### *2.1 The Theory of Emotional Contagion*

“Emotional contagion” is defined as the flow of emotions among individuals and groups, with emotions displayed by the sender transferring to the receiver. (Schoenewolf, 1990). Affected by the sender's emotions, the receiver will unconsciously imitate some of the sender's actions, expressions, and behaviors (Chartrand and Bargh, 1999). In the context of service interactions, emotional contagion creates a ripple effect of emotions from service employees to customers (Pugh,2001).

### *2.2 Positive Emotions in the Service Context*

Positive emotions tend to influence individuals' subsequent judgments of the products or services. Smiling is regarded as a positive emotion (Ekman, 1993) and is collectively understood as a sign of friendliness, generosity, and other altruistic behaviors (Gabriel et al., 2015; Grandey and Gabriel, 2015). Therefore, “service with a smile” is generally a basic rule for the service industry. What's more, positive behaviors displayed by employees such as smiling, greeting, caring, and expressing gratitude are always be encouraged.

### *2.3 COVID-19 and its influence on tourism and hospitality sector*

The COVID-19 pandemic caused a 22 percent fall in international tourist arrivals during the first quarter of 2020 (UNWTO, 2020). Travel and tourism are among the most affected industries, with airplanes grounded, hotels closed, and travel restricted (UNWTO, 2020). It's a big challenge for hospitality sector to recovery. A range of strategies has been undertaken by destinations and hotels.

## **3. Methodology**

An integration method of text mining and manual content analysis was conducted to explore the mechanism of emotional contagion. Firstly, text mining was conducted to analyze online reviews generated by customers and employees during the pandemic. The thematic model analysis and sentiment analysis will be adopted. Secondly, to ensure the credibility of the current study, triangulation was used. The limitations of big data for natural language processing are supplemented with manual content analysis. Besides, member checks and peer review was conducted to ensure the quality of the study.

## **4. Findings**

The finding section is divided into three parts in response to our research purposes. They are: positive emotions displayed by employees, dimensions of customers experience during the COVID-19, and the circle mechanism of emotional contagion.

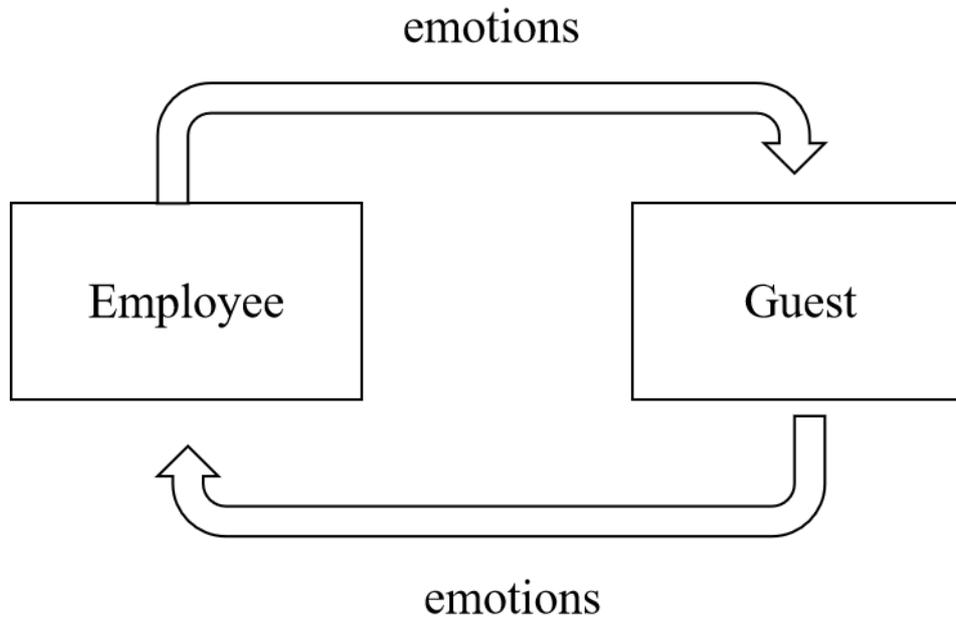


Figure1. conceptual circle mechanism of emotional contagion

## 5. Conclusion and implications

Based on online reviews, this study uses a comprehensive research approach to analyze the emotional contagion between employees and customers during the pandemic, and investigate the mechanisms of emotional contagion. This study emphasizes the importance of emotional contagion from the customer's perspective, especially in the context of health-related crises, enriching the theoretical study of crisis management. In practice, it can provide an employee-level management strategy for crisis management.

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## **Social media sites and nightlife tourism: an empirical study of tourist decision making on nightlife entertainment consumption**

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### **Abstract:**

This paper examines the effect of social media usage on tourist decision to consume and their spending amount on nightlife entertainment. Through the application of Heckman correction model to counter potential selection bias, only tourists' usage of Facebook had positively linked to their probability to consume nightlife entertainment. While Youtube was found to be solely a social media site which can statistically stipulate tourists to spend more on their nightlife entertainment. The result suggested that entrepreneurs can use Facebook and Youtube to elevate consumption probability and spending intensity, respectively.

**Keywords:** Nightlife, Entertainment, Social Media

### **1. Introduction**

The number of international tourist arrivals to Thailand reached a record high, the arrival almost reached 40 million in 2018, the international tourism-income receipts were recorded over trillion Baht or 63 billion US\$ in the same year (UNWTO, 2019). The role of tourists as direct income disseminators in tourist destinations include their spending on accommodation, food and beverage, sightseeing and tour and entertainment. The recent survey by Thai authorities remarked the significant role of nightlife entertainment in Thailand's tourism sector, as 48 percent of the nation's international tourist arrival spent over US\$110 per trip on nightlife entertainment in 2018. Since Thailand has been considered as one of South-East Asia's main destinations for tourists who seek nightlife experiences, we were motivated to study tourists' consumption on this spending category, which had received the least attention in the academic field. This paper was devoted to explore the recent development in nightlife tourism by integrating a growing trend of social media usage by travellers as their information source.

The recent consumer survey revealed that almost 3.48 Billion people were categorized as active social media users which accounted for 45 percent of the total population. 3.26 billion people use social media on mobile devices in January 2019, with the growth of 297 million new users representing a year-on-year increase of more than 10 percent. A vast number of papers had been dedicated to study the effects of social media on accommodation selection, F&B, and shopping behaviour of tourists. There has, however, been a lack of studies on the effects of social media on tourist's entertainment consumption. This paper examines how the usage of each social media site by tourists could influence their consumption of nightlife entertainment in Phuket<sup>7</sup>, which is the major tourist destination in Thailand.

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<sup>7</sup> In recent years, Phuket welcomed more than 50 million visitors. Tourism has dominated the province's economy for the past two decades. Phuket has the second highest tourism revenue of any province in Thailand outside of Bangkok.

## 2. Literature Review

From our review of literatures, Oldenburg (1989), Mendes and Mendes (2011), Florida (2004), Currid-Halkett (2007), and Ngesan and Karim (2012), nightlife activities could be broadly refers as entertainment at the nighttime which generally includes pubs, bars, nightclubs, dance clubs, lounges and the pleasant places provide informal social activities among strangers and friends. Nightlife has been perceived as the late-night economy that to capture young travelers, Calafat, Blay, Bellis, Hughes, and Kokkevi, (2010) found that nightlife entertainment has become one of the criteria for young travellers to select destinations beyond climate and price. Tourists can access travel information regardless of their location, either pre, during, post-arrival, travelers usually used social media sites to seek their travel inspiration, including nightlife entertainment. Calafat et al. (2010) revealed that entrepreneurs often relied on online sites to promote their business by posting the unique nightlife experience scenes. While the tourists typically use them to generate online content on their nightlife entertainment consumption rather than other services and created a significant number of blogs, social networking, and photo/video sharing sites (Xiang & Gretzel, 2010). Alonso-Almeida & Ribeiro de Almeida (2018) explained that tourists used social media as a source of information to make their destination choice. Kiráľová & Pavlíček (2015) found that advertisements on social media sites could actually divert tourist's plans, and Dwityas & Briandana (2017) affirmed the same conclusion. With an increasing presence of social media in consumer behavior, we aimed to examine the linkage between tourist's usage of social media sites and their decision to spend on nightlife activities.

## 3. Methodology

TripAdvisor had suggested that there were more than 200 nightlife establishments in Phuket, which most of the top-rated nightlife entertainments were established in Patong city, specifically most of the nightclubs, bars, go-go bars and pubs located on Bangla road as depicted in the following pictures.



**Note:** Left and right photo were taken on 11th February 2020 and presented the atmosphere of Patong walking street, the most visited nightlife area.

To avoid our research assistants from exposure to respondents' inappropriate behaviour caused by intoxication, a large number of questionnaires, instead of typical 400 sets, were distributed at the departure hall of Phuket international airport. With further application of the econometrics model to avoid selection bias, which could potentially cause by disproportional between respondents with consumption and respondents without consumption of nightlife

entertainments, 2,000 questionnaires were distributed at airport departure hall under the PTEI project.

It should be clearly noted that not all respondents had experienced nightlife activities; hence, if we include only respondents with positive spending amount on nightlife activities. Our analysis would be potentially subjected to selection bias issues. To counter this issue, we had adopted the Heckman two-step correction model, which both decision to purchase and spending amount on nightlife activities were regressed against key social media sites variable, dummy variable. Other control variable lists which include age, travel arrangement, income, perceived important level of nightlife entertainment. The following equations were illustrated to briefly explain the sequences of selection and response in Heckman two steps model.

$$S_i^* = x_i\beta + \epsilon_i \quad \text{eq.(1)}$$

$$D_i = \{1 \text{ if } \gamma_i z_i + v_i > 0\}, \{0 \text{ if } \gamma_i z_i + v_i \leq 0\} \quad \text{eq.(2)}$$

Where  $S_i^*$  is spending amount on nightlife entertainment, which is only observable to respondents who had consume nightlife entertainment,  $S_i^*$  equals to  $S_i$  if  $D_i$  is 1, which implies that the respondent had consumed nightlife entertainment during their trip, 0 otherwise.  $x_i$  is a vector of variables that could potentially influence tourists' expenditure on nightlife entertainment.  $z_i$  is a vector of variables which could potentially influence tourist's decision to consume nightlife entertainment.  $\gamma_i$  is the vector of coefficients of these variables.  $\epsilon_i$  and  $v_i$  were assumed to be normally distributed.

#### 4. Results

Due to word count restriction, table with full lists of variables, descriptive statistics, Ramsey reset test table, correlation matrix re available upon reader's request. However, the following table summarizes key results from both selection (presented as Marginal Effect) and response equation.

Variable	Facebook		Instagram		Twitter		Youtube	
	Marginal Effect	Response	Margin Effect	Response	Marginal Effect	Response	Marginal Effect	Response
Social Media	0.146** (0.043)	0.3728 (0.137)	0.088 (0.316)	0.260 (0.218)	0.1156 (0.387)	0.2820 (0.462)	0.0325 (0.725)	0.572*** (0.009)
Number of obs	407		407		407		407	
<b>R-squared</b>	<b>0.476</b>		<b>0.472</b>		<b>0.469</b>		<b>0.487</b>	

Pseudo R2	0.198	0.193	0.192	0.191
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**Note:** Number in parenthesis is the p value of coefficient, coefficients, figure reported with \*\* are significant with 0.05 significance level, figures reported with \*\*\* are significant at 0.01 significance level.

Results clearly indicated a null hypothesis of no linkage between usage of social media sites and tourist's decision to consume nightlife entertainment can be rejected only in Facebook site. We found that tourists who had used Facebook to seek for their travel information source generally have 14.6% higher probability to consume nightlife entertainment than non Facebook users tourist. For other social media sites (Instagram, Youtube and Twitter), no linkage between tourists' usage of other social media sites and their decisions to consume in nightlife activities was found. For an investigation of social media effects on nightlife spending, we found that only Youtube can significantly influence tourist's spending amount on nightlife activities. The effects from Facebook on decision to consume and Youtube on spending intensity on nightlife entertainment coincided with previous study in the US. As Xiang & Gretzel (2010) found that travel-related search on nightlife activities constituted the largest tourist's expenditure portion, and those online searches were highly associated with the use of photo/video sharing social media sites. We found that Instagram and Twitter had no effect either on tourist's decision to consume nightlife activities or tourist's spending amounts on nightlife entertainment. Interestingly, we found that only a few control variables in our testing regressions can significantly influence tourists to consume nightlife entertainment; for instance, foreign tourists typically have higher spending intensity and they have higher probability to consume nightlife entertainment than domestic tourists. While, free individual travel (FIT) tourists had higher probability to participate in nightlife entertainment than tourists who were travelling as a group tour.

## 5. Limitation and Conclusion

The analysis of this paper was limited to the consumption decision and spending amount on general nightlife entertainments in Phuket, the further primary survey should specify types of nightlife entertainment which tourists had experienced rather than a generally defined term. In addition, data on tourists' social media usage in further studies should be obtained as the level of engagement, preferably through big data platform, in order to elevate the analysis on one of tourism topics which had been flying under researchers' radar in the past.

As part of the Kingdom's promising sector, nightlife tourism plays a significant role in Thailand's tourism industry. This study examined the linkage between the usage of social media sites as an information source and tourist's decision to consume nightlife entertainment. To avoid selection bias which could inherently occur because only a portion of respondents had actually consumed nightlife entertainment, we adopted the Heckman two-stage econometric model to investigate this research question. As a source of information for tourists, we found that only Facebook can significantly increase tourist's nightlife entertainment consumption probability in Phuket. While Youtube was found to be a tourist's source of information which can stipulate the spending amount on nightlife entertainment. Tourist usages of Instagram and Twitter were found to have neither linkage to tourist's probability nor tourist' spending amount on nightlife entertainment.

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## **The impact of social media content on purchase intentions – The role of telepresence and social presence**

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### **Abstract:**

Presence theory acts as an essential role of online behaviors in cyberspace. However, much uncertainty still exists concerning presence-based concepts in social media hotel marketing context. This study investigates the impact of telepresence and social presence on purchase intention through trust. The model was tested by structural equation modeling using 342 valid questionnaires. The results show that telepresence and social presence both are positively related to trust, which is a strong predictor of purchase intention. Additionally, telepresence has direct effect on purchase intention while social presence does not. Implications were provided to scholars and practitioners.

**Keywords:** Social media, Telepresence, Social presence, Trust, Purchase intention

### **1. Introduction**

While research relating to social media effectiveness have increased, there has been limited research attention on the presence theory that exists in such a computer-mediated-communication (CMC) environment (Sacau, Gouveia, Ribeiro, Gouveia, & Biocca, 2003). Based on the presence theory, modeling these two concepts (i.e., telepresence, social presence) with purchase intention could help us extend the current knowledge body and fill the theoretical gap of social media hotel marketing. Plus, trust was labeled as an essential antecedent of purchase intention in online environment (Gefen & Straub, 2004). Therefore, this study proposes a conceptual model (Figure 1) to test the relationship among telepresence, social presence, trust and purchase intention.

### **2. literature Review**

#### *2.1 Social media marketing in hotel industry*

Research on online social media hotel marketing effectiveness on customer behaviors mostly concerned the positive/negative online reviews (Lee, Park, & Han, 2008; Zhu & Zhang, 2010), and customer engagement such as the “like” button (Lipsman, Mudd, Rich, & Bruich, 2012), the click through rate (Zhang & Mao, 2016), rating and overall online reviews (Sparks & Browning, 2011). However, the limitation of social media as a type of computer-mediated-communication (CMC) has rarely been considered. Users communicating through CMC way rely on electronic equipment and the Internet to communicate. Such lack of presence may hinder the participation of consumers and the communication effectiveness (Hamari et al., 2016;

Walther, 1996). In online commerce environment, the lack of presence elements and physical cues of products is associated with the concept of telepresence (Steuer, 1992). On the other hand, the lack of social cues and human elements of hotel service personnel can be associated with the concept of social presence (Short, Williams, & Christie, 1976). These two presence-related concepts have been utilized to examine purchase behavior in different online contexts (Dash & Saji, 2008; Hopkins, Raymond, & Mitra, 2004; Lu, Fan, & Zhou, 2016).

## *2.2 Telepresence, social presence, trust and purchase intention*

Trust is an essential prerequisite for online purchase behavior, because it helps reduce the level of e-trade uncertainty (Kim & Kim, 2005; Yoon, 2002). In the e-commerce context, trust can be shaped based on four different aspects: content, platform, sellers and the electronic communities (Chopra & Wallace, 2003). Hence, purchase behavior could be stimulated by forming the customer trust in above aspects. Plus, the concept of trust has been utilized to test customers online purchase behavior broadly (Dash & Saji, 2008; Gefen & Straub, 2004; Ponte, Carvajaltrujillo, & Escobarrodriguez, 2015). For example, Ling, Chai, and Piew (2010) have identified trust played an essential role in online shopping environment. Lu et al. (2016) have confirmed the robust relationship between trust and purchase intention. Therefore, this study regards trust as a key emotional factor affecting the hotel customers' purchase intention in social media online marketing context.

H1: Trust is positively related to purchase intention.

Telepresence represents the sense of immersion in the virtual buying environment, and it measures the extent to which the viewer feels "being there" in a computer-mediated environment (Schloerb, 1995; Steuer, 1992). Higher degree of telepresence allows customers to better visualize the intangible buying environment and physical cues through a multimedia environment (Park, Ahn, & Kim, 2010). In other words, increasing perceived telepresence helps decrease ambiguity and increase trust formation (Tompkins, 2003). In addition, the more concrete physical clues viewers gain, the higher sense of realism would be aroused, resulting in higher persuasive power to customer's purchase behavior in online environment (Klein, 2003; Lee, 2018). In previous studies, Ye, Lei, Shen, and Xiao (2020) explored and found significant mediating effect of trust between telepresence and purchase intention.

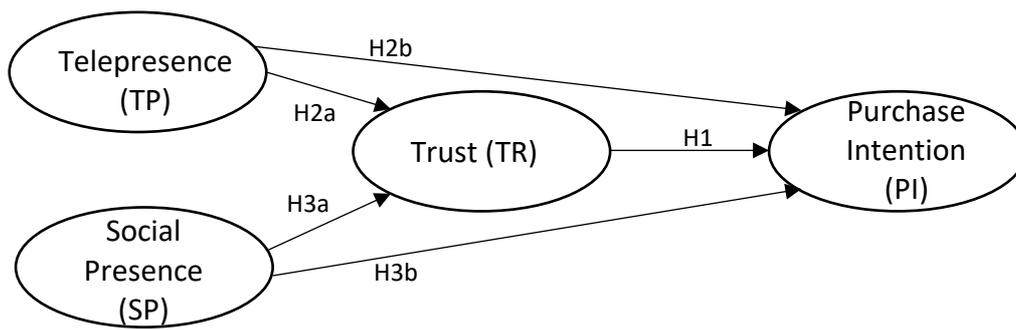
H2a: Telepresence is positively related to trust.

H3b: Telepresence is positively related to purchase intention.

Social presence is related to one's perceived human warmth and psychological connection, which measures the extent to which online communicators perceive human contact and sensitivity (Short et al., 1976). During business interaction, face-to-face (FtF) communication is a dominated way for trust establishment (Donner, 2007); but in online interaction, mediated communication becomes a potential obstacle for building trust (Hassanein & Head, 2007). During the online interaction, the perception of personalness and "human" is conducive not only to their insecurity reduction, but also to trust enhancement (Godes et al., 2005). Therefore, a content with high level of social presence is beneficial to reducing customers perceived risk and uncertainty and forming higher level of trust. In e-commerce environment, it is more likely to induce purchase behavior, when the perceived social distance is short (Lu et al., 2016). Apparently, social presence acts as a vital role to shape the trust and purchase behavior of customers in online context. As such, it is proposed that:

H3a: Social presence is positively related to trust.

H4b: Social presence is positively related to purchase intention.



**Figure 1: Conceptual Model**

### 3. Methodology

#### 3.1 Measurement

The measurement items were adapted from previous studies to be fit in this study’s context (See Table 1). Telepresence (TP) in this context of social media marketing was conceptualized as the extent of viewers’ perception of “being there” after browsing the social media content about hotel, which was measured by five items (TP1 to TP5). As for social presence (SP), it was defined as the extent to which the viewers perceive the sense of human warmth, sensitivity and sociability from the social media posts, and this concept was measured by five items (SP1 to SP5). In terms of trust, the emotional outcome, this study operationally defined it as the extent to which customers evaluate what they see on social media about hotel information as trustworthy, measuring by four items (TR1 to TR4). Finally, purchase intention was regarded as the extent to which the viewers may anticipate to book the hotel after browsing content about hotel on social media, and was measured by 3 items (PI1 to PI3).

**Table 1: Measurement Items Scale**

Items	Sources
Telepresence (TP)	Kim and Biocca (1997)
TP1	When I closed the social media content, I felt like I came back to the “real world” after a journey.
TP2	The content came to me and created a new world for me, and the world suddenly disappeared when it was closed.
TP3	When browsing the content, I felt like I was situated inside the contents.
TP4	When browsing the content, I was immersed into the content.
TP5	When browsing the content, they were more real or present for me compared to the “real world”.
Social Presence (SP)	Gefen and Straub (2004)
SP1	When browsing the content, there was a sense of human contact in the content.
SP2	When browsing the content, there was a sense of personalness in the content.
SP3	When browsing the content, there was a sense of sociability in the content.
SP4	When browsing the content, there was a sense of human warmth in the content.

SP5	When browsing the content, there was a sense of human sensitivity in the content.
Trust (TR)	Newell and Goldsmith (2001)
TR1	I trust the social media content about the hotel.
TR2	The creator of content makes truthful claims.
TR3	The creator of the content is honest.
TR4	I do not believe what the social media tells me. (Reversed)
Purchase Intention (PI)	Gefen and Straub (2004)
PI1	I am very likely to buy the hotel products or services demonstrated in the social media content.
PI2	I would consider buying the hotel products or services demonstrated in the social media content.
PI3	I intend to buy the hotel products or services demonstrated in the social media content.

### 3.2 Survey, reliability and validity

This study adopted a quantitative method, collecting data using offline face-to-face survey and online survey lasting four weeks in September 2019. The offline part was conducted in Macau, a special administrative region of China. The online part was conducted using a famous data collection website – Sojump (www.sojump.com). The questionnaire contains three parts: screening questions, main body and demographic information. Our targeted participants were those who have browsed social media content about a hotel within the past six months. Finally, a total of 415 questionnaires were received, and w342 were valid after data cleaning, which exceeded the suggested cut-off number of 200 sample size (Medsker, Williams, & Holahan, 1994) for generating a structural equation model (SEM).

SPSS software was used to prepare the data for further analysis, and Amos was used for SEM path analysis. All the constructs indicated good reliability, showing that TP ( $\alpha=0.85$ ), SP ( $\alpha=0.87$ ), TR ( $\alpha=0.83$ ) and PI ( $\alpha=0.77$ ) were all greater than the recommended value 0.70 (Cronbach, 1951). The composite reliability (CR) of each construct also shows excellent reliability with TP (0.83), SP (0.87), TR (0.81), PI (0.82) greater than cut-off value 0.80 (See Table 2). As for validity (see Table 2), all constructs' convergent validity were supported by their AVE value, showing that TP (0.55), SP (0.59), TR (0.52) and PI (0.53) all exceeded 0.5, and their AVE value were greater than the squared correlation coefficient between constructs, indicating good discriminant validity (Fornell & Larcker, 1981).

**Table 2: Reliability and Validity Analysis**

	TP	SP	TR	PI
TP	1			
SP	0.56 (0.31)	1		
TR	0.55 (0.30)	0.73 (0.53)	1	
PI	0.62 (0.38)	0.58 (0.33)	0.61 (0.37)	1
AVE	0.55	0.59	0.52	0.53
Cronbach's $\alpha$	0.85	0.87	0.83	0.77
CR	0.83	0.87	0.81	0.82

Note: TP: Telepresence, SP: Social presence, TR: Trust, PI: Purchase intention. AVE: Average Variance Extracted. CR: Composite reliability. The upper part of the table presents the correlation coefficient between constructs. The squared correlation coefficient between constructs are in the brackets.

#### 4. Results

According to the confirmatory factors analysis (CFA), all factors loadings were significant at  $p < 0.001$  (Anderson & Gerbing, 1988), and all the loading values were higher than 0.6, which further supported reliability and validity. Besides, all the goodness-of-fit indexes met the recommended standards, indicating that the model fitted the data well (Costello & Osborne, 2005; Damasio, Zanon, & Koller, 2014; Schreiber, Stage, King, Nora, & Barlow, 2006): the CFA model fit indexes ( $\chi^2=193.86$ , degree of freedom ( $df$ )=113,  $\chi^2/df=1.71$ , RMSEA=0.04, NFI=0.94, GFI=0.93, CFI=0.97, IFI=0.97, RFI=0.93, TLI=0.96).

With regard to the relationship among these constructs (see Figure 2), it was found that trust is positively related to purchase intention ( $\beta=0.30$ ,  $p=0.02 < 0.05$ ), supporting H1; telepresence significantly affects trust ( $\beta=0.70$ ,  $p < 0.001$ ), and telepresence is significantly related to purchase intention ( $\beta=0.36$ ,  $p < 0.001$ ), supporting H2a and H3b; social presence positively affects trust ( $\beta=0.74$ ,  $p < 0.001$ ), supporting H3a; and lastly no significant relationship between social presence and purchase intention was identified ( $\beta=0.11$ ,  $p=0.20 > 0.05$ ), and thus H3b was not supported.

According to the goodness-of-fit indexes of this model ( $\chi^2=328.55$ , degree of freedom ( $df$ )=114,  $\chi^2/df=2.88$ , RMSEA=0.07, NFI=0.90, GFI=0.90, CFI=0.93, IFI=0.93, RFI=0.88, TLI=0.92), RFI just approached to the cut-off threshold 0.9 (Schreiber et al., 2006), but in addition to it, NFI, GFI, CFI, IFI, TLI were over it, and other index met the standard required cut-off values (MacCallum, Browne, & Sugawara, 1996; Wheaton, Muthen, Alwin, & Summers, 1977); thus this model showed an acceptable model fit.

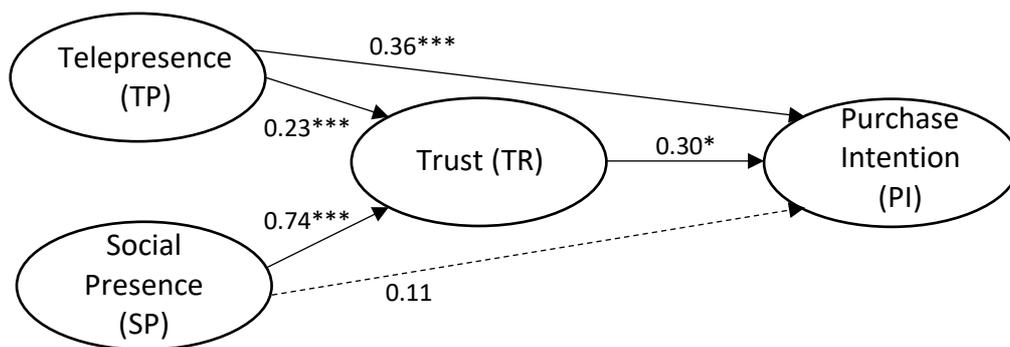


Figure 2: Result of structural equation model (SEM)

## 5. Discussion and Implications

### 5.1 Discussion

This study confirms that stronger degree of customer's trust is more likely to raise their purchase intention (H1), which is consistent with previous study on online booking platform (Ye, Ying, Zhou, & Wang, 2019). Higher level of telepresence can arouse higher perceived trust (H2a), which is consistent with previous studies in business meeting context (Standaert, Muylle, & Basu, 2013). Trust can be established via social presence enhancement (H3a), which echoes a previous studies conducted in tourism and hospitality context (Ye, Lei, Shen, & Xiao, 2020). In addition to these valuable findings, this study explored the relationship between two presence-oriented factors (i.e., telepresence and social presence) and purchase intention, clarifying that telepresence have direct effect on purchase intention.

Social presence measures the extent of perceived human elements (e.g., the sense of human warmth/human sensitivity/ personalness). High degree of social presence enables online users to build mutual trust, which simulates a face-to-face conversation as far as possible. However, in short, it just creates an environment that makes it easier to trade, implying that high social presence does not have direct effect on purchase intention. Based on previous studies it is believed that the relationship between social presence and purchase intention could be mediated by other factors (Ye et al., 2020). That explains why the direct path from social presence to purchase intention received no statistical support.

### 5.2 Theoretical and practical Implications

Theoretically, this study proposed and tested a presence-based framework in online social media for hotel industry. First of all, it contributes to the existing knowledge body of social media hotel marketing context and develops the understandings on the impact of presence elements on potential customer behaviors through an emotional response. By contrast, previous studies tend to test social media effectiveness using concrete contents, such as valence of hotel reviews and ratings; however, they rarely focused on other essential features of these contents such as presence elements. Second, this study does not only determine the effect of telepresence and social presence simultaneously on purchase intention in social media environment, but also connects them with trust to present clearer and more explicit explanation. These findings lay a theoretical foundation for further studies to acquire more knowledge.

Practically speaking, this study aims to raise the importance of considering the potential impact of perceived telepresence on customers booking intention. Technically, interface designers and operators can apply new technology to enhance the visual aesthetics of the social media content, for example using augmented-reality technology, virtual-reality technology and 3D model. As for enhancing customers perceived social presence, web 2.0 functions are helpful (Huang & Benyoucef, 2013; Isbister & Nass, 2000), non-verbal elements such as emoji or interactive images can characters in the social media page; casual verbal cues (i.e., text) may help eliminate the sense of strangeness and make readers feel they are listening to a real person. Moreover, in addition to paying attention to aesthetic and design aspects, hoteliers should remember the importance of trust on customer behavioral intention and implement trust-establishing strategies. Making good use of these practices can be beneficial to the improvement of hotel social media marketing practices in terms of stimulating customer purchases.

### 5.3 Limitation of this study

This study collected data from only two sources (i.e., Sojump and face-to-face survey). Readers should interpret the findings of this study with caution. Future research may consider triangulate the findings of this study by collecting data from different sources and samples. This study focuses on the customer behavioral intention. Future research can investigate actual purchase behavior. Besides, this study utilized only quantitative method without exploring qualitative opinions. Future research can employ mixed methods (e.g., in-depth interview and combination of qualitative and quantitative method) to search for new findings. Furthermore, this study only incorporated one emotional response variable (i.e., trust) into the model. Future study can explore additional emotional/psychological factors to broaden the understandings of social media content on customers' purchase behavior.

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## **The effect of mobile phone adoption in responses to service failure**

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### **Abstract:**

We propose that in self-service encounters, due to the frequent use the service functions of smartphones, people would feel more familiar and easier to do a new self-service task via smartphones (vs. other devices). And such feeling of task material familiarity would induce customers' illusory control over the service process, which leads to an inclination of personal responsibility in subsequent service failure and thus less dissatisfaction with the service firm.

**Keywords:** illusory control, smartphones, service failure

### **1. Introduction**

With the advancement of smartphone, self-service (SS) via portable devices (self-ordering tablets, e-service applications in mobile phones) have become more likely than ever. Smartphone has become one of the most important technical belongings with all types of functions, especially for the young generation (Pew Research Center 2015). In addition, more and more consumers have become multiple device owners (Bröhl et al. 2018). Under such circumstance, multiple device users tend to use different devices for specific functions (Bröhl et al. 2018). Smartphones, compared to tablets and laptops, are associated with communication and social media, the daily miscellaneous (e.g., e-banking, information searching, online shopping) (Pew Research Center 2017), thus are perceived as a personal service assistant. Although practitioners have adopted certain actions to cater such trend that specific devices are used for specific activities in terms of interface design, commanding gesture design, scant research has examined how these portable devices affect customers' response, especially in service failure.

### **2. Literature Review**

#### *2.1 Illusory Control*

Although prior research has demonstrated the important role of perceived control in task performance, stress coping, and life satisfaction (Thompson et al. 1998), it does not mean that individuals can accurately judge their level of personal control over an event each time. Illusions of control occur when people overestimate or exaggerate their personal influence on an outcome, no matter the outcome has been produced (Thompson et al. 1998). For example, one may attribute his or her good health in a flu season to the continuous extra supplement of vitamin C over that period even though the effect of such nutrition may be minimal. Another example is the behavior of gamblers. When asked to pull the slot machines with an increasing number of times, gamblers would judge more personal control over getting the award (Thompson et al. 1998).

Thompson et al. (1998) provided a comprehensive explanation based on a control heuristic, which refers to a cognitive shortcut or a simple cognitive rule an individual would use to judge how much personal influence on an outcome. The control heuristic contains two elements: the actor's intention to obtain the desired outcome (i.e., intentionality) and the perceived connection (i.e., temporal, semantic, or predictive association) between one's action and the outcome. One of the antecedents to induce a sense of inflated perceived connection is the number of successful experiences (i.e., prior positive confirming case), which strengthens the availability of memory and reduces the difficulty of task recalling. As such, when doing a similar task, a sense of task familiarity would be elicited, making the actor easier to imagine the association between the action and a successful outcome and overestimate their personal influence over the outcome (Thompson et al., 1998). In line with this research, Fast et al. (2009) demonstrated that such illusory control even has a spillover effect such that respondents also feel controlling over the coming future are associated with the task outcome.

## 2.2 Conceptualization

We propose that because consumers tend to use the service-related operations of smartphones more frequently, therefore, they would feel more familiar and easier to do a new self-service task using their smartphones (vs. other personal devices). Derived from illusions of control theory, this easy perceived connection of successful smartphone operation would trigger an inflated personal control over the self-service process, which leads to the tendency to attribute a higher level of personal responsibility (i.e., internal locus) in subsequent service failure. As a result, less dissatisfaction with the service firm would be exerted.

## 3. Methodology

### 3.1 Experiment Design

Respondents would be randomly assigned to a one-way (devices: tablet vs. smartphone) between-subjects design. A mock unmanned stand that sells snacks (chocolate and jerky) would be prepared in the lab. Participants would be told that a school restaurant is considering using mobile ordering service to lower the costs of manpower, and they are invited to help test the technology. They are asked to bring their own portable devices. In front of the stand, only QR codes and pictures of the snacks would be presented. They would be asked to scan the QR code and later the experimenter disguised as a service provider would bring the order to the stand. Service failure is described as delivering the incorrect order. Then, respondents would be asked to fill in a survey with a series of measures including dissatisfaction, responsibility attribution, and perceived control. A debriefing session would be conducted at last.

## 4. Expected Results

*Perceived control.* A main effect of device on perceived control would be expected. To be specific, smartphone users (vs. tablet users) would perceive a higher level of control over the service process.

*Personal Responsibility.* We expect a main effect of device type. Specifically, mobile phone users would attribute more personal responsibility than would tablet users. In contrast, smartphone users would be less likely to blame service provider than would tablet users.

*Dissatisfaction.* We predict a main effect of device type on dissatisfaction. That is, mobile users would exhibit a lower level of dissatisfactions to the service provider in the service

failure. Furthermore, a serial mediation by SPSS Process 3.0 (Hayes 2017) would be conducted. A significant mediation would be expected.

## 5. Discussion and Conclusion

### 5.1 Discussion

Our research provides a new perspective regarding self-service via mobile devices. That is, we seek to provide an explanation how different portable self-service devices would induce customers' differential reactions under service failure. We predict that by triggering an inflated perceived control in service process and thus a higher level of inclination to attribute subsequent service failures to personal responsibility, smartphones are the most advantageous portable device in terms of mitigating dissatisfaction.

Another implication stems from the reasoning that a sense of similarity with other service-related operations (e.g., similar operative gestures and procedures) on smartphones is essential to eliciting more perceived control in the service process. Hence, self-service interface should avoid gestures or layouts that cost customers more cognitive resources to learn. On the other hand, interface designers of tablets could make the layout of self-service more similar to that on smartphones to induce a sense of operative similarity.

### 5.2 Limitations of this study

Limitations of the research are also discussed. Due to the difficulty of conducting lab experiment during COVID-19, empirical evidence should be conducted later. The confound of screen size should be controlled and ruled out in the future studies. Moreover, whether such effect would only appear when the device is owned by customers themselves (i.e., device ownership) needs to be further explored.

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## **Does need for cognition matter in voice shopping adoption? Testing the mediating role of perceived technology usefulness and individual-technology fit**

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### **Abstract:**

Voice shopping is a newly evolving e-commerce channel, which is high in demand among consumers. Since factors affecting consumers' voice shopping adoption in tourism and hospitality are still in their infancy, this study aims to investigate the influence of individuals' need for cognition on voice-based travel services acceptance. Based upon an analysis of 215 survey responses, this study finds perceived technology usefulness and individual-technology fit as a causal chain mediates the relationship between need for cognition and intention to adopt voice-based travel services. This study provides new insights related to utilizing voice-based travel services in the field of consumer behavior.

**Keywords:** Individual-technology fit; Need for cognition; Voice shopping

### **1. Introduction**

Voice technology has changed the way individuals search for information online. This speech recognition technology allows users to search through speaking, instead of typing terms in a text field (Kraus, Reibenspiess, & Eckhardt, 2019). A user's commands through voice for playing music, setting reminders, placing online shopping orders, and checking information can now be interpreted by that technology, which generates an appropriate response for the user (Sciuto, Saini, Forlizzi, & Hong, 2018). It is estimated that half of all Internet searches will be completed through voice assistants by 2020 (Maney, 2017). Comscore (2017) also forecasts that over 50% of all searches will be done by voice by 2020. The statistics show that 58% online adults have used voice search in early 2019 (Voicebot.ai, 2019). The rise of Amazon Alexa, Apple HomePod, Google Home, Alibaba Tmall Genie and many others suggests that voice assistants will be the central development of future retail.

Besides altering consumers' information search behavior, the advent of voice technology is expected to transform consumers' shopping behavior. Standard desktop searches may show that users are simply looking for information by delivering mass results, while voice search aspires to allow users to refine the search process based on exactly what they are looking for (PhocusWire, 2019). Voice travel services have the power to enhance the overall travel experience by providing highly relevant results, and they have already impacted how travelers are searching and booking their next holidays. According to OC&C Strategy Consultants (2018), voice shopping is expected to grow to a USD 40 billion market by 2022.

Defined as the act of purchasing products from online retailers by giving voice commands to voice assistants (Mari, 2019), voice shopping method will not only minimize transaction costs for consumers but also provide them with unprecedented convenience. A voice assistant can help consumers navigate through many alternatives. The algorithms of voice technology can learn how to make purchase decisions by analyzing consumers' choice criteria. Several travel retailers have already launched voice-enabled travel services on Amazon Alexa. For example, Expedia and Kayak services on Amazon Alexa can now allow consumers to search and book flights, hotels and rental cars as well as keep track of flight status updates through voice commands.

As voice shopping is rapidly becoming a focal point in both academic and industry research because of its swift adoption and disruptive potential in buying dynamics, researchers call for future studies to focus on voice technology (Dawar & Bendle, 2018). However, to the best of our knowledge, research on factors affecting the adoption of voice shopping in tourism and hospitality is still in its infancy. To fill this knowledge gap, the present study aims to identify factors affecting the intention to adopt voice-based travel shopping services.

Specifically, the purpose of this study is to investigate the influence of individuals' personality in information processing (i.e., level of need for cognition) on the adoption intention of voice-based travel services. Two influential variables, perceived technology usefulness and individual-technology fit, which are firmly proved as determinants in the technology acceptance literature (e.g., Parkes, 2013; Speier & Venkatesh 2002) are also added to the research model. The relationship of individuals' need for cognition and voice-based travel services adoption intentions will be explained through a mediation model, which includes perceived technology usefulness and individual-technology fit as mediators. This study introduces the idea that the intention to adopt voice-based travel services should be affected by individuals' need for cognition, the individual-technology fit and perceived technology usefulness with the voice technology.

In the following sections, the direct impact of need for cognition on intention of adopting voice-based travel services as well as the indirect impact through perceived technology usefulness and individual-technology fit will be firstly discussed. The method section will then explain the questionnaire design and data collection. The subsequent sections will describe the data analysis and the findings. The last two sections will present the conclusions, implication and limitation of this study.

## **2. Literature Review**

### *2.1 Need for Cognition*

Need for cognition refers to people's tendency to participate in problem-related information processing when forming an attitude toward cognitive tasks (Cacioppo, Petty, & Chuan, 1984). According to the elaboration likelihood model (Petty & Cacioppo, 1986), individuals with high level of need for cognition may follow the central path and form attitudes on the basis of in-depth processing of product related information. On the contrary, individuals with low level of need for cognition are more susceptible to contextual cues and heuristic information processing (Diamantopoulos, Arslanagic-Kalajdzic, & Moschik, 2020; Zhang, Gursoy, & Xu, 2017). In other words, consumers who have high level of need for cognition pay close attention to relevant alternatives based on reliable evidence (Cacioppo, Petty, & Morris, 1983).

Traditional desktop search provides a large evaluation set to consumers as its high media richness and text efficiency (Hong, Thong, & Tam, 2004). While voice-based travel services use auditory interfaces, this kind of shopping method reduces the negative impact of an

overwhelming amount of information (Maity & Dass, 2014). Compared with desktop shopping, voice shopping provides more relevant and personal recommendations for consumers. This shopping method may reduce the risks by providing recommendations with high quality.

Individuals with high level of need for cognition tend to conduct more intensive information processing instead of seeing more information. The combination of cognitive operations used, rather than the amount of information, determines individuals' effort (Verplanken, 1993). Since consumers with high need for cognition will spend more effort into information processing to find relevant evidence and information to support their decisions (Cacioppo et al., 1984) and voice shopping can provide more effective, accurate and relevant information to help people with high cognition to process information well, it is reasonable to suggest that consumers with higher level of need for cognition tend to have more positive attitudes toward intention to adopt voice-based travel services. Thus, we assume:

H1: Need for cognition is positively associated with consumers' intention to adopt voice-based travel services

## *2.2 Mediating Role of Perceived Technology Usefulness*

Perceived technology usefulness refers to the degree that consumers think voice shopping technology will improve transaction performance (Chiu, Lin, Sun, & Hsu, 2009). Ajzen and Fishbein (1980) suggests that perceived usefulness is positively related to future behavioral intention, directly or indirectly through its impact on people's attitudes. Reasoned Action Theory and Technology Acceptance Model (Davis, 1985; Fishbein & Ajzen, 1977) suggest that individuals' attitude towards technology is an individual's evaluation of an object. Individuals' positive attitudes will increase the intention to use the technology. Chiu et al. (2009) suggest that customers' perceived usefulness is positively associated with online shopping loyalty intention. The findings in the technology acceptance studies indicate there is a significantly positive correlation between perceived usefulness and technology acceptance.

Though no literature directly shows that need for cognition is related to perceived usefulness of voice-based travel services, evidence shows that need for cognition is significantly associated with online shopping attitude (Marie-Odile & Jean-Charles, 2016). For example, Hung, Cheng, and Hsieh (2015) demonstrate individuals' personalities (e.g., cognitive style, computer self-efficacy and involvement) have moderating effects on the relationship between incentives and attitudes of online buying. It is, therefore, reasonable to postulate that:

H2: Perceived technology usefulness has a direct and positive effect on consumers' intention to adopt voice-based travel services

H3: Need for cognition has an indirect and positive effect on consumers' intention to adopt voice-based travel services through its influence on perceived technology usefulness

## *2.3 Mediating Role of Individual-Technology Fit*

Individual-technology fit is defined as the extent to which technology features meet the needs of individuals' problem solving (Liu, Lee, & Chen, 2011). This concept/construct was developed from task-technology fit theory (Goodhue, 1995), which emphasizes the match of the task requirements and the technical capabilities to support task completion (Fuller & Dennis, 2009). Individual-technology fit occurs when technology satisfies an individual's needs or preferences.

Individual differences are proved to have an impact on technology usage (Burton-Jones & Hubona, 2005; McElroy, Hendrickson, Townsend, & DeMarie, 2007). In the context of voice-based travel services, the logic is that the higher level of individuals' need for cognition, the more likely they will get involved in searching for relevant information and evaluate alternatives when making decisions (Cacioppo et al., 1984). Thus, it can be assumed that people who have high level of need for cognition are more possible to acknowledge individual-technology fit. According to the cognitive cost and benefit perspective, individuals are influenced by how well technology operates. Individuals can perceive whether a technology is fit for their information processing style and choose technology on that basis (Goodhue, 1995). Individuals may weigh costs and benefits before choosing a strategy for processing information in decision making.

The fit between technology and individuals may affect individuals' attitudes toward that technology (Parkes, 2013). Individual-technology fit is proved positively influence technology usage (Speier & Venkatesh, 2002). A study conducted by Wu and Chen (2017) proves that individual-technology fit has a positive impact on perceived ease of use, which then has a positive impact on perceived usefulness and technology usage. Accordingly, the literature about individual-technology fit proves that people who are fit with the technology features will have a higher acceptance intention than people who are less fit. Therefore, it is reasonable to argue that people who perceive a good fit with the voice-based travel services will be motivated to use this technology. Therefore, this study posits the following hypotheses:

H4: Individual-technology fit has a direct and positive effect on consumers' intention to adopt voice-based travel services

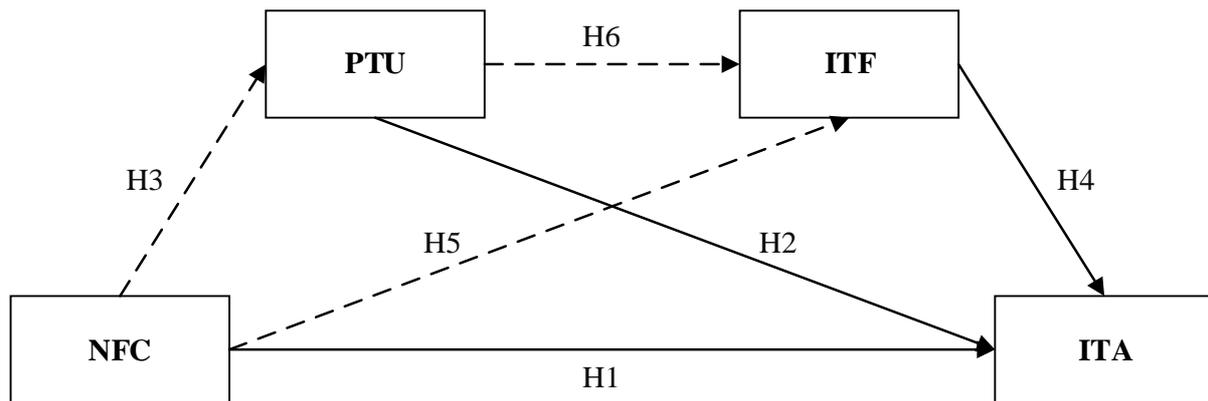
H5: Need for cognition has an indirect and positive effect on consumers' intention to adopt voice-based travel services through its influence on individual-technology fit

#### *2.4 Perceived Technology Usefulness and Individual-Technology Fit as a Causal Chain*

The assumptions regarding H3 and H5 are limited, in that need for cognition indirectly influences adoption intention through its impact on either individual-technology fit or perceived technology usefulness in isolation. The following question is whether one mediator affects the other. It may be more reasonable to say that the individual-technology fit depends, at least in part, on the perceived usefulness of the technology. That is, individuals with a high level of need for cognition is more likely to perceive usefulness with the technology. When the perceived usefulness with the voice-based travel services is high, they will be more likely to perceive a fit with voice-based travel services, which in turn has a positive impact on the intention to adopt voice-based travel services. Technology acceptance literature and individual-technology fit literature are not competing with each other to understand technology adoption. Instead, they represent serial influences in a causal chain to explain consumers' technology usage.

As described above, perceived technology usefulness and individual-technology fit are both implicated in the relationship between need for cognition and voice-based travel services adoption intention. Research shows that these two factors are interrelated. This argument is supported by the study of Speier and Venkatesh (2002), in which indicated that perceived fit is related to technology perception. Thus, we postulate H6 and explore a multiple mediation model (see Figure 1):

H6: Need for cognition has an indirect and positive effect on consumers' intention to adopt voice-based travel services through its influence on perceived technology usefulness and individual-technology fit in serial.

**Figure 1. Conceptual model**

**Note:** NFC=Need for cognition; PTU=Perceived technology usefulness; ITF=Individual-technology fit; ITA=Intention to adopt voice-based travel services; Dotted lines denote effects; Solid lines denote direct effects.

### 3. Methodology

#### 3.1 Questionnaire design

This study developed a questionnaire with three sections to collect the data for testing the hypothetical model. The first section introduces what voice-based travel shopping services is and how voice-based travel shopping services work to the participants. The second section of the questionnaire designs questions about the main constructs of the hypothetical model. The third section includes questions soliciting demographic information about the participants. The items measuring need for cognition, perceived technology usefulness, individual technology fit and intention to adopt voice-based travel services were adapted from the existing literature.

Need for cognition was measured based on the scale of Zhang et al. (2017) were used. Eight items were assessed on a 7-point Likert-scale (1: strongly disagree – 7: strongly agree;  $\alpha=0.916$ ). Perceived technology usefulness was measured using a four-item scale adapted from Kraus et al. (2019). Participants had to rate the items on a 7-point Likert scale (1: strongly disagree – 7: strongly agree;  $\alpha=0.844$ ).

Individual technology fit was measured using two items borrowed from Kraus et al. (2019) and Yu and Yu (2010). Participants had to rate the items on a 7-point Likert scale (1: strongly disagree – 7: strongly agree;  $\alpha=0.868$ ). To measure intention to adopt voice-based travel services, the scale as described by Agag and El-Masry (2016) was used. The scale consists of three items, measured on a 7-point Likert scale (1: strongly disagree – 7: strongly agree;  $\alpha=0.928$ ).

#### 3.2 Data collection

Before the main data collection, a pretest was conducted to check the clarity of wording used in the survey. Based on the results of the pretest, the questionnaire was revised accordingly. The main data collection was conducted in December 2019, and the participants were recruited via Amazon Mechanical Turk. The target respondents were those who have purchased at least one travel product online in the past. A total of 215 participants provided valid responses. Table 1 summarizes respondents' profiles.

**Table 1. Respondents' profiles**

		Frequency	Percentage
<b>Gender</b>	Male	132	61.4%
	Female	83	38.6%
<b>Age</b>	20-29	90	41.9%
	30-39	82	38.1%
	40-49	28	13.0%
	50-59	10	4.7%
	60 or above	5	2.3%
<b>Education Level</b>	High school	15	7.0%
	Diploma/Higher diploma	19	8.8%
	Bachelor's degree	117	54.4%
	Master's degree or above	64	29.8%
<b>Voice-based services experience</b>	Yes	190	88.4%
	No	25	11.6%

#### 4. Results

A mediation analysis was performed to test the relationship between need for cognition and voice-based travel service adoption intention and both the role of perceived technology usefulness and individual-technology fit as mediators. The model was estimated using the PROCESS macro for SPSS (Hayes, 2017).

As predicted, the direct effect of need for cognition on voice-based travel service adoption intention was significant (H1 was supported). H4 stated that individual-technology fit has a direct and positive effect on voice-based travel services adoption intention. As shown in Table 2, the standardized regression coefficients between individual-technology fit and voice-based travel services adoption intention were significant. Therefore, H4 was supported.

H2 stated that perceived technology usefulness has a direct and positive effect on voice-based travel services adoption intention. However, the results presented in Table 2 do not support this hypothesis. Thus, H2 was rejected.

**Table 2. Regression results**

	Model 1 ITA		Model 2 PTU		Model 3 ITF		Model 4 ITA	
	B	t	B	t	B	t	B	t
<b>NFC</b>	0.48	7.96***	0.43	6.87***	0.19	3.85***	0.07	1.99**
<b>PTU</b>					0.65	13.09***	0.07	1.60
<b>ITF</b>							0.80	17.22***
<b>R<sup>2</sup></b>	0.22		0.18		0.57		0.80	
<b>F</b>	63.43		47.24		139.92		283.72	

Note: p<0.01 \*\*\*; p<0.05 \*\*

NFC=Need for cognition; PTU=Perceived technology usefulness; ITF=Individual-technology fit; ITA=Intention to adopt voice-based travel services

The indirect effect was tested using bootstrapping procedures with 5000 estimations. According to Hayes (2017), an indirect effect is considered significant if the bootstrapping confidence interval does not include zero. The total effect is 0.62, the direct effect is 0.09. As shown in Table 3, individual-technology fit was a significant mediator for the relationship between need for cognition and voice-based travel services. As such, H5 was supported.

Table 3 also shows that need for cognition has an indirect and positive effect on consumers' intention to adopt voice-based travel services through its influence on perceived technology usefulness and individual-technology fit in serial. H6 was accepted. However, we found no evidence of perceived technology usefulness mediating the relationship between need for cognition and voice-based travel services (H3 was rejected).

**Table 3. Bootstrapping mediation test results**

	Effect	Boot SE	Bootstrap 95% CI		Relative effect
			LL	UL	
Indirect Effect	0.53	0.08	0.38	0.69	85.94%
NFC à PTU à ITA	0.04	0.04	-0.04	0.13	6.49%
NFC à ITF à ITA	0.20	0.07	0.06	0.33	32.43%
NFC à PTU à ITF à ITA	0.29	0.07	0.17	0.44	47.02%

**Note:** NFC=Need for cognition; PTU=Perceived technology usefulness; ITF=Individual-technology fit; ITA=Intention to adopt voice-based travel services

## 5. Discussion and Conclusion

### 5.1 Discussion

A direct relationship was found between need for cognition and voice-based travel services adoption intention. The relationship between need for cognition and voice-based travel services adoption intention was partially explained by the extent to which consumers feel the individual-technology fit and perceived technology usefulness. This finding confirms literature on the importance of need for cognition in determining consumers' intention to adopt voice-based travel services. These results have made an important contribution to the technology acceptance literature, as they point out the potential reasons for the relationship between need for cognition and voice-based travel services adoption intention.

The results of serial mediation framework prove that need for cognition influences voice-based travel services adoption intention through its influence on perceived technology usefulness and individual-technology fit in the causal chain. It should be noted that perceived technology usefulness alone does not mediate the relationship between need for cognition and consumers' intention to adopt voice-based travel services. This finding is in line with the idea that consumers' feeling fit is associated with perceived technology usefulness (e.g., Speier & Venkatesh, 2002) and suggests that consumers who satisfy with the technology demonstrate more willing to perceive a good fit with technology as a result of increased intention to adopt voice-based travel services. This finding is significant because previous studies have shown that individual-technology fit and perceived technology usefulness are related and have an

important impact on the willingness to adopt voice-based travel services, although no prior research has considered the joint role of these two factors in this relationship.

An additional major finding is that perceived technology usefulness mediating the relationships between need for cognition and voice-based travel services is not significant. We speculate that the non-significant relationships found can be explained as follows. It is possible that voice-based travel services are new to consumers at this stage and many consumers may have not used this technology to buy travel products yet. Though consumers feel the technology is easy to use and the results provided by the technology are useful for them, they may still do not feel this voice-based travel services fit their habits and personality to search information and make travel products purchase decisions. Because voice shopping only provides consumers with several recommendations based on the algorithm and consumers stated needs, while desktop shopping provides large amount of information to consumers and consumers can make trade off by themselves. For example, though the recommendations provided by the voice-based travel services are good or the transaction process of the services fluently, consumers are still not likely to use voice-based travel services in the future, they think how voice-based travel services work is not fit for their need for cognition style for searching information and evaluating choices. Then, they will not be willing to use voice-based travel services.

Overall, the findings of this study shed light on the potential role of perceived technology usefulness and individual-technology fit as a serial causal mechanism for some technology acceptance related literature, while indicating that (a) adoption intention of voice-based travel services may vary depending on individuals' need for cognition and (b) the relationship is perhaps more complex than previously identified mechanism explaining technology adoption, as both perceived technology usefulness and individual-technology fit can be two mediators to explain technology acceptance mechanism in serial.

### *5.2 Implications and limitations*

This study generates new insights related to the utilization of voice-based travel services in the realm of tourism and hospitality. Understanding the underlying mechanism of voice-based travel services adoption will suggest ways in which suppliers can best utilize voice shopping. For example, the findings would suggest whether consumers think voice shopping method is fit for their consumers' information search and decision making processes. If this is true, suppliers should consider ways to enhance the feeling of individual-technology fit when using voice-based travel services in decision scenarios.

This study has limitations that could be addressed in future research. First, this study mainly focuses on the influence of consumers' personality on voice-based travel services, while other adoption models consider the factors from different aspects (e.g., social influence). Future research may consider integrating other adoption models and exploring consumers' adoption intention further. Second, the generalizability of the study results may have been limited due to the small sample size and sample characteristics. For example, considering the sample characteristics, whether respondents have past experience of voice technology usage may influence their attitudes on voice shopping. Future studies may consider exploring the impact brought by consumers' past voice technology experience.

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## Mobile payment adoption in Hong Kong's hotels

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### Abstract:

The growth of smartphone use in Asia escalates mobile payment to replace cash and credit cards, which becomes a dilemma between user's experience and implementation issues for hotels. Through interviews with hotel professionals, this study will be the first of its kind to investigate the practice of m-payment adoption in Hong Kong's hotels. A Modified Technology Acceptance Model for M-payment is proposed to assist hotels' decision on m-payment adoption and implementation.

**Keywords:** technology acceptance, mobile payment, risks and security, hotel industry

### 1. Introduction

The evolution of smartphone has unleashed the opportunities to enrich user's experience (Wang, Li, Li, & Zhang, 2016). Among all possibilities of utilising mobile devices, mobile payment (m-payment) is one of the highest potential mobile commerce services. The hospitality industry is exploring the use of m-payment in its businesses. Starbucks has successfully integrated m-payment with its loyalty programme to provide convenience and retain customers (Fitzgerald, 2013). In Asia, tourists in China, Korea and Japan perceive m-payment as an important factor when they travel (Miao & Jayakar, 2016). As such, Marriott has entered an m-payment partnership with Alipay for its properties in China (Bhattacharya, Reeves, Lang, & Augustinraj, 2016). Although geographically connected with China, m-payment is progressing slowly in Hong Kong. Several obstacles hindered the slow m-payment adoptions in Hong Kong hotels.

Prior studies on hotel technology acceptance rarely focused on m-payment, and they were mostly consumer-focused. As such, there is a need to provide a reference for academics or hotel management to understand m-payment adoption. By reviewing the existing literature regarding technology acceptance, four models are commonly reviewed. These models are namely, Technology Acceptance Model (TAM) (Davis, 1993), Unified Theory of Acceptance and Use of Technology Model (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003), Unified Theory of Acceptance and Use of Technology Model 2 (UTAUT 2) (Venkatesh, Thong, & Xu, 2012) and Extended Technology Acceptance Model (Extended TAM) (Ozturk, 2016). These models focus on IT application criteria such as performance, proficiency, facilitating condition, and the habit of the users.

In contrast, issues that affect m-payment adoption in hotels have not been evaluated in the above models (Law, Chan, & Wang, 2018). For example, perceived risks and security, legal and regulatory framework, choice of platforms and compatibility are not considered. Hotel m-payment is an emerging trend in Asia that is generally unexplored in both research and practical perspective, which requires attention and generate insights from a wealth of unexploited data (de Albuquerque, Diniz, & Cernev, (2016). To bridge this research gap, this research is the

first of its kind in Hong Kong. The following objectives are set in this study to investigate hotel m-payment adoption.

1. to examine the acceptance of hotel-related m-payment in Hong Kong;
2. to analyse how hotel managers perceive the effectiveness of hotel-related m-payment;
3. to identify the barriers of adopting hotel-related m-payment; and
4. to provide m-payment suggestions for hotels in Hong Kong.

## 2. Methodology

This study used semi-structured interviews to acquire detailed information about hotelier's perceptions of the drivers and barriers of m-payment adoption. Interview questions were designed to address the research objectives, which are listed as follows:

### 2.1 Interview questionnaire design

Question	Content	Objective/s
1	What is your opinion of m-payment in Hong Kong?	1
2	Do you think the customer's proficiency in modern technology and payment size is perceived as higher risks for the hotel to adopt m-payment?	
3	How do the Payment Systems and Stored Value Facilities Ordinance (Cap. 584) reduce the risks for the hotels and the consumers?	1 & 2
4	Which hotel departments are more likely to accepting m-payment? Why?	2
5	How would you describe the relationship between m-payment and customer loyalty?	
6	Do you think m-payment improves your performance? (training, cost, service flow)	
7	Do you see any difficulty to select and adopt m-payment with the variety of m-payment methods available now? (e.g. in-app payment, contactless payment, closed-loop payment) Why?	3
8	Do you have any suggestions and examples for hotel-related m-payment application and development?	4

Table 1 Interview Questionnaire

### 2.2 Interviewee selection

Fifteen industry professionals were interviewed according to two layers of criterion hierarchy. Criterion sampling was applied to ensure the professional expertise and the collected data represent different relevant stakeholders in a hotel. Interviewees were selected according to two layers of criterion hierarchy. Firstly, interviewees they should have at least three years of experience on their relevant post, and their routine tasks should involve in m-payment.

Furthermore, interviewees should be selected from different departments and different hotel categories in Hong Kong.

### **3. Findings and Discussion**

The findings suggested how do hotel managers in Hong Kong perceive m-payment, the current environment of m-payment in Hong Kong, and the obstacles of adopting m-payment. Four key findings were summarised through the interviewees' opinion.

#### *3.1 M-payment effectiveness*

Unlike the retail industry, the unique operating environment of a hotel is complex with concerns in multiple aspects. First, consumers expect a faster and seamless transaction but there are different forms of payment which make transaction settlement complicated. For example, payment through hotels, travel agents, online travel agents (OTA); or payment with debit cards, credit cards, online banking, etc. Second, most interviewees were not familiar with hotel's m-payment process, and for this reason, they were not able to provide a positive m-payment experience to the customers. Third, different hotel departments have their own expectations of m-payment. However, there is no specific assigned person/ party to coordinate between/among departments.

#### *3.2 Barriers of adopting m-payment*

Through the interviews, several barriers were identified for adopting m-payment in a hotel. First, several risks and security issues were raised. Examples included complexity of hotel reservation policy, daily transaction limit of m-payment platforms, and poorly established m-payment-related regulations. It resulted in several m-payment disputes and refund cases which negatively affected customer's experience. Due to different requirements between/among hotel departments, there is disagreement within hotel departments regarding which payment platforms to be used. Furthermore, m-payment is poorly compatible with hotel's Property Management System (PMS). It makes m-payment an isolated system away from the hotel guest's database. Hotel staff thus found their workload increased to match each payment with the guest's record.

#### *3.3 Unidentified m-payment issues in hotels*

Some unidentified issues were found through the interviews, especially issues of the local environment. For example, hotel practitioners expected m-payment to trigger automated transaction and reduce their work. Besides, interviewees hoped m-payment can integrate with hotel's central reservation system, Point-of-sale (POS) system and Customer Relationship Management system (CRM), and create a synergy in the competitive business environment. Furthermore, Sales and marketing managers suggested to extend the use of m-payment in a Business-to-Business (B2B) environment with their corporate clients. Meanwhile, interviewees concerned that any integration could lead to a potential customer data breach. These issues were not found in previous studies, which are unique to the hotel operating environment and required further investigation.

### 3.4 The attitude of hotel professionals towards m-payment

Adoption of m-payment in hotels is highly prospective, yet a challenge due to the technical, legal, and operational issues. By interviewing hotel professionals, one finding in this study is to observe their attitude towards m-payment. Their support or against could affect the successful m-payment adoption in hotels.

To start with, staff on the front line felt that there are several unsolved technical and operational problems. These issues had largely increased their work complexity and they felt the use of m-payment is limited. They were frustrated by the poor support but forced to adopt m-payment in their routine duties. Middle management felt the change is unnecessary because of the potential risk of adopting m-payment. The current legal framework in Hong Kong was not able to protect a hotel and its customers. They felt that there is not enough guidelines and resources to implement m-payment. On the other hand, senior management perceived m-payment as an opportunity as they felt the operating challenges are under control. However, their positive attitude was not conveyed to any support of m-payment adoption.

Hotel practitioners' attitude towards m-payment adoption renders the poor understanding of the m-payment process. After summarising the findings, a Modified Technology Acceptance Model for M-payment is proposed. The modified model emphasis on improving communication between different departments in a hotel and raise m-payment proficiency of hotel practitioners. It is modified from TAM and UTAUT2, which were commonly adopted to evaluate general technology acceptance. First, this model is designed for hotel m-payment adoption that requires a hotel to conduct a feasibility study of the expected performance. According to the expected performance, the hotel should go through the process of selecting the m-payment platforms that fit the hotel, and customise the training before its implementation. Last but not least, the proposed model includes "Evaluation and Enhancement" as the last step—it aims at the continuous process to review the performance of m-payment adoption for further enhancement.

## 4. Conclusion and Future Research

M-payment is a future direction of hotel payment. It has been proven successful in the retail industry. Findings of this study confirmed that hotels in Hong Kong were driven by the market to adopt m-payment. Little initiative was found to utilise guest experience with m-payment. several logistics and operational issues remain unrefined. It was perceived by the hotel management as an alternative payment gateway. Subsequent research should consider focus group interview with the representatives from the government authority, banks and the service providers to enhance the validity of the study. Besides, the research could take further to a larger scale of quantitative study to minimise the bias of the collected and analysed data, so as to achieve a valid, more reliable and generalizable to a larger population. The quantitative research could triangulate the proposed model with a more extensive population related to hotel m-payment and improve the validity.

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## **Customer-centric e-payment factors: An exploratory study for dining establishments in Hong Kong**

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### **Abstract:**

Electronic payment has become a prevailing trend across the world. Cashless transactions are particularly important in this new normal. This was an exploratory study aiming to investigate customer-centric e-payment factors for dining establishments in Hong Kong with 267 quantitative data items collected through an online survey. The results from the exploratory factor analysis identified five factors: “trustworthy security system”, “efficient to use”, “fast and safe cashless transactions”, “discounts and incentives”, and “uncertainty reduction”. Regression analysis suggested a 3-factor model for improving customers’ experience which would foster satisfaction and revisit intention. Theoretical and managerial implications are discussed.

**Keywords:** Customer satisfaction, Dining, Electronic payment, Hong Kong

### **1. Introduction**

Given the advancements in technology, the swelling internet coverage, and the mounting penetration rate of smartphones, using electronic payment (e-payment) has become a prevailing trend across the world, and various e-payment platforms have been growing in leaps and bounds in recent years. In 2020, the world’s total transaction value in the e-payment segment has exceeded US\$4,700,000 million (Ilic, 2020).

Hong Kong has long been renowned for being one of the most developed and wealthy cities in the world possessing an extensive financial and technological infrastructure. Surprisingly, Hong Kong is lagging behind in terms of e-payment development and popularity, in particular compared to mainland China. A survey revealed that over two-thirds of Hong Kong consumers have never paid by their smartphones and more than half of them claimed that they do not intend to do so in the future (Law, 2018). The same survey revealed that China is the pioneer in the e-payment industry; over 98% of its consumers have already switched from cash to mobile payment methods. Singapore’s e-commerce market share of \$2.1 billion also surpasses Hong Kong’s \$1.4 billion, while the mobile payment industry in Singapore accounts for 42% of all e-commerce transactions, which is much higher than the 36% in Hong Kong. It is predicted by J.P. Morgan that, in Hong Kong, the development of e-payment will exceed credit card transactions in 2021, increasing to an annual growth rate of 28%.

In 2020, as the outbreak and spread of the coronavirus continues, many people are now staying at home, practising quarantine and social distancing. The pandemic has drastically changed people’s shopping and dining experience, leading to an unprecedented growth in the demand

for and usage of electronic payment methods. As the hygiene awareness of the general public increases, people are becoming more interested in contactless electronic payment methods, as it is unclear whether the virus can latch onto paper notes; thus, a number of consumers are switching to e-payment in order to stay safe (Adlina, 2020). E-payment companies in Hong Kong have seen significant growth. As Huang (2020) mentioned, Octopus card (a reusable stored value smart card) experienced growth rates of 20% and 30% in terms of transaction values during the first two months of 2020, while the average transaction of O! ePay Mastercard rose 60% during the same period. Though the pandemic has caused a severe economic recession, it has created a golden opportunity for e-payment companies in Hong Kong to partner with hospitality merchants, such as hotels and dining establishments, to provide value-added services to enhance customer satisfaction in the local market.

Customer satisfaction is positively correlated to repurchasing intention and fosters customer loyalty (Anton, 1997; Evans & Berman, 1997; Sivadas & Baker-Prewitt, 2000). Clark (1997) described the achievement of customer satisfaction and retention as “powerful weapons” for businesses, as it gives companies a cutting edge over competitors in the increasingly fierce market; hence, it is essential to identify and understand the e-payment factors that would potentially increase customer satisfaction during their service experience. However, there is a dearth of research investigating these factors in relation to the hospitality industry in the new normal. Therefore, this exploratory study purports to identify the general e-payment dimensions that are considered important by customers. Then, the customer-centric factors for application in the dining establishments, such as hotels, in Hong Kong are examined.

## **2. Literature Review**

### *2.1 Definition of e-payment*

Numerous studies have provided definitions of electronic payments. As defined by Wrobel-Konior (2016), an electronic payment system, also known as mobile payment system, is a method to conduct transactions or pay for services and goods by an electronic or mobile device without using cash or cheque. Mallat (2007) further explained that electronic payment is a process whereby money is transferred through electronic devices from payers to receivers. Major and traditional payment methods, such as cash, debit and credit cards, and electronic bill payments, could be potentially substituted by electronic payment systems. It was highlighted by Oliveira, Thomas, Baptista, and Campos (2016) that electronic payment is different from online and mobile banking, as the latter is related to the relationships between the banks and customers, while the former represents the transaction processes among individual users, banks, and merchants.

### *2.2 Mobile payment methods*

Smartphones were gaining in popularity in the early 2010s, which led to the emergence of various mobile payment methods. The first mobile payment method launched in Hong Kong was local brand Tap & Go, followed by the entry of Apple Pay, Google Pay, and Samsung Pay from the U.S and South Korea in the following year. In 2017, WeChat Pay and Alipay were introduced to Hong Kong from mainland China. A number of local e-payment systems have emerged in recent years, including Faster Payment System, TNG Wallet, and O!e Pay (Cai, Qi, & Li, 2019). In Hong Kong, the Octopus card has taken roots for more than two decades, while the penetration rate and usage of credit cards are very high, meaning that the existing payment system in Hong Kong is already stable and mature. Therefore, there was no urgent need for an alternative payment method. Cai et al.’s study (2019) found that fourth fifths of the respondents

said that they “never” or “seldom” conducted transactions with their mobile devices. The result reflected and explained the strange phenomena that the adoption rate of mobile payment in Hong Kong and among hotels is still low, albeit that Hong Kong ranks top for mobile phone penetration rates, and has long been regarded as one of the smartest and most well-developed cities in the world.

### *2.3 Technology Acceptance Model*

Proposed by Davis (1989), the Technology Acceptance Model is a theory which is applied to predict and explain the acceptance and adoption of various information systems, including mobile payments (Matemba & Li, 2018; Moores, 2012; Shankar & Datta, 2018). As Lim & Kim (2009) stated, perceived usefulness and perceived ease of use are the two factors that may affect one’s intention regarding the adoption of new technology. The former represents the extent to which users feel that such technology can improve the performance of their tasks, while the latter is the extent to which customers take the view that they will face no difficulties when using such technology. The TAM can be adopted to explain why Hong Kong consumers have been willing to use Octopus card since first launched and throughout the years. The functions of recharging and contactless transaction provide great convenience to users, and the card is easy to operate as it does not require any authentication or verification processes. Contactless transactions are completed within two seconds by simply placing the card on the reader. Apparently, customers’ perceived usefulness and ease of use of the Octopus Card are significantly high, and this explains why Hong Kong consumers have continued using it over the years. In contrast, as most of the mobile payment methods require identity confirmation processes, while currently, the mobile payment methods are not widely accepted by the merchants, their perceived usefulness and ease of use, therefore, are not as high as for the Octopus card.

### *2.4 Technology satisfaction theories*

Technology-oriented products and services emerged gradually in the past decades. Therefore, the customer satisfaction theories and models are shifting to value-added services that also place emphasis on customer satisfaction along with the advancements in technology. Meuter, Ostrom, Roundtree, and Bitner (2000) conducted a study to investigate the determinants that would affect satisfaction with self-service technologies. The study defined the concept as any kind of technology which allows customers to obtain services without any direct involvements from employees such as contactless e-payment methods. The study explained that technology satisfaction is achieved by addressing customers’ demands and performing their expected functions. In addition to the theory, Fournier and Mick (1999) proposed a comparison standards paradigm, which suggests customers to compare the standards of technology products with their actual performance to form a judgment of satisfaction. Therefore, not only physical products or services provided by the hotels, such as the restaurants or cake shops, are important to customers, but also the technological aspects offered to them at the hotel premises.

### *2.5 Preliminary e-payment dimensions*

Traditional payment methods commonly offered at hotels such as credit cards are no longer adequate to meet customer demand in the new normal. In order to provide value-added services to customers, preliminary e-payment dimensions that impact on positive customer satisfaction were identified from previous literature. Table 1 presents 12 factors clustered in five

dimensions, namely convenience (access convenience, transaction convenience); financial benefits (price discounts, reward programme); security (transaction procedure, technical protection, security statements); brand reputation (business integrity, word of mouth, customer loyalty); and user familiarity (user experience, uncertainty reduction).

### **3. Methodology**

#### *3.1 Research design*

The key objective of this exploratory research was to identify the customer-centric e-payment factors for dining establishments in Hong Kong. Prior to the commencement of the data collection process, a literature review identified 12 preliminary dimensions with 24 statement items. An expert review suggested to reword three statement items to increase its face validity. The results of the measurement items were then transformed into a bilingual questionnaire (in English and Cantonese). A trial run of the questionnaire was carried out with 25 respondents. The overall feedback confirmed that the questionnaire was easy to comprehend.

The questionnaire comprised three sections. The first section was a screening question, “Have you ever used any of the following e-payment methods”. It was a sampling strategy designed to screen out non-users. The second section consisted of the 24 statements to measure the e-payment factors. The last question was a statement, “Overall speaking, I am satisfied with the e-payment methods”, aiming to obtain the respondents’ overall satisfaction. The respondents were asked to indicate their level of agreement with each statement based on a scale of “1” (strongly disagree) to “5” (strongly agree). The last section was demographic information of the respondents, including gender, age group and education level.

The study population of this research was customers who had experience using e-payment methods in the hospitality industry. Convenience and snowball sampling methods were adopted. Data were collected in February 2020 using an online survey and 267 valid responses were obtained. Using SPSS, descriptive statistics, exploratory factor analysis and regression analysis were conducted.

### **4. Findings**

#### *4.1 Demographic profile*

Among the 267 valid responses, male and female respondents accounted for 51.7% and 48.3% respectively, 15% of the respondents were 51 to 60 years old, 17.6% were 31 to 40 years old, 28% were 21 to 30 years old, and 11.6% were below 21 years old. Half of the respondents had obtained a bachelor’s degree or above (49.8%), 15.7% had attained a post-secondary certification and 34.5% had attained primary or secondary education level.

#### *4.2 Mean ratings of statements*

Among the 24 statements, the item “have a high level of perceived trust among customers” scored the highest mean rating of 4.57. This was followed by “provide a privacy-protection mechanism to ensure that my personal information is kept confidential” (4.55) and “have a high level of transparency” (4.47). This reflected that the respondents perceived the “security” of the e-payment method as their major area of concern. Conversely, the three lowest indicators were “provide the latest updates of the business’ current actions to reduce uncertainty” (3.85), “enable me to comprehend the future plan of the business to reduce uncertainty” (3.83), and

“appear frequently on conversation/social media sites” (3.65). The results revealed that the respondents had less interest in companies' business and marketing strategy, implying future communications to customers can make less effort in this area.

#### *4.3 Exploratory factor analysis results*

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was 0.925 and Bartlett's Test of Sphericity was 3688.938 with a 0.000 significance level, indicating that exploratory factor analysis (EFA) could be proceeded. Principal Components Analysis and Varimax rotation were used. Table 2 presents the results of five factors with twenty indicators. The eigenvalue ranged from 1.06 to 10.30, while the factor loadings ranged from 0.52 to 0.82. The coefficient of the reliability test was above 0.7 (Hair, Black, Babin, & Anderson, 2010), i.e. between 0.71 and 0.93. The EFA result loaded five factors, namely factor 1 “trustworthy security system” (factor mean 4.43); factor 2 “efficient to use” (factor mean 4.29); factor 3 “uncertainty reduction” (factor mean 3.84); factor 4 “discounts and incentives” (factor mean 4.10) and factor 5 “fast and safe cashless transactions” (4.11). The cumulative variance was 66.25% which was above the threshold (Hair et al., 2010).

#### *4.4 Regression analysis of customer satisfaction on e-payment experience*

Regression analysis using a stepwise method was conducted to estimate the coefficients of the linear equation constituting 12 factors that best predicted the value of the dependent variable (customer satisfaction on e-payment experience). The overall regression model was significant,  $F(3, 255) = 278.608$ ,  $p < .001$ ,  $R^2 = .766$ . Factor 1 “trustworthy security system” (.510), factor 5 “fast and safe cashless transactions” (.236) and factor 2 “efficient to use” (.362) exerted positive influences on the dependent variable.

### **5. Discussion and Conclusion**

Three customer-centric e-payment factors for dining establishments were derived from the regression analysis.

#### *5.1 Trustworthy security system*

A trustworthy security system was found to be a major underlying factor influencing customer satisfaction with the e-payment experience. This showed how consumers attach importance to the information system protection of e-payment. Gul (2014) mentioned that trust is considered as a special psychological state, and it occurs when a party shows their honesty and reliability to others. Customer perceived value is directly related to the actual performance. Since Hong Kong consumers have a relatively high level of awareness of information systems, dining establishment providers should market this value-added service whilst emphasizing the provision of comprehensive data privacy protection. Board, Sutcliffe, and Wells (2002) stated that having a high level of transparency and offering users “right to know” information are important. When customers can receive or obtain more details about their transactions, the risks or uncertainty of their e-payment will be reduced. Customers may tend to trust the hotels because of their brand names and form judgments to use the stable and secure services provided by them.

### *5.2 Efficient to use*

Efficient to use exerts an important influence on the customer satisfaction with e-payment experience. As opposed to traditional payment methods such as credit card or cash that require a much longer transaction time, the characteristic of e-payment is the convenience of access. Without doubt, being accessible anytime is an essential feature of dining products and services, such as food takeaways, in today's world.

Usability is also an element affecting the customer experience. When the interface design and the internal functions of e-payment methods are user friendly and comprehensive, the requests of the users could be fulfilled successfully. Especially, when the multiple demands of users could be both solved by a multi-functional e-payment method with simple verification procedures, the favourable impression and customer satisfaction of users will be boosted. Customer loyalty will be generated if the e-payment method is suitable for them. When the e-payment can provide all the services that customers need on a website or app, it will be convenient and efficient for them. When user familiarity is created, usage mistakes and errors are minimized, thereby, customer satisfaction and the user experience can be optimized.

### *5.3 Fast and safe cashless transactions*

In view of the development and popularity of e-commerce in Hong Kong, customer buying behaviour has changed. The speed of transactions for take-away businesses has become the customer-centric factor expected of hotels and dining establishments. Also, because of the COVID-19 pandemic, the risks of carrying and using cash have increased substantially. According to Lamichhane, Adhikary, and Gautam (2009), currency is a type of vector in the transmission of viruses and bacteria in the community. Choi (2020) also mentioned that several banks in China and South Korea's central bank at one time were quarantining bank notes for at least seven days to stem the outbreak. Therefore, using e-payment to avoid the risk of carrying cash can reduce public concerns. This important factor can meet the multiple needs of the e-payment user in Hong Kong, so their customer satisfaction can be enhanced.

### *5.4 Contribution*

This study explores the measurement items for customer-centric e-payment dimensions for adoption in the hospitality industry. The mobile payment methods developed in recent years have created a new variety of perceived security risk, that is, users' mobile devices may be damaged, stolen, lost or hacked (Stiakakis, Georgiadis & Andronoudi, 2016). This study was corroborated in their study as it was found that a trustworthy system is perceived important by respondents. This suggests that managers should put more effort into improving the security systems with their e-payment platform providers as this is valued by customers. As customers' information is stored on servers and the cloud, e-payment methods can establish a passcode for logging in or allow e-payment accounts to link with their email address, so that customers can retrieve and freeze their e-payment accounts easily, thereby avoiding any monetary loss or leaks of personal information. Moreover, if customers' mobile devices are disconnected from the Internet or run out of batteries, the e-payment system will be paralyzed. As such, mobile charging stations and the internet connection at the dining establishments are also the hygiene factors to maintain customer expectations regarding the accessibility of their service.

Finally, bacteria or viruses may cling to the surface of banknotes and facilitate the spread of the disease as transactions are conducted among people (Gardner, 2020). This study found that "fast and safe cashless transactions" is one of the important factors contributing to customer

satisfaction, while the indicator of “avoid the risk of carrying cash” is proven to be significant. This implies that customers are concerned about the risks of carrying cash, especially during the Covid-19 pandemic. Managers should, therefore, offer contactless e-payment methods as a pull factor to ensure their safety and health.

### 5.5 Limitations of the study

In view of the convenience sampling method used and the cross-sectional data collected at one point in Hong Kong, the generalizability of the results may be limited. The growth of e-payment platforms is highly likely to continue in the future, while the factors affecting customer perception and satisfaction will vary across time. Qualitative research using interviews and focus groups could yield more results to develop pull factors that attract and retain customers.

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### Appendixes

Table 1. Preliminary e-payment factors

Dimensions		Definition	Reference
Convenience	Access convenience	Customers' perceived time and efforts spend to accustom the service.	Berry et al. (2002); Moeller et al. (2009); Ozkan et al. (2009)
	Transaction convenience	Customers' perceived time and efforts spent to conduct a transaction.	Chavosh et al. (2011); Jiang et al. (2013)
Financial benefits	Price discounts	Monetary incentives offer to customers that could facilitate buyers' satisfaction.	Ghosh and Saha (2018); Kour and Bedia (2015)
	Reward program	Incentives used to encourage future repurchase behaviours.	Putri (2018); Safa and Von Solms (2016)
Security	Transaction procedure	The process interaction of the e-payment methods.	Chaudhry et al. (2016); Hanaee and Alinejad (2012); Nguyen and Huynh (2018); Tsiakis and Sthephanides (2005)
	Technical protection	The technical measures to protect e-payment system.	Huang and Cheng (2012); Jajae and Tahernejad (2011); Tsiakis and Sthephanides (2005); Vinitha and Vasantha (2018)
	Security statements	The declaration and commitment of safety precautions to protect the security of e-payment system.	Barkhordari et al. (2017); Cotteleer et al. (2007); Lim (2008); Yoon (2002)
Brand reputation	Business integrity	Customers' perceived trust on the companies' business integrity.	Elbeltagi and Agag (2016); Piercy (1995); Scherling and Antinoja (2019)
	Word of mouth	People speaking or discussing on the positive experiences they have or events regarding the businesses.	Anderson (1998); Kim et al. (2009), Linda (2010); Ranaweera and Prabhu (2003)
	Customer loyalty	Consumers' acts to adopt one brands' products and services consistently.	Ariff et al. (2013); Castañeda (2011); Chen (2012); Moshan et al. (2011); Murray and Haubl (2002); Safa and Von Solms (2016)
User familiarity	User experience	Overall customer experience and enjoyment during the buying and using of products and services.	De Kerviler and Demoulin (2017); Huang and Cheng (2012); Ogara et al. (2014)
	Uncertainty reduction	Customers gaining understanding on the businesses to reduce the uncertainty, and establish trust.	Field et al. (2006); Gefen (2000)

Table 2. Results of the exploratory factor analysis

An e-payment method provided by merchants should	Factor loading	Factor name (factor mean)	Eigenvalue	% of variance	Cumulative variance	Cronbach alpha
be able to provide a security statement	0.80	Factor 1	10.30	23.78	23.78	0.93
have a confirmation process to ensure that my payments have been received successfully.	0.79	Trustworthy security system				
provide a privacy-protection mechanism to ensure that my personal information is kept confidential.	0.77	(4.43)				
be able to provide a security statement which is easy to access.	0.73					
be able to provide a security statement which is easy to comprehend.	0.69					
have a high level of transparency.	0.69					
have an authentication process to verify my identity.	0.68					
receive a high level of perceived trust from me due to excellent integrity.	0.63					
make it easier for me to complete the transactions successfully once I am familiar with the method.	0.52					
contain a simple verification procedure.	0.67	Factor 2	1.78	14.89	38.67	0.82
be accessible at any time.	0.65	Efficient to use				
be convenient to use.	0.64	(4.29)				
be easy to get familiar with	0.62					
be user-friendly.	0.58					
Enable me to comprehend the future plan of the business to reduce uncertainty.	0.82	Factor 3	1.58	10.61	49.28	0.83
Provide the latest updates of the business' current actions to reduce uncertainty.	0.74	Uncertainty reduction				
		(3.84)				
have exclusive discounts to motivate me to continuously use it.	0.81	Factor 4	1.19	9.12	58.40	0.87
provide a reward programme with incentives to motivate me to continuously use it.	0.80	Discounts and incentives				
		(4.10)				
be faster to complete the transaction as compared to physical payment.	0.78	Factor 5	1.06	7.85	66.25	0.71
avoid the risk of carrying cash.	0.70	Fast and safe cashless transaction				
		(4.11)				

Note: extraction method: principal components analysis; rotation method: varimax with Kaiser normalization. Five-point Likert scale was used; ranging from 1 = "strongly disagree" to 5 = "strongly agree".

## **Developing smart tourism in Hong Kong: The perspective of some stakeholders**

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### **Abstract:**

Smart tourism is a burgeoning development direction in recent decades. However, scant research has been conducted from the perspective of some stakeholders, which is important for policy-makers and suppliers while implementing smart tourism. This study adopts a qualitative method to solicit insights from smart tourism related stakeholders. Findings reveal the necessary elements, current barriers, and possible benefits of developing smart tourism in Hong Kong. Implications are provided accordingly.

**Keywords:** smart tourism, development, Hong Kong, stakeholders, qualitative research

### **1. Introduction**

Hong Kong is a glamorous tourist destination that attracts tourists from all over the world for the city's cuisines, shopping, nightlife, and visual appeal, which are studied and highly rated by Enright and Newton (2004). Since the introduction of the Individual Visit Scheme in 2003, Hong Kong appeals a booming number of tourists from Mainland China, with a total of 270 million visitors until the end of 2018 (Hong Kong Tourism Board [HKTB], 2019). Hong Kong's tourism development has been confronting several crises in recent decades. First, Hong Kong has been regarded as a "shopping paradise" for a long period, which has led to some problems. Previous statistics reveals that 50% of a Chinese tourist's budget is for shopping (Law & Au, 2000), showing the monotonous income source of the tourism industry. Moreover, the flourishing parallel trade in Hong Kong even caused the phenomenon of over-tourism in some districts (e.g., Sheung Shui and Tuen Mun) (Cheung & Li, 2019). Moreover, the effects of parallel trading, such as the shortage of resources and high commodity prices, triggered intensified conflicts between tourists and local residents (Liu & McKercher, 2016; Wong & Buckley, 2015). Second, a series of social events, such as "Occupy Central" in 2014 and the ongoing social unrest in 2019–2020, severely affected Mainland Chinese tourists' visit intention to Hong Kong. The inbound tourism expenditure of Hong Kong in 2019 has declined by approximately 23% compared with that in 2018 (HKTB, 2020). Considering the above crises, rejuvenating tourism development and promoting the transformation of the tourism industry in Hong Kong is imperative. The Hong Kong government has, therefore, attempted to diversify tourism products and visitor source markets and has proposed several strategies to support the sustainable tourism development of Hong Kong. In view of its important contributions, developing smart tourism in Hong Kong is one of the proposed future directions (HKTB, 2019).

Commented by Shao, director of the China National Tourism Administration (CNTA) (2011), smart tourism is a burgeoning development direction in recent decades and has attracted lots of attentions from practitioners and academics (Mehraliyev et al., 2019). In general, smart

tourism refers to a summary of tourism activities that are informed and supported by advanced technologies, especially information and communication technologies (Gretzel, Sigala, Xiang, & Koo, 2015). Corroborated by prior studies, smart tourism greatly influences tourists' experience and behavior at three stages, namely, pre-trip (Bae, Lee, Suh, & Suh, 2017), on-site (Buonincontri, & Micera, 2016), and post-trip (Chung, Lee, Kim, & Koo, 2018), which could be an effective tool for suppliers to enhance tourist destination competitiveness (Wang, Li, & Li, 2013). Seizing this opportunity, several regional governments, especially those in Mainland China, Macau, and Korea, have taken initiatives to develop smart tourism. For instance, CNTA (2015) launched "Guidance to Promote Smart Tourism Development" in 2015 and identified 33 cities in Mainland China as smart tourism pilot cities. Moreover, the Macao Government Tourism Office (2019) launched three smart tourism platforms in 2019 to accelerate smart tourism development. Nevertheless, in Hong Kong, a Special Administrative Region of China, smart tourism development is seemingly still at its beginning stage and only identified as the future direction by HKTB in 2019. Therefore, to promote tourism development and transformation, and enhance the overall competitiveness of the city, the Hong Kong government plans to translate smart tourism project into action.

Insufficient literature has focused on smart tourism development and planning from the perspective of multi-stakeholder (Mehraliyev et al., 2020); thus, policy-makers and pertinent suppliers must evaluate the current status and promote the implementation of smart tourism. The current study adopts a qualitative method to evaluate the current status and identify the development prospect of developing smart tourism in Hong Kong from the perspective of some stakeholders. The results extend the literature on smart tourism from a multi-stakeholders' perspective and provide implications for key players of smart tourism in Hong Kong.

## 2. Literature review on smart tourism

The term "smart," which is a buzzword in recent decades, is defined as capable of independent action in the context of technology by Oxforddictionaries.com (n.d.). It is commonly combined with other terms (e.g., smartphone, smart home, and smart city) to explain how multifunctional technologies support information connection and facilitate resource optimization (Gretzel, Sigala, Xiang, & Koo, 2015). The concept of smart tourism was introduced into academia by Wang, Li, and Li (2013) and Buhalis and Amaranggana (2014) while proposing the concept of a smart tourism destination based on a smart city. Although the smart tourism literature has greatly proliferated, the definition and framework of smart tourism have not reached a consensus (Li, Hu, Huang, & Duan, 2017). Li et al. (2017, p. 297) defined smart tourism as "an ubiquitous tour information service received by tourists during a touring process," whereas Gretzel, Werthner, Koo, and Lamsfus (2015) considered smart tourism as an ecosystem where practitioners could leverage smart technologies to reach the balance of creation, management, and delivery of tourism service/experiences through an intensive data sharing process. Highlighted by Wang, Li, and Li (2013), smart tourism is a value co-creation process that could be understood under the context of service-dominant logic.

In terms of smart tourism development components, Zhang, Li, and Liu (2012) indicated three supporting technological components, which are the Internet of Things (IoT), cloud services, and end-user Internet service. Gretzel, Sigala, Xiang, and Koo (2015) identified business foundations, encompassing tangible and intangible resources (e.g., software and information), human resource, and stakeholders' relationship as other predominant foundations. In terms of the value chain of smart tourism, attributed to Werthner and Klein (1999), smart tourism is mainly built by four stakeholders, comprising consumers or tourists, direct suppliers (e.g., transports), destination management organizations (DMOs) or administration (e.g.,

government), and intermediaries (e.g., travel agents). However, under the context of service-dominant logic, any aforementioned stakeholders could act the role of a supplier, a consumer, and an intermediary, which should be contingent on the flow of information and resources (Vargo & Lusch, 2008; Gretzel, Werthner, Koo & Lamsfus, 2015).

With fierce competition in the globalization market, developing smart tourism is an effective and practical approach to strengthen destination competitiveness (Wang, Li, & Li., 2013). The big data collected by smart technologies could assist in resource allocation, management decision-making, and interaction between stakeholders (Mayer-Schonberger & Cukier, 2013). By enhancing the destination's competitiveness, smart tourism may lead to the sustainable tourism development of a city (Law, 1995).

Although abundant extant literature on smart tourism has built a solid foundation of this realm, the research on smart tourism remains at an early stage (Mehraliyev et al., 2020). First, the concept and development framework of smart tourism have not reached a consensus, which is the primary theoretical foundation. Second, prior smart tourism studies have mostly been consumer-focused, such as the impact of smart tourism on tourist, which ranges from tourists' perception (Wang, Li, Zhen, & Zhang, 2016), experience (Lee, Lee, Chung, & Koo, 2018), and behavior (Shen, Sotiriadis, & Zhou, 2020), and the analysis of tourism relevant data from social networking sites (SNS) (Encalada et al., 2017). Thus, more smart tourism studies from the perspective of other stakeholders is strongly appealed by academics (Mehraliyev et al., 2020). Third, professional implications from diversified pertinent industries are necessary for policy-makers and suppliers to develop strategic planning and conquer the present impetus while implementing smart tourism.

Thus, the present study adopts a qualitative method to collect and analyze the data from smart tourism related stakeholders to identify the necessary components, development barriers, and benefits of smart tourism. Moreover, implications are provided for the future sustainable development of smart tourism in Hong Kong.

### **3. Methodology**

This study employed a qualitative method to access, collect, and analyze the data, which is commonly adopted by tourism researchers (Pernecky & Jamal, 2010; Riley, & Love, 2000). First, given that the purpose of this study is to identify the framework of smart tourism development in Hong Kong and provide implications for key players, a semi-structured interview questionnaire with open-ended questions was designed (Ayres, 2008) as shown in Table 1. Second, snowball sampling was adopted as an auxiliary method (Noy, 2008) during the stage of accessing targeted data. Third, with the consent of the interviewees, an in-depth interview was adopted as the most appropriate method to collect insights from academics and professional practitioners (Strauss & Corbin, 1998). Finally, a qualitative content analysis based on the grounded theory (Strauss & Corbin, 1998) was conducted to analyze the transcripts of interviews by using the software Nvivo 11.

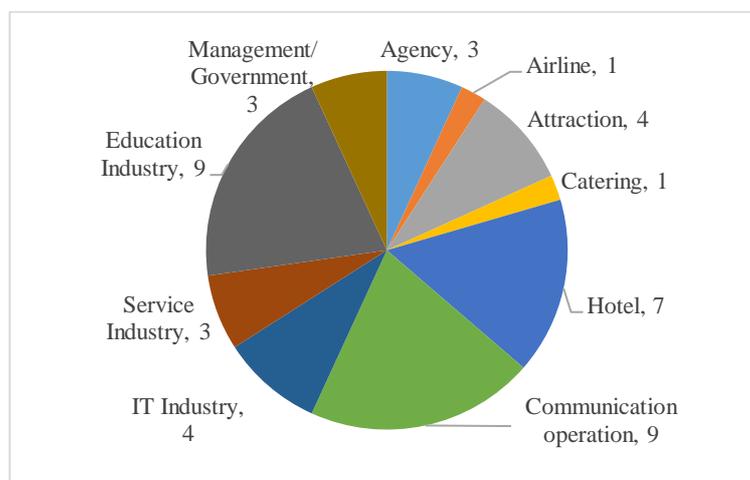
**Table 1. Interview questions**

Question	Content
1	Can you describe your understanding of smart tourism?
2	What do you think of the current status of smart tourism development in Hong Kong (or other cities in Mainland China)?
3-1	Does your enterprise provide any smart tourism application for tourists?
3-2	Has your organization/company started carrying out any work on the development of smart tourism?
4	Do you think COVID-19 has any impact on smart tourism?
5	What do you think smart tourism will bring to Hong Kong?
6	Do you think your industry and city are ready for smart tourism development?
7	What are the necessary elements to set up a smart tourism management platform?
8	What are the major challenges to the development of smart tourism in Hong Kong?
9	What do you think should be the mid-term (five-year) and long-term (ten-year) goals of smart tourism development in Hong Kong?
10	Do you have any suggestions for the government to develop Hong Kong's smart tourism?

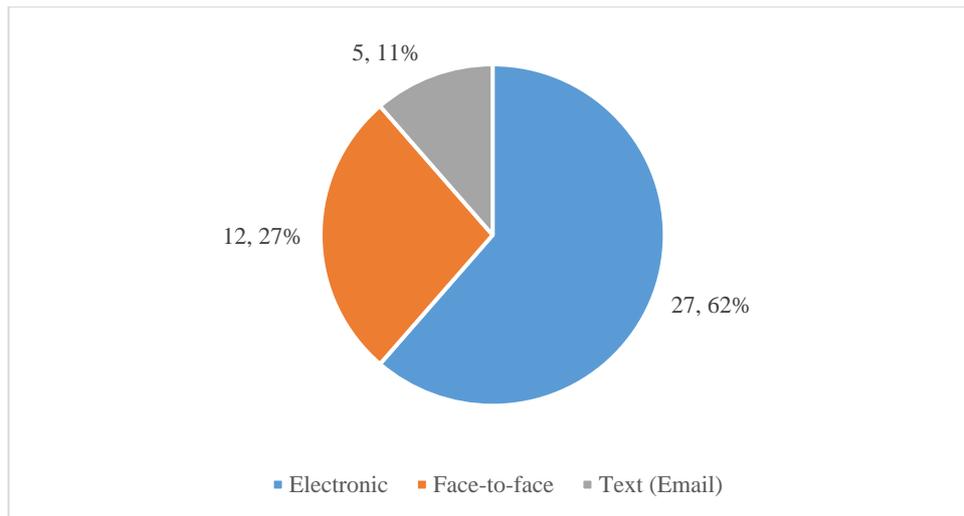
## 4. Finding

### 4.1 Demographic of interviewees

The data collection stage lasted for seven consecutive months (i.e., December 2019 to June 2020). In order to ensure the validity of the collected data, the interviewee sampling process was non-probability, meaning that only those who worked in the key positions were targeted (Costa, 2001). Finally, a total of 42 in-depth interviews were conducted, and 44 academics and practitioners participated in the study (Interview 6 had multiple interviewees) to provide professional insights about developing smart tourism in Hong Kong. The distribution of 44 interviewees' industry background, and interview format are shown in Figures 1 and 2.



**Figure 1. Distribution of interviewees' industry**



**Figure 2. Distribution of interview format**

#### *4.2 Necessary elements of developing smart tourism in Hong Kong*

##### *4.2.1 Hardware elements*

To develop smart tourism in Hong Kong, the paramount hardware element is big data (e.g., real-time tourist flow data, traffic, navigation, and surrounding information). Second, infrastructure, which supports data collection, is indispensable and involves “*countless IoT (Internet of things) infrastructure, including all sorts of sensors, capable and stable network, up-to-date end devices*” (Interview 23). Third, advanced technologies are essential while processing the data. Moreover, sufficient funding from the government is one of the imperative foundations of smart tourism development, which could be invested in constructing infrastructure, introducing talents, and encouraging data sharing.

##### *4.2.2 Software elements*

Apart from hardware elements, intangible software elements are crucial for the development of Hong Kong’s smart tourism.

First, talents who are proficient in technology and tourism are paramount for developing and managing smart tourism. Moreover, government and associations play a key role in coordinating relevant issues because developing smart tourism is a megaproject. The support from the government and associations, which shows their positive attitude toward smart tourism, would greatly encourage the participation of other stakeholders. Lastly, adequate promotion of related smart tourism projects through multiple digital channels is vital while promoting Hong Kong’s smart tourism.

#### *4.3 Benefits of developing smart tourism in Hong Kong*

##### *4.3.1 Economic benefit*

At the pre-trip stage, multiple online marketing channels allow more potential visitors to access information about Hong Kong (Interview 24). While travelling in Hong Kong, tourists’ experience would be greatly enhanced with the assistance of advanced technology (Interview

41), which may further influence their revisit intention. For example, as shared by an expert in Interview 2, *“there are always some new functions in the app that tourists have not used.”* As a result, a large number of tourists would boost the economic development of the city.

#### 4.3.2 Social and cultural benefit

Development of smart tourism will also contribute to social and cultural development of Hong Kong. Attributed to the participants, developing smart tourism will promote the development of related industries (e.g., retail and technology industries) and encourage more relevant research in institutes and improvement of courses in the education industry (Interview 27).

Moreover, developing smart tourism will facilitate the promotion and inheritance of the local culture (Interview 7). Smart tourism can also improve the image of Hong Kong. Considering the unstable social situation and the long-term label of Hong Kong as a *“shopping paradise”* (Interview 19), the development of smart tourism is expected to bring vitality to Hong Kong and change the city image.

#### 4.3.3 Management benefit

For tourism suppliers, smart tourism will bring huge managerial advantages. First, it may improve the overall tourism service quality. Second, the smart tourism platform will serve as a tourism information processing center to help the *“integration, dissemination, presentation and utilization of the tourism information”* (Interview 23), which is applicable in the era of information overloading. Third, the extract valuable implications from the results of data analysis assist managers in better allocating resources. As stated in Interview 19, smart tourism may help in the *“Better simulation and calculation for resource arrangement (manpower or transportation).”*

Fourth, several advantages of smart tourism have been demonstrated in the COVID-19 public health emergency. For example, smart tourism facilitates many tourists to enjoy virtual tourism while staying at home, as mentioned by the participant in Interview 24, *“Because now everyone cannot go outside, then they will spend more time on searching tourism information from the Internet, or use VR to visit the attraction.”*

Moreover, smart tourism assists in dealing with tourist issues in an emergency. For instance, smart tourism applications can allow tourists to cancel their reservation immediately and access real-time data of the destination (Interview 31).

#### 4.3.4 Environmental friendly

Attributed to three interviews, smart tourism will ultimately lead to sustainable tourism and help resources conservation. With the assistance of advanced technology, the consumption of tangible materials, such as paper brochures and electricity, will be reduced, and some unnecessary labor cost will decrease. As interpreted in Interview 36, *“Smart tourism can enhance the livability of Hong Kong and make it more sustainable to reduce the use of fuel energy, or the lights will be turned on only when somebody is there.”*

#### 4.4 Barriers to developing smart tourism in Hong Kong

##### 4.4.1 Infrastructure problem

At first, in some interviewees' opinions, Hong Kong relatively lags behind in technology. Specifically, the network infrastructure is inadequate at the current stage in town, which was commented by 11 interviewees. As mentioned in Interview 38, limited Wi-Fi coverage is one of the significant problems that should be addressed: *"We must solve the network problem. In Hong Kong, only 30 minutes of free Wi-Fi was available when I entered some stores."*

##### 4.4.2 Software barriers

Meanwhile, the question of whether there are enough talents in Hong Kong to support the development of smart tourism was raised by several interviewees. Besides, Hong Kong lacks a smart tourism platform that integrates tourism-related information. Although the government has been trying to promote many travel-related apps (HKTB, 2020), *"There is no all-in-one app that integrates all tourism information in Hong Kong. The information is scattered, and it is very difficult to find the information I want"* (Interview 24).

Third, the existing tourism products in Hong Kong are overly monotonous to support a smart tourism application that will provide substantial tourism information: *"The current tourism products in Hong Kong are too monotonous. When we talk about Hong Kong, can we think of other things besides shopping?"* (Interview 31).

Fourth, the most worrying software barrier is the collaboration and data sharing between/among different stakeholders. For example, *"some attractions are unwilling to share the data to cooperate"* (Interview 20) because *"the data are really like the assets, which are the competitive advantage of the company"* (Interview 36). Thus, persuading stakeholders to collaborate and share the data is an arduous task.

##### 4.4.3 Administrative issues

The third theme of barriers is administrative issues related to government initiatives and attitudes. Two high-tech talents in Interviews 26 and 30 argued that the government did not attach great importance to the IT industry. Meanwhile, no professional department coordinates and handles the issues about smart tourism project. Moreover, as emphasized in Interview 4, having enough budget is one of the issues that should be solved.

Another challenge is the strict and lengthy legal procedure before approving and launching a new project in Hong Kong. Last but not least, the conservative attitude of the local government toward advanced technology also impedes the implementation of smart tourism.

##### 4.4.4 Acceptance by other stakeholders

In addition to the government, the acceptance of other stakeholders is worried by many interviewees. The first concern is the acceptance of the elderly. As stated by an elderly expert in Interview 25, *"It is inconvenient to use these technologies because of my poor eyesight. I need to take some time to learn. I can't keep up with the speed of technological development."*

The second concern is the acceptance of the public. Some interviewees stated that the *"distrust of high-tech technology"* (Interview 31) of residents is mainly related to their privacy concerns. The third concern is the acceptance of pertinent suppliers. Given that the return rate of smart tourism is uncertain, suppliers may be concerned about investment risk (Interview 22).

#### 4.4.5 Market relevant issues

The fierce market competes with other international online travel agencies. The smart tourism application, developed by the government, will inevitably compete with similar mature applications, such as C-trip (Interview 34). Second, the monotonous market source of Hong Kong has always been a problem (Interview 29).

#### 4.4.6 Social situation

The social unrest in Hong Kong (Ni et al., 2020) was a concern of many interviewees. On the one hand, the perceived unsafety of the city severely influences the tourism industry. As stated by a practitioner in the hotel industry in Interview 13, *“If the security in this place cannot be guaranteed, how can we attract tourists?”*

On the other hand, social events distract the local government’s attention from other development projects. Therefore, the unstable social situation in Hong Kong is a major issue that should be addressed before promoting smart tourism.

### 5. Discussion and implications

This study has identified the necessary elements, four major benefits, and six barriers of the current stage for developing smart tourism in Hong Kong. This section discusses corresponding implications that may rectify the barriers and would be a great reference for the government and other pertinent suppliers when developing smart tourism in Hong Kong.

First, hardware element construction is the principle component. It lays a solid physical foundation of smart tourism development. For example, network-related facilities (e.g., 5G and Wi-Fi) are expected to be constructed well, and other city infrastructures (e.g., high-speed railway), are supposed to be invested to connect more cities (Interview 32). Besides, the government was suggested to provide support to the *“start-up business and develop incubation base”* (Interview 1) to promote the innovation of relevant technology.

Second, corresponding to the software constraints, more opportunities should be provided to cultivate or attract all-round talents. Moreover, some preliminary surveys are expected to be conducted to evaluate the characteristics of the tourism market and tourism resource to make a tailored strategic plan. Then, more local tourism products should be developed to attract more tourists. Next, as an international tourist destination, Hong Kong should accept multiple online payment methods to provide a smart travel experience to tourists without any problems in currency exchange. Most importantly, a smart tourism application or platform, which will provide comprehensive tourism information of Hong Kong, is demanded, as suggested in 18 interviews.

Third, given that the Hong Kong government has the authority and power to promote smart tourism and is should be more strategically planned, to the government should seize the opportunity and take the initiative. The government’s attitude toward smart tourism is paramount for smart tourism development. Nine interviews suggested that the government should reposition the city and prioritize technology and tourism development.

The appropriate initiatives of administration while implementing smart tourism follow, a) a professional department should be established to handle issues that are related to smart tourism; b) financial support from the government is serviceable while encouraging the innovation, development, and cooperation of pertinent stakeholders, as well as supporting relevant academic research and cultivating talents in universities; c) policies or standards are suggested

to be formulated for regulating smart tourism development procedures; d) the government should implement smart tourism as transparent as possible to gain trust and acceptance from the public.

Fourth, collaboration between different stakeholders is cardinal for the development of smart tourism. Some related stakeholders are expected to strengthen the collaboration among themselves, including the government, tourism relevant enterprises, communication operators, the technology industry, and the education industry, and should communicate with residents. In terms of the long-term goal, Hong Kong may consider collaborating with other cities in the Greater Bay Area (e.g., Macau, Guangzhou, Zhuhai, and Shenzhen) to develop smart tourism.

Fifth, multiple channels could be considered to promote the notion and products of smart tourism to gain acceptance from the public and diversify the market source. For example, more creative advertisements could be posted on popular SNS (e.g., Facebook and Weibo).

Last but not least, efforts should be made to safeguard social stability and improve the city image to ensure tourist's security.

## **6. Conclusions and limitations**

In conclusion, during this challenging period, the Hong Kong government may consider taking advantage of smart tourism and diversifying the city image to enhance destination competitiveness and re-boost the tourism industry. The government should take the initiative and provide attractive incentives to encourage collaboration among stakeholders to develop smart tourism. More importantly, the safety of this city should be guaranteed.

This study extended the literature of smart tourism development by adopting a qualitative method to solicit insights from pertinent stakeholders. The necessary elements, current barriers, and benefits of developing smart tourism in Hong Kong were identified in this study. The results also provided specific smart tourism development implications for suppliers and policymakers. Several limitations in this research can be addressed in the future. First, this study had a small sample size of the interviewees from DMOs. Given the severe impact of COVID-19 and social unrest, inviting officials to participate is difficult. Thus, more insights from officials could be obtained in a future study. Second, this study mainly focused on the positive impact of smart tourism. The negative impact that smart tourism may introduce (e.g., concerns in privacy leakage and challenges in using technology for senior tourists) should be examined as well.

## **Acknowledgments**

This research was funded by the Public Policy Research Funding Scheme from Policy Innovation and Co-ordination Office of the Hong Kong Special Administrative Region Government (Project Number: 2019.A6.136.19C).

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## **An exploratory study on students' emotional intelligence and psychological capital, and their influence on academic achievement and job intent in hospitality industry**

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### **Abstract:**

This study aims to explore the emotional intelligence (EI) and psychological capital (PsyCap) of college students and to scrutinise the influence of both capabilities on their academic achievement and job intent in hospitality industry. A total of 347 usable self-administered questionnaires were obtained from the first-year hospitality students studying a 2-year associate degree programme. The findings suggested both EI and PsyCap exert positive influence on students' job intent; more importantly, PsyCap plays a predominant role in students' academic performance when compared with that of emotional intelligence. Finally, suggestions for curriculum and student development were made to hospitality educators based on the results.

**Keywords:** Emotional Intelligence, Psychological Capital, Academic Achievement, Job Intent

### **1. Introduction**

Recognised as an established international city, Hong Kong has been attracting millions of international tourists every year (Lam, Cheung, & Lugosi, 2020). Although the tourism in Hong Kong has plummeted due to the local social movement happened in the second half of 2019 and the outbreak of COVID-19 worldwide in 2020, it is generally believed that the quandary would be over and the tourism and hospitality industry would be recovered gradually. It is expected that firms in hospitality and tourism sectors continue offering some exciting and challenging careers, the job natures of which are fascinated by lots of youngsters.

In Hong Kong, there are two UGC-funded universities offering hospitality and tourism related degree programmes namely The Hong Kong Polytechnic University and The Chinese University of Hong Kong. In addition, there are approximately 21 full-time accredited hospitality and tourism related programmes (higher diploma and associate degree) being offered by eleven institutions in academic year 2020-21 (Information Portal for Accredited Post-secondary Programmes, iPASS, 2020). For this large number of higher diploma and associate degree graduates, they are going to compete for a place from a limited number of approved senior year student intakes offered by local UGC-funded universities.

Tourism and hospitality schools, especially those reputable ones, strive to develop hotel internship programmes for their students. Hospitality student interns are expected to proactively engage in the service encounters that requires a high level of emotional labour in a highly interactive work settings (Prentice & King, 2011; Prentice & King, 2013). An ideal emotional labour behavior is largely controlled by the positive attributes of emotional intelligence (Lee & Ok, 2012) whilst serving the customers (Wong & Law, 2002; Matthews, Zeidner, & Roberts, 2012). Undisputedly, emotional intelligence has played a pivotal role to hospitality students in their internship.

Another personal resource which is closely related to emotional labour is psychological capital (PsyCap). Positive psychological state is a key for individual development (Wang, Zheng, & Cao, 2014). Furthermore, one's PsyCap can influence his/her disposition in learning (Pletsch & da Silva Zonatto, 2018). The findings were supported by the study of Atsa'am and Bodur (2020) that employees with positive PsyCap are 2.6 times more likely to be bachelor degree holder at least. In other words, PsyCap has exerted positive influence on academic outcomes.

EI and PsyCap are of utmost importance to the hospitality students of tertiary education, especially those studying associate degree programmes since articulating to University Grants Committee (UGC)-funded universities in Hong Kong for continuing their senior year study is their ultimate goal. However, few hospitality and tourism academics hitherto have examined the influence of EI and PsyCap on students, particularly for those facing the moment of truth for their further study. For these reasons, the authors conduct a study to scrutinise the effect of personal capabilities affect students' academic study and their job intent in the hospitality industry. Hopefully, this study expects to evidently draw hospitality practitioners' attention to the importance of EI and PsyCap in the hospitality context while bringing educators insights into nurturing students' EI and PsyCap in the curriculum over and above the regular learning.

Hence, the objective of this study was to examine the influence of students' EI and PsyCap on their perceived academic achievement, academic performance and job intent; and to make suggestions to hospitality educators for curriculum enhancement.

## **2. Literature review**

### *2.1 Emotional intelligence*

Emotional intelligence (EI), developed by Salovey and Mayer (1990), is defined as an individual's ability to monitor the emotions of oneself and the others, to distinguish among them, and to use the information to guide an individual's thinking and actions. The authors suggested EI comprises three dimensions: appraisal and expression of emotion, including self-emotional appraisal (SEA) and others' emotional appraisal (OEA); regulation of emotion (ROE); and utilisation of emotion (UOE). SEA facilitates an individual to realise and express his/her own emotions while OEA enables one to recognise and understand other people's emotion (Wong & Law, 2002; Yuan, Hsu, Shieh, & Li, 2012). ROE relates to one's ability to modulate own emotions, leading to rapid recovery from psychological distress. Finally, UOE means one's ability to make use of their emotions for positive outcomes.

### *2.2 Emotional intelligence, academic performance, and perceived academic achievement*

Applying EI in educational sector, it is corroborated that EI is significantly and positively related to students' capabilities in terms of critical thinking, peer learning, as well as academic performance for first-year nursing students (Fernandez, Salamonson, & Griffiths, 2012). Furthermore, there is a positive influence of EI on academic performance (Codier & Odell,

2014; Vidal Rodeiro, Emery, & Bell, 2012; Fernandez et al., 2012). Vidal Rodeiro et al.(2012) further mentioned that EI scores of high performing secondary school students is significantly higher than the low performing ones. The positive findings indicate that EI leads to academic success (Fernandez et al., 2012). By contrast, a study of undergraduate business students, emotional intelligence was not significantly associated with academic performance (Shipley, Jackson & Segrest, 2010). Arguably, in view of the positive influence of EI on academic performance are generally recognised in the studies, and the majority of which examined the relationship based on students' CGPA and subject performance, the following hypotheses are proposed:

**Hypothesis 1a.** Students' EI is positively associated with academic performance.

**Hypothesis 1b.** Students' EI is positively associated with perceived academic achievement.

### *2.3 The relationship between students' EI and job intent*

Making career decision is important and always difficult as it is made through a series of decisions (Zhou, 2013). West and Jameson (1990) found that there was an inverse relationship between graduate career choice and supervised work experience, that is, the more exposure a student has in the industry, and the less commitment to developing career in the industry he or she demonstrates. Conversely, EI is found negatively associated with one's turnover intention (Wong & Law, 2002), signifying that university students with high EI have higher confidence in making career decision (Zhou, 2013).

**Hypothesis 2.** Students' EI is positively associated with their job intent in the hospitality industry.

### *2.4 Psychological capital*

Psychological capital (PsyCap) is a multidimensional construct of positive psychology developed by Luthans, Youssef-Morgan, and Avolio (2007). Precisely, PsyCap refers to "an individual's positive psychological state of development" (Luthans et al., 2015, p. 2) which comprises four components, namely efficacy, optimism, hope, and resiliency. The four components are interrelated (Peterson, Luthans, Avolio, Walumbwa, & Zhang, 2011) and the accumulation of these four constructs represents one's motivational propensity (Luthans, Avolio, Avey, & Norman, 2007). As PsyCap is a state-like construct, each of the PsyCap components is malleable and may have some changes over some time of stability (Choi & Lee, 2014; Luthans, Luthans, Avey, & Avolio, 2014; Peterson et al., 2011). Individuals thereby could continue to deposit or withdraw from their psychological resources to enhance their performance (Peterson et al., 2011). Thus, the nature of positive states of PsyCap demonstrates its connection with desired job outcomes in workplace (e.g., Abbas, Raja, Darr, & Bouckenoghe, 2014) as well as academic outcomes (e.g. Liran & Miller, 2017).

Efficacy refers to an individual's belief in his or her ability for successful task completion. Optimism represents one's expectation of future success (Luthans et al., 2014). Luthans et al. (2007) suggested hope consists of agency, pathways and goals. Agency is about pursuing a goal whereas pathways involve identifying goals and ways to achieve those goals. Finally, people with resilience would be able to bounce back from any mistakes and setbacks (Luthans et al., 2014). Although the four dimensions are separate in nature, Luthans et al (2007)

emphasised that underlying link exists among the four constructs which influence the motivational propensity to complete tasks and reach targets more effectively.

*2.5 Psychological capital, academic performance, perceived academic achievement and job intent*

As PsyCap emphasises on one’s positive psychological states, its positive influence on academic outcomes, both high school and university students were corroborated in some studies (see for example, Jafri, 2013; Luthans, Luthans & Jensen, 2012). With the positive emotions attained from PsyCap, students trust in their capabilities and are better able to deal with academic stress and difficulties, and to study towards their pre-defined goals, so that the chance of success can be increased (Liran & Miller, 2017). Siu, Bakker and Jiang (2014) and You (2016) investigated hundreds of high school students and university students in Hong Kong and South Korea respectively, the authors found that students’ PsyCap could increase their academic engagement in different classroom and learning activities. Hence, students with higher PsyCap have stronger psychological resources, show greater confidence, stronger perseverance and motivation for learning while overcoming any difficulties in their study, so that their academic performance can be improved.

In studying the influence of PsyCap on job search, Chen and Lim (2012) proposed displaced employees high in PsyCap perceived higher level of employability. On the other hand, PsyCap brings negative effect on turnover intention (Choi & Lee, 2014). Given the insufficient studies in examining the relationship between individuals’ PsyCap and career intention, these research findings provide sufficient evidence to propose the following hypotheses:

**Hypothesis 3a.** Students’ PsyCap is positively associated with academic performance.

**Hypothesis 3b.** Students’ PsyCap is positively associated with perceived academic achievement.

**Hypothesis 3c.** Students’ PsyCap is positively associated with their job intent in the hospitality industry.

Based on the previously stated literatures and hypotheses established, the conceptual model of this study is illustrated in Figure 1.

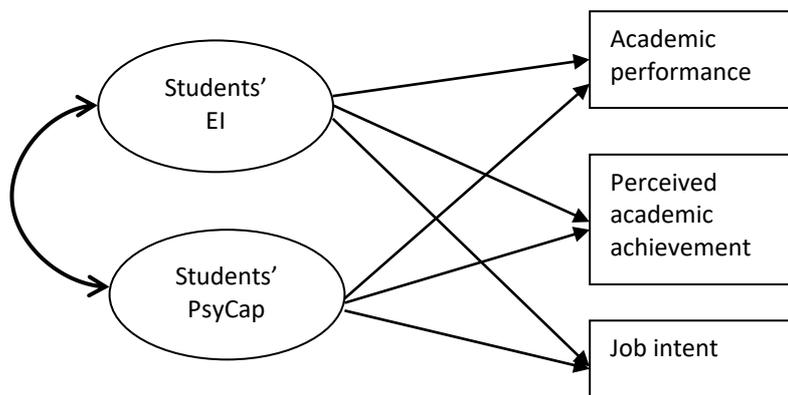


Figure 1: Proposed conceptual model

### **3. Methodology**

#### *3.1 Instrument Design and Measurement Development*

This is an empirical research study adopting quantitative approach and a self-administered questionnaire containing five sections was developed. In section one, four questions regarding students' previous job experience were designed. Questions in sections 2 and 3 captured respondents' EI and PsyCap. Questions in section 4 captured students' academic performance in the recent semester, perceived academic achievement and job intent accordingly. Section 5, the final section, collected respondents' major demographic information including gender.

Students' EI, PsyCap, perceived academic achievement and job intent were evaluated using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). This study adopted 16-item EI scale, contains Self-Emotional Appraisal (SEA) items, Others' Emotional Appraisal (OEA), Use of Emotions (UOE) and Regulation of Emotion (ROE), developed by Wong and Law (2002). A 24-item PsyCap scale developed by Luthans et al. (2007), encompasses hope, self-efficacy, resiliency and optimism, was chosen to use in the survey. Furthermore, the respondents were asked to provide their CGPA in the recent semester to evaluate their academic performance and to answer a couple of questions to reflect their perceived sense of satisfaction and confidence of their academic study.

#### *3.2 Sample Selection and Data Collection*

The targeted sample of the study was Year One students studying two-year Associate in Hospitality Management. The students were given a survey questionnaire in the second semester of their first year study as they may need to take a least one semester to adapt to new learning environment and learning mode. After eliminating those invalid responses, a total of 347 valid questionnaires were received. Within the 347 respondents, 240 female students participated in the survey, accounting for 69% of the respondents.

### **4. Results**

#### *4.1 Measurement Model and Confirmatory Factor Analysis*

The entire measurement model comprised 12 constructs (including first-order factors) and 43 measurement items. As exhibited in Table 1, the average variance extracted (AVE) for all variables were above 0.5 and the composite reliabilities well exceeded 0.7 (Hair et al., 2014). The convergent validity of the measurement scales was supported. Moreover, Table 1 shows that the AVE for each pair of constructs was generally greater than the squared correlation estimate and the pairwise correlations of the manifest variables were largely lower than 0.85 (Kline, 2005), supporting the discriminant validity of the full measurement model. Finally, based on the results from the confirmatory factor analysis, the whole measurement model overall fitted the data well according to the goodness of fit indices ( $\chi^2 = 1518.18$ ,  $df = 823$ ,  $\chi^2/df = 1.85$ , CFI = 0.93, TLI = 0.93, IFI = 0.94, RMSEA [90% CI: LO; HI] = 0.049 [0.046; 0.053]).

Table 1. Descriptive statistics, composite reliabilities, correlations, and squared correlations of full measurement model

	Mean(Std dev.)	AVE	SEA	OEA	UOE	ROE	HO	SE	RE	OP	AA	JI
EI: SEA	5.52 (.89)	0.68	<b>.89<sup>a</sup></b>	.35 <sup>b</sup>	.56	.47	.58	.59	.50	.53	.37	.39
EI: OEA	5.44 (.81)	0.66	.12 <sup>c</sup>	<b>.89</b>	.43	.37	.45	.46	.39	.40	.29	.30
EI: UOE	4.90 (1.00)	0.67	.31	.18	<b>.89</b>	.59	.72	.74	.63	.65	.46	.49
EI: ROE	5.21 (.94)	0.69	.22	.14	.35	<b>.90</b>	.61	.62	.53	.55	.39	.41
PsyCap: HO	4.79 (.90)	0.59	.34	.20	.52	.37	<b>.90</b>	.86	.73	.76	.64	.56
PsyCap: SE	5.04 (.89)	0.58	.35	.21	.55	.38	.74	<b>.87</b>	.74	.78	.65	.57
PsyCap: RE	4.80 (.89)	0.54	.25	.15	.40	.28	.53	.55	<b>.85</b>	.66	.56	.48
PsyCap: OP	4.66 (.86)	0.53	.28	.16	.42	.30	.58	.61	.44	<b>.87</b>	.58	.50
AA	4.23 (1.26)	0.79	.14	.08	.21	.15	.41	.42	.31	.34	<b>.88</b>	.54
JI	4.79 (1.14)	0.82	.15	.09	.24	.17	.31	.32	.23	.25	.29	<b>.90</b>

EI = emotional intelligence; SEA = self-emotional appraisal; OEA = others' emotional appraisal; UOE = utilisation of emotion; ROE = regulation of emotion; PsyCap = psychological capital; HO = hope; SE = self-efficacy; RE= resiliency; OP = Optimisim; AA= perceived academic achievement; JI = job intent

Goodness-of-fit statistics:  $\chi^2 = 1518.18$ ,  $df = 823$ ,  $p < .001$ ,  $\chi^2/df = 1.85$ , TLI = .93, CFI = .93, RMSEA = .049.

Note: All correlations among study variables are significant at  $p < .01$ .

<sup>a</sup> Composite reliabilities are along the diagonal.

<sup>b</sup> Correlations are above the diagonal.

<sup>c</sup> Squared correlations are below the diagonal.

#### 4.2 Relationships of EI and PsyCap on academic performance and perceived academic achievement

A multiple regression was performed to examine the relationships of EI and PsyCap on students' academic performance and perceived academic achievement respectively. The results in Table 2 show that the overall EI and PsyCap explained the EI- and PsyCap-academic performance relationship, with a 95% confidence interval. The correlation coefficient R of 0.224 suggested a positive relationship between both predictors (students' EI and PsyCap) and their actual academic performance. Furthermore, both EI and PsyCap accounted for 5.0% ( $R^2 = 0.050$ ) of the variability of academic performance. However, it is noted that students' EI was negatively related to their academic performance ( $\beta = -0.164$ ). Hence, Hypothesis 1a is not supported. In contrast, students' PsyCap was positively related to their academic performance ( $\beta = 0.320$ ), therefore, Hypothesis 3a is supported.

Table 2. Regression results of academic performance

Independent variables	B	SE	$\beta$	t	Sig.	Tolerance	VIF
Constant	2.540	0.248		10.221	0.000		
Overall emotional intelligence	-0.145	0.071	-0.164	-2.049	0.041*	0.430	2.325
Overall psychological capital	0.258	0.065	0.320	3.996	0.000***	0.430	2.325
Multiple R	0.224						
R Square	0.050						

Note: (1) B, coefficient; SE, standard error;  $\beta$ , standardised coefficient; t, t-value; Sig., significance.

(2) Dependent variable: academic performance. (3) \*  $p < .05$ ; \*\*\*  $p < .0001$ .

As depicted in Table 3, both EI and PsyCap helped explain the EI- and PsyCap-perceived academic achievement relationship, with a 95% confidence interval. The correlation coefficient  $R$  of 0.604 reflected a high positive relationship between students' EI, students' PsyCap and their perceived academic achievement. Both students' EI and PsyCap overall accounted for 36.5% ( $R^2 = 0.365$ ) of the variability of perceived academic achievement. However, the association between students' EI and their perceived academic achievement were found insignificant except that students' overall PsyCap was positively related to their perceived academic achievement ( $\beta = 0.644$ ). Hence, Hypothesis 1b was not supported whereas Hypothesis 3b was supported.

Table 3. Regression results of perceived academic achievement

Independent variables	$B$	SE	$\beta$	$t$	Sig.	Tolerance	VIF
Constant	-0.379	0.414		-0.914	0.361		
Overall emotional intelligence	-0.096	0.118	-0.053	-0.814	0.416	0.430	2.325
Overall psychological capital	1.061	0.108	0.644	9.829	0.000***	0.430	2.325
Multiple R	0.604						
R Square	0.365						

Note: (1)  $B$ , coefficient; SE, standard error;  $\beta$ , standardised coefficient;  $t$ , t-value; Sig., significance. (2) Dependent variable: perceived academic achievement. (3) \*  $p < .05$ ; \*\*\*  $p < .0001$ .

#### 4.3 Relationships of EI and PsyCap on job intent

Table 4 exhibits the results of students' overall EI and PsyCap on their job intent. Students' EI ( $\beta = 0.163$ ) and PsyCap ( $\beta = 0.413$ ) were positively associated with their job intent. Both predictors (overall EI and PsyCap) suggested positive relationship with job intent ( $R = 0.546$ ) and helped explained 29.8% ( $R^2 = 0.298$ ) of the variability in job intent. The results corroborated that both students' EI and PsyCap were positively associated with their job intent in the hospitality industry. Thus, Hypothesis 2 and Hypothesis 3c were supported. Moreover, it is worth noted that the predictive effect of students' overall PsyCap ( $\beta = 0.413$ ) is much higher than that of their overall EI ( $\beta = 0.163$ ).

Table 4. Regression results of job intent

Independent variables	$B$	SE	$\beta$	$t$	Sig.	Tolerance	VIF
Constant	0.398	0.397		1.002	0.317		
Overall emotional intelligence	0.267	0.113	0.163	2.364	0.019*	0.430	2.325
Overall psychological capital	0.620	0.103	0.413	5.996	0.000***	0.430	2.325
Multiple R	0.546						
R Square	0.298						

Note: (1)  $B$ , coefficient; SE, standard error;  $\beta$ , standardised coefficient;  $t$ , t-value; Sig., significance. (2) Dependent variable: job intent. (3) \*  $p < .05$ ; \*\*\*  $p < .0001$ .

## 5. Discussion and Conclusion

### 5.1 Discussion

The present study found that the influence of students' EI and PsyCap on their academic study, both academic performance and perceived academic achievement, are at two extreme. The significantly negative influence of students' EI on their actual academic performance (CGPA) is consistent with the study by Codier & Odell (2014), denoted that students could not capitalise on their emotional resources, such as understanding his/her the emotions and even others' emotion to make any regulations to facilitate his/her learning. As compared to EI, PsyCap exhibited its positive predominant role on students' academic study, their perceived achievement, in particular, lending support to previous research studies (Jafri, 2013; Lee & Chu, 2016).

People at work need to know others' feeling (Kim & Agrusa, 2011). Lee and Ok (2012) suggested EI is the major emotional resource helping people cope with emotional stress and frustration. Additionally, emotional intelligent people have better task performance due to their attentiveness and effective interaction with co-workers (Yuan et al., 2012). All of these help explain the importance and indispensability of EI towards working individuals, but it may not be applicable to teenagers as the respondents in this study aged between 19 and 20. As Scott-Halsell, Blum and Huffman (2008) proffered, the emotional insights of individuals grow with personal and work experience. Hence, when individuals become older, they could realise and manage emotions better. Plausibly, adolescents' personal experience is relatively little, they may not realise the importance of understanding others' feeling when studying with their counterparts at school. PsyCap drives individuals' motivation and cognitive processing in order to strive for success (Peterson et al., 2011). More importantly, students' academic performance goes up when their PsyCap increases (Jafri, 2013). The positive impact of students' PsyCap on their academic study is twofold: First, youngsters' capabilities in mastering their positive psychological resources and apply them in their academic study. This might because the multi-faceted resources of PsyCap are mainly pertinent to that particular individual without considering others' feelings or emotions similar to EI. Second, the positive psychological resources of PsyCap are crucial to students' study, especially for the college students studied associate degree programme in the current study. They wish to articulate to the preferred university after the two-year study, so those resources possessed may strive them to work hard in their study for a better academic achievement.

The positive association between EI and job intent supported the study of Walsh et al. (2015). Individuals high in EI are better able to recognise their emotions and integrate their emotional experience and thought into career decision-making (Di Fabio & Saklofske, 2014). As previously discussed, EI might affect more on working individuals in workplaces. The positive EI-job intention relationship further echoed to the study by Zhou (2013) that Chinese students possessing emotional intelligence show greater confidence in making career decision.

As compared to EI, PsyCap exerted conspicuously greater influence on students' job intent in the hospitality industry. That is, PsyCap is imperative to students regardless whether they have or possess any forms of work experience. Plausibly, an individual would be able to utilise their psychological resources to tackle with problems and difficulties encountered in workplaces which may bring confidence to students to work in the hospitality industry, lending the support to previous studies (Hur et al., 2016; Yin et al., 2018). PsyCap is powerful resources which provide momentum for students to think and act positively on their study.

### 5.2 Conclusion, implications and recommendations

The present study examined the influence of EI and PsyCap of associate degree students studied hospitality management on their academic studies, both perceived academic achievement and academic performance (CGPA). The results indicate that the significantly negative impact of students' EI on their academic study. More importantly, the current study further highlighted the great impact of PsyCap on academic studies on the student cohort, signifying younger people such as adolescents could master and capitalise on the unidirectional personal resources in themselves better.

The study's finding of EI has exhibited its prominent role in the hospitality industry. In addition, the higher PsyCap is expected to provide fundamentally positive psychological resources to support students' study and career development. Beyond the positive outcomes of PsyCap, it is crucial to one's happiness (Choi & Lee, 2014). Tsai and Lee (2014) indicated that EI training is a long-term process, similarly, it may apply to PsyCap.

Considering the uniqueness of the hospitality industry, hospitality educators are obliged to prepare students, both emotionally and psychologically, to confront the challenges from the hotel internship and academic study. Hence, the management of the hospitality programme is suggested to nurture students' EI and PsyCap in two major aspects: First, they may consider introducing both capabilities while increasingly immersing the elements of EI and PsyCap in specific hospitality courses within the curriculum. To ensure the quality of the course delivery, the hospitality educators involved are expected to receive proper training. Second, the programme management may also seek for the support of counsellors who are regarded as professionals to line up relevant professional parties in organising workshops targeting for students' needs. With the professional effort in the design of workshops tailored for nurturing students' EI and PsyCap, students' capabilities in these two areas would be elevated, thereby enhancing the reputation of the programme.

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**Exploring the impact of internship job characteristics on hospitality students' job satisfaction and job performance: Students and employers perspectives**

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**Abstract:**

Only few studies related to internship simultaneously adopted employers' perspective to examine students' internship performance as well as taking students' perspective to investigate how job characteristics influence their job performance. Therefore, understanding the students' perception of internship programs and employers' perspective of students' performance would create the appropriate alignment between the needs and preferences of both parties. This study attempted to examine the relationship among job characteristics, job satisfaction, and task performance of student interns in the hospitality industry. The findings suggests job characteristics play a determining role towards employees' job satisfaction, the hotel management should ensure the supervisors and managers, realise the aims of student internship and extend their support and consideration to them.

**Keywords:** Internship, job characteristics, job involvement, job satisfaction, task performance and career intention

**1. Introduction**

The provision of internship by hospitality and tourism programme in higher education level is to help students obtain some real world experience and increase their competence (Yiu & Law, 2012) by connecting theory with practice (Wang, Chiang, & Lee, 2014). The work experience obtained from the internship could broaden students' scope of knowledge and skills (Ruhanen, Robinson, & Breakey, 2013), thereby preparing themselves for the future career better (Getz, 1994). Recent study, however, claims that the future career intention of hospitality and tourism graduates in the industry is not optimistic (Siu, Cheung, & Law, 2012). Pervious research argued that the nature of service orientation of hospitality and tourism products and services, the influence of external environments (e.g. economy turndown, terrorist attack), and people attitudes and perceptions toward hospitality and tourism careers – have raised the concerns to the fresh graduates on future career pursuing. Given that quite a number of hospitality students at tertiary level (higher diploma, associate degree, and degree course) are expected to participate in internship programme, compulsory or voluntary, their internship experience has played a key role in creating either positive or negative working experience, thereby affecting

their intention to develop career in the industry. Students' future career intention is of great importance because it may directly affect the quality of manpower in the future hospitality and tourism industry. As a result, designing the appropriate internship program for hospitality and tourism students and reducing the gap between students' perceptions and expectation are necessary. It will enhance student's job involvement, job satisfaction, task performance, and career intention.

Although many studies have explored the relationship between students' internship experience and career intention, the gap of academic literature still exists. Only few studies related to internship simultaneously adopted employers' perspective to examine students' internship performance as well as taking students' perspective to investigate how job characteristics influence their job performance. Mismatching occurs between enhancing students' learning experience and employers' willingness to promote job experience (Stansbie, Nash, & Jack, 2013). Therefore, understanding the students' perception of internship programs and employers' perspective of students' performance would create the appropriate alignment between the needs and preferences of both parties. Furthermore, the findings will minimize the data bias in terms of self-evaluation of task performance by students themselves.

The objectives of the study are to:

1. identify the students' perception on internship experiences by the design of their jobs
2. examine the relationships among job characteristics, job satisfaction and job performance
3. examine the relationship between job satisfaction and task performance from the supervisors' perspective

## **2. Literature Review**

### *2.1 Job Characteristics*

Job characteristics are the attributes of jobs which could motivate employees (Chiu & Chen, 2005; Lee-Ross, 1998). By knowing the employees' perceptions of the activities and responsibilities in their job, employers may identify the degree to which employees perceive their jobs as motivating and satisfying (Barlett, 2007; Kim, Dee & Crutsinger, 2009). In other words, job characteristics could be used in measuring the employees' feedback of job related constructs. Hackman and Oldman (1976) developed job characteristics model (JCM) and proposed five core job dimensions, including skill variety, task identity, task significance, autonomy, and feedback.

When the concept of job characteristics applied in the internship program, Stansible et al., (2013) stated that interns have different perceptions on the jobs (such as feedback from supervisors and co-workers. The factors of friendly colleagues, brand of the organization, comprehensive training program, competitive remuneration, and commute distance are important from the students' perspectives choosing the employers (Fong et al., 2014).

### *2.2 Job Satisfaction*

Job satisfaction is defined as a perception of the job by the job holder, who determines level of satisfaction based upon physiological and psychological need. In some capacity, job satisfaction may also reveal employees' feelings of their past and present work experiences (Ko, 2012). The level of satisfaction exists when there is a gap between an evaluation of experience (i.e. perception) and the anticipation (i.e. expectation) (Oliver, 1980). Zopiatis,

Constanti, and Theocharous (2014) identified the positive and significant relationship between job satisfaction and organizational commitment, both affective and normative. On the other hand, employees' turnover intention is decreased when attaining job satisfaction (Ko, 2012; Yang, 2010; Zopiatis et al., 2014).

### *2.3 Job Characteristics and Job Satisfaction*

Lawler and Hall (1970) emphasised the strong relationship between the job dimensions and job satisfaction. This finding was further corroborated in several studies in the hospitality industry. Kim et al. (2009) denoted Generation Y's perception of job characteristics in their job positively affect their job satisfaction. Wong, Wan and Gao (2017) found that Generation Y in operational positions look for autonomy when dealing with customers directly. The result is crucial to the hospitality industry because Generation Y is expected to be the major workforce over the next two decades (Heo, Kim, & Kim, 2018). Applying to the context of internship, Teng (2008) found that hospitality students were least satisfied with the nature of work which, in some capacities, prevents them from getting hospitality jobs upon graduation. Hence, the relationship between the job characteristics and job satisfaction can be deduced (Siu et al., 2012). As job characteristics plays major role in determining employees' job satisfaction, it is plausible to propose the following hypothesis:

H1: The job characteristics are positively associated with students' job satisfaction.

### *2.4 Job Characteristics, Job Satisfaction and Task Performance*

Employees use technical skills and knowledge to produce goods or service through the organizational process are engaging to task performance (Boroman & Motowidlo, 1993; Van Scotter, 2000). Edwards, Bell, Arthur and Decuir (2008) showed that overall job satisfaction was positively related to task and contextual performance of employees. Furthermore, in Miao's study (2011), he proved that there were significant, positive relationship between job satisfaction and task performance. Employees become more committed to the organization when they are satisfied. Bartlett (2007) suggested that designing proper jobs will increase employees' job satisfaction and job performance. The variety of the job content can encourage employees to display organisational citizenship behaviour (Chiu & Chen, 2005) and stronger performance outcomes (DeVaro et al., 2007; Johari & Yahya, 2016). Hence, the hypothesis 2 and 3 are proposed as follows:

H2: Students' job satisfaction is positively associated with their task performance.

H3: The job characteristics are positively associated with students' task performance.

## **3. Methodology**

Quantitative approach was adopted and applied in this study to explore the students' perception of internship experiences in areas of job characteristics, job satisfaction, and task performance. The target populations included 1) the Year-1 Associate Degree students in hospitality management programme of Hong Kong Community College, and 2) the students' supervisor at the hospitality organizations.

Two types of questionnaire were created. For the student's questionnaire, it consisted of two sections. Respondents were asked to respond their perceptions on the items related to job characteristics and job satisfaction in Section I. These items were adopted by the studies of

Hackman and Oldman (1976), Siu et al. (2012), Yeh (2013). The reliability and validity of job design items were tested and confirmed by Lee-Ross (1998). All items were measured using 5 point Likert-type scales from 1 (strongly disagree) to 5 (strongly agree). Section II included eight close-ended questions on the respondents' demographic (e.g., gender, age, durations of working, position, and income) and organization characteristics (e.g., nature of business, affiliation, and size).

For the supervisors' questionnaire, it covered two sections. Section I, the supervisors' evaluation on task performance (9 items) were measured by their direct supervisor, adopted by Espino-Rodriguez and Gil-Padilla (2015). All items were measured using 5 Likert-type scales from 1 (strongly disagree) to 5 (strongly agree). Section II included eight close-ended questions on the supervisors' demographic characteristics (e.g., gender, age, duration of working, position, and income). The results of the student's and supervisor's questionnaires were matched accordingly.

The questionnaires were distributed to all intern students of hospitality management programme. Students must complete their internship program before conducting the questionnaires. Another questionnaire was sent to their supervisors to evaluate the students' job performance during internship period.

Descriptive analysis was used to explore the characteristics of intern students and supervisors. Confirmatory Factor Analysis (CFA) was employed to test the data fit of target samples. Lastly, Structural Equation Modeling (SEM) was used to test the casual relationships among job characteristics, job satisfaction and task performance.

## 4. Results

### 4.1 Measurement Model Analysis

Before conducting the structural equation modelling (SEM) analysis, confirmatory factor analysis was performed to verify the number of dimensions/factors existing in the measurement model and the item-factor relationship for construct validity (Brown & Moore, 2015). The measurement model of the three measurement variables, namely job characteristics, job satisfaction and student performance were loaded on the CFA model and the fit indices ( $\chi^2=701.04$ ,  $df=508$ , normed  $\chi^2=1.38$ , CFI=0.94, TFI=0.93, RSMEA[90%CI:LO; HI]=0.046; [0.037; 0.054]), confirming the good fit of the measurement models in this study.

### 4.2 Structural Model Analysis

After assessing the goodness of fit of the overall CFA model, the three measurement models were allowed to load on the structural model for further testing. The fit indices of the entire structural model ( $\chi^2=701.04$ ,  $df=508$ , normed  $\chi^2=1.38$ , CFI=0.94, TFI=0.93, RSMEA[90%CI:LO; HI]=0.046; [0.037; 0.054]), completely conform to the threshold values of the major model fit indicators including normed  $\chi^2$  less than 3 (Bollen, 1989), CFI above 0.9 (Hair Jr., Black, Babin, & Anderson, 2014), TLI close to 0.95 (Hu & Bentler, 1999), RMSEA below 0.05 (Browne & Cudeck, 1993; Steiger, 1989), a good model fit is represented.

Table 1 presents standardised coefficients for all constructs in the proposed structural model. A positive relationship between job characteristics and job satisfaction is found, supporting Hypothesis 1. The result shows that students who perceive job characteristics, namely skill variety, task identity, task significance, autonomy, and feedback, from their job may feel more satisfied. However, the relationship between job satisfaction and task performance, as well as

between job characteristics and task performance are not significant, so Hypothesis 3 and 4 are not supported.

Table 1. Results of the hypothesised path.

Hypothesised path	Standardised Path Coefficient	SE	Critical Ratio ( <i>t</i> )	<i>p</i>	Results
H1: JC à JS	.853	.050	8.871	***	Supported
H2: JS à TP	.196	.180	0.988	.323	Not supported
H3: JC à TP	-.010	.095	-.0520	.959	Not supported

Note:  $N = 184$ ,  $\chi^2(508) = 701.04$ ,  $p = .000$ , normed  $\chi^2 = 1.38$ , comparative fit index = 0.94, Tucker-Lewis index = 0.93, root mean square error of approximation [90%CI:LO; HI] = 0.046; [0.037; 0.054]. JC = job characteristics; JS = job satisfaction; TP = task performance.

\*\*\* $p < .001$ .

## 5. Discussion and Conclusion

This study attempted to examine the relationship among job characteristics, job satisfaction, and task performance of student interns in the hospitality industry. As presented in Table 1, the perception or experience of the students during their internship positively affects their job satisfaction. The finding suggests job characteristics exert motivational function to employees (Chiu & Chen, 2005) and further support the study of Ali et al. (2014). Students may think that they really can try different nature of job tasks by learning and exercising different skills, manage their work independently whilst receiving useful feedbacks from their supervisors and managers. These experiences benefit their academic study and personal growth which cannot be attained from the college.

On the contrary, since the task performance of the student interns were evaluated by their immediate supervisor or manager, the students' satisfaction from the job may not lead to better task performance based on the perception of their supervisor or manager. It is expected job tasks comprising a combination of job characteristics could be challenging, so students' task performance may not meet the standards as required by their supervisors or managers. Plausibly, the more job characteristics are included in interns' job, the more challenging for student interns to perform properly, and the higher possibility that their task performance cannot reach to the standard as their supervisor or manager expect.

Recognising the job characteristics play a determining role towards employees' job satisfaction (Barlett, 2007), the hotel management should ensure the employees at all level, especially supervisors and managers, realise the aims of student internship and extend their support and consideration to them. The hospitality practitioners should regard the importance of designing jobs for student interns instead of simple and monotonous tasks to fulfil their purpose of control. By doing this, student interns' positive experience and satisfaction can be enhanced, which may augment their career intention in the hospitality industry.

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## **Hospitality workplace sexual harassment, organizational affective commitment and proactive customer service performance: The moderating role of Chinese cultural values**

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### **Abstract:**

Sexual harassment has a negative effect on organizations but these effects are rarely examined in the hospitality context. Several research gaps are identified in this study: (1) the literature on sexual harassment and employee performance, and particularly on proactive customer service performance is limited; (2) sexual harassment and cultural values are discussed more from a theory basis. Therefore, this study proposes the following objectives: (1) to understand the relationship among hospitality workplace sexual harassment (SH) affective commitment (AC) and proactive customer service performance (PCSP); and (2) to investigate the moderate role of traditional cultural values on SH and AC, as well as on SH and PCSP. Snowball sampling will be utilized in this study. A regression analysis will be employed and mediation role of traditional cultural values will be examined. The results of the study are expected to add new knowledge to the current literature and put a greater emphasis on sexual harassment and its impacts on the practitioners

**Keywords:** sexual harassment, organizational affective commitment, proactive customer service performance, Chinese cultural values

### **1. Introduction**

Sexual harassment is a human resource management issue that has often been discussed in the hospitality industry. Davis (1998) stated that it can be a more serious problem in the hospitality industry due to the long working hours, which are often at night, the emphasis on team work, and the service-oriented nature that makes its employees susceptible to the problem. Mkono (2010) pointed out that employees in the hospitality industry may find it difficult to find the “fine line” when it comes to service delivery. If the above situations are ignored by both the employers and employees, sexual harassment will be considered as being a part of the service during employee-customer interactions.

Proactive customer service performance which is associated with an individual’s self-efficiency and organizational commitment, has often been discussed in the service industry, but it has rarely been discussed with sexual harassment. In addition, a few research gaps were also highlighted by the current study: (1) a number of the negative impacts of sexual harassment on organizations have been theoretically discussed in the literature but not empirically examined; (2) Coats, Agrusa and Tanner (2004) mentioned that Asians, particularly the Chinese, emphasize *mianzi* (face) even when there are conflicts. Therefore, Chinese cultural values may influence the employees’ reactions to cases of sexual harassment.

Therefore, this study intends to emphasize the importance of sexual harassment in the hospitality industry and examine its relationship to organizational commitment and proactive

customer service performance and it will also seek to understand the moderating role of Chinese cultural values among the three above mentioned variables.

## **2. Literature Review**

### *2.1 Sexual harassment*

There are various definitions of and explanations for sexual harassment that exist across disciplines such as psychology, sociology, law and management (Samuels, 2003). Behaviors ranging from sexual remarks to sexual assault can be defined as sexual harassment. There is no general agreement on whether a particular behavior constitutes sexual harassment (Schneider & Phillips, 1997). The Taiwanese government created Sexual Harassment Prevention Regulations in 2006. The definition of sexual harassment was based on the American sexual harassment legislation (Lin, 2006), which basically classified it as actions that created a quid pro quo situation (i.e. sex acts for something like job promotion or even job retention) or a hostile environment. Quid pro quo situations are the most common and obvious form of harassment and manifest themselves in situations where the harassed person can keep a job only by accepting of sexual advances, sexual favors or other verbal or physical conduct of a sexual nature. A hostile work environment occurs when workplace conduct is so severe as to create unreasonable impediments rather than tangible benefits (Enghagen, 1996).

### *2.2 Organizational commitment*

Atak and Erturgut (2010) considered the possibility that if employees are in agreement with organizational objectives and values, they will be more confident about staying in the organization. This is also a reflection of their organizational commitment. Meyer and Allen (1991) indicated that there are three types of organizational commitment, namely: affective commitment, continuous commitment and normative commitment. Affective commitment is the emotional attachment to and involvement with an organization. Therefore, it best explains one's commitment to his/her employer (Meyer, Becker & Vandenberghe, 2004). Meyer et al. (2002) mentioned that affective commitment is the most effective connection between employees and organizations. A high affective commitment results not only in a high performance, employee involvement and organizational citizenship behavior but it also decreases the turnover rate, pressure and work-family conflicts.

Hunter-William et al. (1999) mentioned that sexual harassment will decrease the employees' affective commitment to the organization, and Kath et al. (2009), suggested that, according to the social exchange theory, employees will consider their organizations to have lost the ability to react to sexual harassment. Therefore, employees feel that they are not supported by the organization and eventually decrease their attachment to the organization.

### *2.3 Proactive customer service performance*

Raub and Liao (2012) stated that proactive customer service performance reflects the following three characteristics: (1) self-starting: the ability to exceed the demands of the supervisors and customer and to demonstrate active and just-in-time service efficiency; (2) long-term orientation: the ability to anticipate the customers' needs and to establish a good partnership with other staff members that may benefit future customer interactions; and (3) persistence: the ability to constantly provide services that proactively seek feedback and to satisfy the customers. Li et al. (2016) suggested that sexual harassment has a negative impact on proactive

customer service performance. When employees are sexual harassed, it is hard for them to proactively serve the customers (Grandey, 2003). Liu, Kwan and Chiu (2014) examined the service staff in the Chinese restaurants and found that sexual harassment positively affected them and made it difficult for them to maintain and display the rules and service performance.

### 2.4 Chinese cultural values

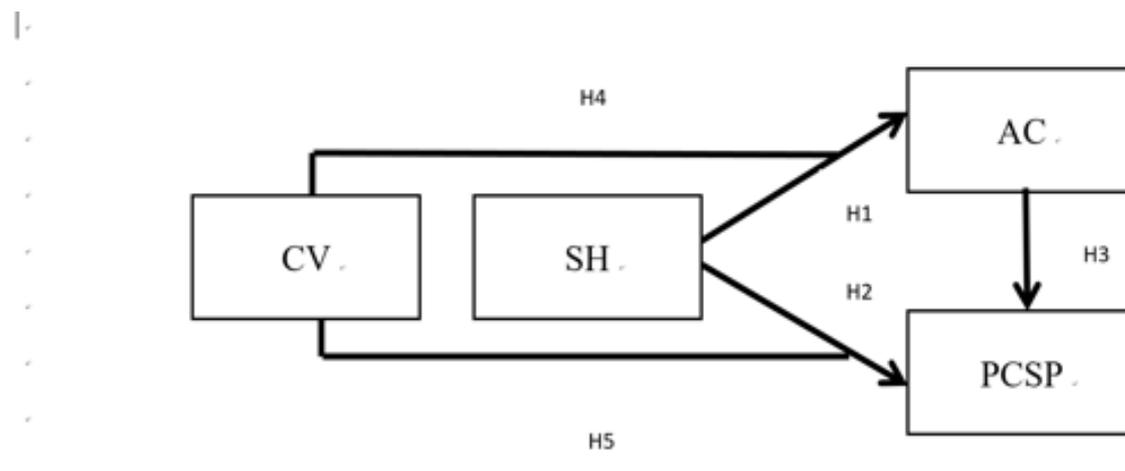
O’Leary-Kelly et al. (2009) pointed out that culture may influence how victims of sexual harassment react to it. Liu et al. (2014) suggested that understanding one’s cultural values is a good approach for understanding how a sexual harassment incident is handled. Chinese people value interpersonal relationships highly. Fan (2000) categorized 13 items in the interpersonal relationship construct, based on Chinese Cultural Connection, including tolerance to others, harmony with others, face and avoid confrontation, and these may be associated with how sexual harassment incidents are seen and handled. Hui et al. (2007) stated that traditional cultural values influence Chinese people at work. Therefore, it may be possible for the employees to see mianzi (face) and interpersonal relationship are more important issues even when they are sexual harassed in the workplace. It is possible that they will prioritize the benefits for the organization rather than their own ones.

## 3. Methodology

### 3.1 Measurement

This study intends to understand the relationships between sexual harassment (SH), affective commitment (AC) and proactive customer service performance (PCSP). It also seeks to examine the moderating role of Chinese cultural values (CV) (Figure 3.1).

Figure 3.1 The proposed research framework



Measurements of each variable are listed in the Table 3.1 below.

Table 3.1 Measurements

Variable	Source	No. of Items
SH	Fitzgerald et al. (1988)	19 items
AC	Meyer and Allen(1991)	6 items
PCSP	Ruab and Liao (2012)	7 items
CV	Fan (2000)	5 items

### 3.2 Sampling

The subjects of this study are Taiwanese frontline employees. Due to the sensitivity of the study, the snowball sampling technique will be utilized. Surveys will be administrated and 250 participants will be recruited. The reliability and validity of the survey questionnaire will be verified by contend validity and statistics analysis.

### 3.3 Analysis

The background of the participants will be analyzed. Liner and hierarchical regression analyses will be employed to understand the relationships between the variables indicated above. The anticipated results will be used to provide an insight into the current literature, as well as to make suggestions for the industry.

### 3.4 Limitations

The sensitive nature of the studied topic as well as the sampling method employed in this study may limit the findings of the study. In addition, the studied sample consists of Chinese people in Taiwan, and it may not be able to generalize the results to Chinese, or others, outside of Taiwan.

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**Linking empowering leadership  
to proactive work behavior among hotel employees:  
A serial mediation model**

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**Abstract:**

This study aims to investigate the serial mediating effects of job characteristics and job embeddedness between empowering leadership and proactive work behavior among hotel employees. The findings of this study provide hotel organizations to redesign the work, to reexamine the benefits of empowering leadership, and to develop the competitive advantages in the managerial practices by engaged and embedded employees. Finally, the interpretation is why hotel employees tend to perform proactive work behavior.

**Keywords:** Empowering Leadership, Job Characteristics, Job Embeddedness, Proactive Work Behavior

**1. Introduction**

As competition increases, if employees can take the initiative to help the organization discover and solve problems, the organization will be able to more effectively face the threats and challenges posed by the environment (Crant, 2000; Grant & Ashford, 2008). High Performance Work Practices (HPWPs) are vital strategies in the hospitality industry, HPWPs empowered employees and enriched the job design, which are beneficial to work outcomes (Murphy et al., 2018). Additionally, the high turnover rate of employees has been particularly concerned in the hotel industry, organizations will only increase the competitive advantages if keeping employees (Karatepe, 2016).

**2. Literature Review**

*2.1 Empowering leadership and proactive work behavior*

Empowering leadership refers to a process of sharing power, through a specific set of leader behavior for employees (Ahearne et al., 2005). Proactive work behavior is focused on taking control of, and bringing about change the work environment (Parker & Collins, 2010). The empowerment strategy makes employees take more initiative, they have more flexibility to accomplish the work (Raub & Robert, 2013). Accordingly, the relationship between

empowering leadership and proactive behavior has been proven in the hospitality industry (Usman et al., 2019). The following hypothesis is, therefore, proposed: H1: Empowering leadership positively influences employees' proactive work behavior.

## *2.2 Serial mediation*

Job characteristics are key elements for designing empowering work (Kirkman & Harris, 2017), and confirmed to foster hotel employees' job embeddedness (Ferreira et al., 2017). Job embeddedness, however, makes employees more proactive (Jia et al., 2020), they are willing and motivate to perform proactive work behavior. The abovementioned relationship refers that there is a serial mediation process of job characteristics and job embeddedness for linking empowering leadership and proactive work behavior. Job design characteristics determine employees' work motivation, satisfaction, and work outcomes (Hackman & Oldham, 1976; Morgeson & Humphrey, 2006), as well as keeping employees from leaving their jobs (Oldham & Hackman, 2010). Hotel employees with organizational embeddedness have been shown proactive at work and impose a strong influence on excellent service performance (Yang et al., 2020). Drawing from the conservation of resources theory (COR) and the job demands-resources (JD-R) model, hotel employees might be conscious of job characteristics and then increase their job embeddedness through empowering leadership as well as exerting higher levels of proactive work behavior. The following hypothesis is, therefore, proposed: H2: Job characteristics mediates the relationship between empowering leadership and employees' proactive work behavior, H3: Job embeddedness mediates the relationship between empowering leadership and employees' proactive work behavior, H4: Job characteristics and job embeddedness mediate the relationship between empowering leadership and employees' proactive work behaviour.

## **3. Methodology**

Stratified random sampling was utilized from each level containing 10 employees of 60 distinct departments and organizations of hotels in Taiwan. All measure items were adopted from previous studies on a 7-point Likert Scale. Data were assessed by utilizing SPSS 24 and AMOS 24. Structural equation modeling (SEM) was subsequently conducted to examine all hypotheses in this study. Based on a two-step approach recommended by Anderson and Gerbing (1988), conducting confirmatory factor analysis (CFA) to assess construct validity. Additionally, bootstrap approach was recommended to test the mediating effects based on 10,000 bootstrapping samples (Hayes & Preacher, 2014).

## **4. Results**

The instruments were distributed 600 hotel employees, 482 were usable with a response rate of 80.3 percent. The majority of employees were female, 20s, working experiences in the hotel industry of 1-3 years. The CFA demonstrated that factor loadings were significant, all constructs showed the acceptable composite reliabilities (CR), also the average variance extracted (AVE) demonstrated sufficient convergent validity. Furthermore, the results from SEM, empowering leadership has a significant positive effect on employees' proactive work behavior, supporting H1. Based on bootstrap approach, both job characteristics and job embeddedness mediated the indirect effects between empowering leadership and employees' proactive work behavior, supporting H2, H3. Finally, job characteristics and job embeddedness

are variables that explain why hotel employees tend to perform proactive work behavior. Hence, H4 was supported.

## 5. Discussion and Conclusion

### 5.1 Discussion and Conclusion

Based on JD-R theory and COR theory, the purpose of this study aims to investigate the effect of empowering leadership toward proactive work behavior with a serial mediation model that apply job characteristics and job embeddedness as mediators. According to the results, all hypotheses are supported, the contribution of this study was threefold. First, this the first empirical research to examine the internal process through which empowering leadership influences employees' proactive work behavior with a serial mediation model. Second, the findings contribute to empowering leadership and proactive work behavior literature. Third, to advance the competitive advantages in the hotel organizations.

### 5.2 Implications and limitations of this study

This study extends the previous researches, leaders' empowering leadership enriched the job design, employees are more likely to stay in their job and willing to stay in the organization for a long term (Halbesleben et al., 2014; Oldham & Hackman, 2010). Hotel employees with organizational embeddedness makes them more proactive at work, and further impose excellent job performance (Yang et al., 2020). This study advances scholarly understanding regarding why empowering leadership influences employee proactive work behavior by integrating the JD-R theory and the COR theory. If managers want to discover and solve problems as soon as possible, they must practice empowering leadership. However, this study is mainly focused on the individual level goals, the team and organization level goals can be invested in the future. Furthermore, followers' desired behaviors are necessary for a hotel organization, proactive work behavior could be replaced with other firmly valued outcomes

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## **The role of locality in Cause-Related marketing: A study of Taiwanese tourism company**

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**Keywords:** Cause-related marketing, locality, brand strategy

### **1. Introduction**

Cause-related marketing is a unique marketing strategy that integrates a good cause and marketing effectiveness and creates a win-win situation. It originated in 1981 when American Express launched the deal of donating 5 cents to support the San Francisco Art Festival every time its credit cardholder used their card. However, as societies change, marketing strategy development changes. This study observed that more and more enterprises today tend to establish their own nonprofit foundations to have more control over and be more efficient in promoting good causes. In addition, enterprises focus more on the feedback and contribution to the places where they are located, so the design of their good-cause activities become more local-oriented. As a result, cause-related marketing has an increasing influence on local residents. Accordingly, this study included local residents who have rarely been included in studies on cause marketing to understand the local history of cause marketing strategies and the influence of locality on cause marketing. The tourism and hospitality industry is currently the key industry emphasized by the government, and it gives the public the impression of its workers being exploited. Also, cause marketing studies have been lacking in the tourism and hospitality industry. Therefore, this study aims to include three perspectives: firm, resident, and consumer to explore role of locality in cause-related constitution and value delivery.

### **2. Literature Review**

#### *2.1 Cause-Related Marketing*

Cause-related marketing (CRM) traditionally has been regarded as the powerful tool to create a mutually beneficial relationship between a company and a nonprofit organization, with the dual objectives of boosting profit for the company and promoting the cause of the nonprofit (Chang & Chu, 2020; Christofi, et al., 2018; Guerreiro, et al., 2016). CRM and CSR (corporate social responsibility) have been found similarities : both of them see a win-win for the organization and the cause by doing good (Demetriou and Pappasolomou,2010; Schyvinck and Willem,2018). Extant studies claimed that CSR is more holistic, and encompassing than CRM (Beise-Zee, 2011; Chéron and Kohlbacher,2012). CRM specificity focuses on the practice of marketing a product, service, brand or company through building a relationship with a cause

or a number of causes for mutual benefit (Diehland and Terlutter, 2016; Demetriou and Pappasolomou, 2010).

CRM has been regarded as the win-win strategy for three parties : the firm, the organization which provide cause and consumers (de Oliveira Duarte & e Silva, 2018; Westberg, 2004). The benefits of CRM are usually divided into short-term and long-term benefits (Pracejus & Olsen, 2004; Varadarajan & Menon, 1988). In terms of short-term benefits, CRM is seen as a strategic tool to stimulate purchase intentions as well as sales performance (Hartmann, Klink, & Simons, 2015; Koschate-Fischer, Stefan, & Hoyer, 2012). Some research claimed the influence of CRM on price premium and product sales (Habel, Schons, Alavi, & Wieseke, 2016; Subrahmanyam, 2004). Some scholar found that CRM has no effect on price of products but product sales. In short, regardless of product premium, the benefit of CRM on product sales has been proved (Barone, Miyazaki, & Taylor, 2000). The main contribution of CRM is the improvement on brand image (Barone et al., 2000; Ross III, Patterson, & Stutts, 1992). Also, CRM can create customers' positive brand association and brand loyalty (Lafferty, Lueth, & McCafferty, 2016; Westberg & Pope, 2014). The improvement of brand performance are viewed as lone-term benefit of CRM.

## *2.2 Locality*

Locality has been viewed as an abstract concept and lined up with various research aspects, for example, residents' interactions with local places or community (Vargas-Sánchez, et al., 2010), local food production and consumption system (Sims, 2010), local specialty or local tourism attractions (Ren, 2011). Kozorog (2010) discovered the source of locality in the context of festival tourism and proved the importance of local subject (locals) and imagination in producing locality. Recent studies proved that locality are surely critical in developing local sustainability (Morais, et al. (2019; Ruiz-Ballesteros, and Cáceres-Feria, 2016).

## **3. Methodology**

As the objective of this study is to comprehend the constitution process of cause-related marketing strategy across different phases as well as different groups, a qualitative approach to data gathering is particularly appropriate for this study. Qualitative approach, which emphasizes the interpretation of social reality, is adopted for this study and accordingly, interviews were conducted as it is the data collection technique that best captures the essence of this qualitative approach (Wilson and Hollinshead, 2015). The primary advantage of in-depth interviews is the ability to provide rich data in the examination of an informant's inner feelings. Therefore, this study conducted in-depth interviews to collect data from two responsible persons involved with the cause marketing of a locally famous chocolate firm in Puli, 15 consumers, and 26 local residents.

#### 4. Results

Consumers and local people agree that Feeling 18 is a unique tourist attraction in Puli. Therefore, consumers, they arrange the itinerary by themselves when they visit to Puli. Local people also give a list of recommendation, and they both mentioned that Feeling 18 is a small town in Puli. The impact of the chocolate can give the increasing employment opportunities, stimulating the sightseeing activities, growing business around Puli, etc. Moreover, the characteristics of Feeling 18 is its high quality and high service. Although it is relatively high, the consumers and residents are being impressed by the story of founder and his son. Therefore, this is the reason for both consumers and local people to buy this expensive chocolate to support the father and son's dream of charity. Consumers and residents have a positive view of CRM as they believe that companies are willing to do charity and increase social power. We think that enterprises are willing to do the public welfare to increase the social power, and if the brand advertising, increase exposure or the revenue increase due to the public welfare, it is also a good circulation because manufacturers should also have such benefits when doing public welfare.

Many consumers now focus on products for Feeling 18's CRM. For them, a portion of the surplus will be donated to the products consumed in the store. So, they are more willing to buy products that make donations. More residents' perception of CRM lies in the large and small public welfare affairs done by Feeling 18 in Puli Town. As these public welfare affairs are fixed and long-term, residents will have a deep understanding of Feeling 18's public welfare image and impression. Residents and consumers have different perceptions of Feeling 18's CRM. Consumers believe that the revenue of Feeling 18 has a great impact on public welfare affairs, and both show positive development. The higher the revenue, the larger amount of donation and it's vice versa. Residents' perception of CRM is based on the various charity activities implemented by Feeling 18, such as story time for children, 18-charity days promotion for low carbon activities, etc. From those activities, Feeling 18 is deeply impressed in the minds of residents. Feeling 18 can be seen from the volunteer sweepers wearing the 18 degree C chocolate factory vest and sponsored road running activity and that makes residents realize the diversity of Feeling 18's CRM. Also these public benefits will not change with the revenue and will last forever.

Table 1

	Same perspectives	Different perspectives
Brand recognition of Feeling 18 chocolate workshop	Puli has many representatives and influential tourist attractions. It also has high quality products and high-quality services, and willing to do good deeds in return.	consumers believed that they are enterprises with high quality and excellent service and take the initiative to do good deeds and give back to the society. Residents mainly focus on the impact of this brand on Puli region, and position their brand awareness as an influential and active feedback enterprise in Puli
CRM perception of Feeling 18 chocolate workshop	Some companies in the society are willing to participate in CRM that give the positive development for the society.	Consumers believe that CRM is the manufactures donate a fixed percentage of surplus; while residents believe that manufactures give sponsors and

		participate in, and organize various topic activities locally.
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Source: this study.

## 5. Discussion and Conclusion

After an analysis, we discovered that the donation amount proportional to the earnings directly affected the increase in the consumer's willingness to make purchases. In addition, good causes conducted by the firm, including increasing job opportunities, triggering tourism, and bringing up nearby businesses in Puli, elevated the brand image. For residents, charity activities that benefited the place increased brand image of the firm as well as increased residents' willingness to assist the firm in promoting the products; the residents actively became the brand spokespersons. By contrast, some local residents believed that good causes were only good when they were not being bragged about. They held a negative view on the firm actively inviting the media to report on their good cause activities. This study revealed the influence and forming context of locality on cause marketing. We referred to different perspectives and organized the key factors in constructing cause marketing. The results of this study may serve as references for future studies on and the implementations of cause marketing.

### 5.1 Discussion and implications

Residents are an easily overlooked role for enterprises in CRM, but they are very important especially when the cause of the enterprise is local, residents play the dual role of word-of-mouth recommendation. However, we can't expect all the leaders will actively participate and even lead the development of local affairs like the founder of Feeling 18 Chocolate Workshop. But we think that local cause-causing activities will be a future trend worthy of corporate attention, for example, Yi Jianshe has promoted many CRMs related projects to local residents through its foundation. In this trend, companies might need to reposition the relationship between residents and companies. The relationship with residents is no longer entirely a neighbour relationship. While implementing CRM, residents also play multiple roles such as consumers, event supporters, resource seekers, and word-of-mouth speakers. CRM is originally a form of corporate social responsibility. Therefore, companies must think about how to fulfill their social responsibilities. In addition to maintain good neighbourhood relations, it is necessary to further think about how to incorporate residents into the company's CRM design and implementation so that residents can act as the most convincing brand ambassadors and become the most powerful promoters of good cause benefits.

The establishment of the relationship between Feeling 18 Chocolate Workshop and consumers is based on good quality and high quality service. In recent years, companies have been increasingly examined whether they fulfill their social responsibilities. Feeling 18 Chocolate Workshop has not only for doing good deeds but also for willing to go for consumption and their brand image will be pushed higher in the minds of consumers. The establishment of the relationship with residents is more focused on the area of Puli district affairs and feedback. Through interviews, it can be known that the interaction between Feeling 18 Chocolate Workshop and local residents is quite high through its efforts.

Extending this to other companies, in addition to its high-quality and services, consumers must also fulfill their social responsibilities. As for the residents, if they don't make donations in their social responsibilities, they ignore the relationship with the local area and their contributions to the local area. No matter how much the company donates, the residents will

feel indifferent, and it is difficult for the company to have a good brand image in the mind of residents. From my point of view, it is better to let the residents think alone so that they will actively recommend this company to foreign tourists or take the initiative to participate in organizing activities.

The enterprises in Taiwan have accepted this concept in 1990s. The pioneering cases are the collaboration of one financial institution with one NPO, corresponding to the fusion of Corporate Social Responsibility (CSR) with affiliate marketing. A few widespread successful cases include: (1) Back in 1993, CTBC Bank and Tzu Chi Foundation have put forward the first ever credit card “Tzu Chi-CTBC Card” in Taiwan, linking up individual consumption and charity. This credit card aims to assist Tzu Chi’s facilitation of charitable, medical, cultural and educational work. Every expense from a card holder contributes to CTBC’s donation to Tzu Chi, from 0.275 percent to 0.5 percent. There are 300 thousand “Tzu Chi-CTBC cards” circulating currently, completing more than 450-million worth of donation; (2) Since 1995, P&G collaborates with the Taiwan Breast Cancer Foundation (TBCF) and the Department of Health to organize the “Six Minutes for a Lifetime” event. In the event, P&G donates 6 NTD with every purchase of its products, supporting women from rural areas to receive breast cancer tests. According to Andreasen’s classification, the above two cause-related marketing (CRM) cases root in financial transactions. (3) In the end of 2005, Bank of Taiwan issued the “Guide Dog School-Bank of Taiwan Card”, placing donation boxes at various BOT locations. BOT received approximately 190 thousand NTD within a month. In 1998, Citi Bank issued the “Children Are Us-Citi Bank Card,” giving 0.275 percent of donation to Children Are Us foundation with every expense from a card holder. This supports the opening of bakeries, restaurants, and factories, creating diverse channels of social relation for the intellectually disabled children. Up to 2005, they have reached more than 90 million NTD. Both entities advance CRM, while the former focuses on collaborative promotion, and the latter on financial transactions. (4) In 2006, TAIYEN applies CRM strategies, transforming their inventory accumulation into “Hope Gift Boxes”. Each sold gift box presents 100 NTD to funds for single mothers’ business launching. This event can be seen as Kotler’s extensive Corporate Issue Promotion (1996), where corporations promote charitable works that fit the societal needs. On account of that, CRM development in Taiwan coincides with international trends that all start from the promotional collaboration of a NPO with a financial entity. However, due to societal changes, corporates nowadays incline to launch their own non-profitable foundation that they may bring up benevolence more dominantly and effectively. E.g. JUT Foundation for Arts and Architecture

In addition to structural changes, corporates increasingly value community feedbacks and contributions, resulting in the localization of charitable work. Thus, the performance of CSR has been increasingly diverse due to corporations’ application of CRM. There are several researches on collaborations among business institutions, governmental units, and NPO, yet none discusses corporations’ self-founded non-profit foundations with CRM framework. Hence, this research advocates discussions about the latter, which is able to enrich CRM and its applications.

### *5.2 Limitations of this study and suggestions for future study*

This research has taken into consideration the perspectives of manufactures, enterprises, and consumers were taken into account and the new CRM insight were discovered through the exploration of a new form of cause-related cooperative Organization, the enterprise foundation. It is just that this in-depth interview is only carried out on residents. In future, interviews with cooperate consumers can be conducted to gain a deeper understanding of the interaction

between consumers corporate CRM. Varadarajan (1996) view that CRM can change consumer donation behavior. Consumers will think that buying products from CRM activities is a good deed, so they will reduce their participation in public welfare activities. This part can be reserved for future research to continue to explore. It can be find out that similarities and differences between CRM, good deeds and public welfare. In addition, Garcia, Gibaja, and Mujika (2003) proposed that although CRM is a popular research topic in recent years, from a practical point of view, not evry CRM is successful, and the research on potential unstable factors. As a result, future research can continue to investigate potential instability factors for the less successful CRM in Taiwan.

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## **Residents' perceptions towards China inbound tourism in Hong Kong**

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### **Abstract:**

In Hong Kong, tourism makes up 8% of GDP in 2019 and Mainland Chinese tourists contributed to 78% of the total arrivals in Hong Kong tourism in both 2018 and 2019. However, negative tourism impacts were reported in most of the media such as crowding in public transportation, high inflation rate, changing shopping landscape and cultural conflicts leading to the perceived deterioration of quality of life. In 2012, a group of HK internet users pulled together and published a full-page newspaper advertisement comparing Mainland Chinese tourists to locusts. In 2014, over 200 residents even abused vocally to tourists and yelled them to go back to China. In fact, residents are the ones who are exposed to the impacts brought by the tourism development. Their perceptions of tourism development not only influence their level of support for tourism development, but also critically affect their way of dealing with the tourists (customers) – the host-tourist interaction. In addition, tourists' satisfaction is also affected by the host hospitality towards them during the travel journey. Therefore, research on Hong Kong residents' perceptions of tourism impacts is vital as it provides an indication of the impacts of tourism on the community. When a destination reaches the stagnation stage, conflicts between host and tourist become more obvious. If no measures are taken to remediate the situation, the destination will unavoidably decline. This study aims to identify the different respondents' groups and its nature based on their perceptions of tourism impacts and their level of support to tourism. While most of the residents' perception studies are quantitative in nature, qualitative approach would be able to provide deeper insights as to why and how residents' formed the perceptions in that way.

A rarely applied model of Social Representations Theory (SRT) was adopted in this study. It recognises the heterogeneous nature of a community and accepts the existence of differing social representations in a community. Therefore, this theory allows the researcher to identify several homogenous clusters in HK community.

In-depth interviews and focus groups were conducted to provide insights for grouping the respondents based on their perceptions towards tourism impacts and tourism development. Four different groups, namely 'Lovers', 'Cautious Romantics', 'Environmental and Social Ambivalents' and 'Haters' were identified with different compositions and characteristics of respondents. It was found that respondents in different groups also had different educational level, age, economic dependency on tourism and level of life satisfaction of residents also affect how residents perceive the tourism impacts and its development in Hong Kong. The younger generation, low-income interviewees have strong and negative views toward tourism impacts and development in Hong Kong, whereas the older generation and high-income interviewees had a more positive evaluation toward tourism impacts and more favourable attitude to tourism. As a matter of fact, the younger generation is the future of Hong Kong and their impact on community cannot be neglected. The Government has to seriously consider and address their concerns so as to ensure the tourism sustainability of Hong Kong. Practical implications for the HKSAR Government were discussed.

## **Rethinking the relationships among residents' perceived tourism impacts, life satisfaction and support for tourism development**

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### **Abstract:**

The research explores the relationships among residents' perceived impacts of tourism development, life satisfaction and support for tourism development based on top-down and bottom-up theories. Results show that higher level of life satisfaction make people perceive more positive impacts of tourism development and therefore more supportive of tourism development. Findings of the bottom-up model confirm that residents' perceptions of positive tourism impacts affect their life satisfaction and attitudes of tourism development positively.

**Keywords:** tourism impacts, life satisfaction, support for tourism development, top-down theory, bottom-up theory

### **1. Introduction**

The rapid development of the tourism industry in the recent decades has given rise to various consequences that have a close connection with local residents' life, thereby influencing their support for further tourism development. Studies have paid much attention to investigating the relationships among tourism impacts, residents' life satisfaction and support for tourism development (Gursoy & Rutherford, 2002; Styliadis et al., 2014; Woo et al., 2015; Rivera et al., 2016). While residents' support is seen as playing a key role in maintaining sustainable development of the tourism industry (Styliadis et al., 2014), residents' support for tourism development is affected by their life satisfaction, which is in turn influenced by their perception of tourism impacts, based on the bottom-up spillover.

It is noteworthy that individuals' life satisfaction, also known as personal wellbeing or happiness, could have served as an antecedent of their perceptions, according to the top-down theory (Veenhoven, R., 2012; Brief et al., 1993). In fact, Brief et al. (1993) point out that happier people tend to experience things more positively. Notwithstanding, this important directional relationship has been largely overlooked in the literature surprisingly, to the best of our knowledge.

In this paper, we provide both theoretical and empirical contribution to the tourism literature in two steps. First, we innovate by proposing a top-down model to investigate whether residents who have higher level of life satisfaction would perceive more tourism benefits than costs. Doing so highlights the vital role of improving residents' life satisfaction on long-term tourism development. Second, we also examine a modified version of the existing bottom-up model. This helps to offer a fuller understanding of the effects of tourism impacts on life satisfaction and therefore tourism development than what the literature depicts.

## 2. Literature Review

Perceived value represents the integration among the cognitive elements of multidimensional values (Zeithaml, 1988). Some perceived tourism impacts are positive, also known as perceived benefits, while some are negative impacts, also termed perceived costs (eg. Ko & Stewart, 2002; Stylidis et al., 2014; Nunkoo & Ramkissoon, 2011). Existing literature maintains that whether residents support tourism development or not is based on a trade-off that evaluates the perceived benefits and costs according to the social exchange theory (Perdue et al., 1990; Stylidis et al., 2014; Nunkoo & Ramkissoon, 2011; McGehee & Anderek, 2004). Woo et al. (2015) also demonstrate that tourism development could gain more support from local people by improving their overall life satisfaction through the perceived benefits of tourism. Different from the literature, the present study identifies three domains of tourism impacts, viz. perceived economic benefits (PEB), perceived socio-cultural benefits (PSCB) and perceived environmental costs (PEC). The most favorable impacts come from the economic and social-cultural perspectives, whereas the majority of social costs can be derived from the environmental aspect (Lin et al., 2017).

The term ‘life satisfaction’ can be used interchangeably with ‘a positive mood’, ‘happiness’ and ‘personal wellbeing’ (Veenhoven, R., 2012). There are two theories, namely the bottom-up and top-down theories, that are applied to evaluate an individual’s subjective wellbeing (SWB) (Diener, 1984). According to Heady et al. (1991), “[b]ottom-up causation is where particular variables cause SWB and top-down causation is where SWB produces certain outcomes”. With respect to the bottom-up theory, previous studies examine how perceived tourism impacts affect residents’ overall life satisfaction, which in turn affect support for tourism development (Diener, 1984; Perdue et al., 1990; Kim et al., 2013; Woo et al., 2015; Stylidis et al., 2014; Gursoy & Rutherford, 2004). However, as regards the top-down theory, life satisfaction influences people’s propensity to experience things positively or negatively. More specifically, happier people tend to perceive things in a more positive way (Heller et al., 2002; Diener, 2006; Qiao-Tasserit et al., 2017). Vargas-Sanchez and Porrás-Bueno (2011) indicate that people who are more satisfied with their community will perceive more positive and less negative effects of tourism and vice versa. Notwithstanding, life satisfaction is rarely, if ever, treated as an antecedent in tourism research. In the current study, we address the research gaps discussed above by proposing two models (Figure 1 & Figure 2) based on the top-down and bottom-up theories respectively to examine the relationships among perceived tourism impacts, life satisfaction and support for tourism.

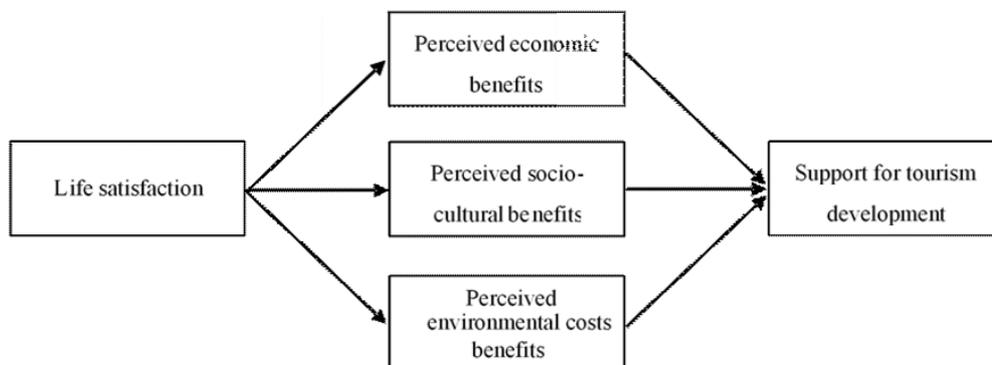


Figure 1. The top-down model

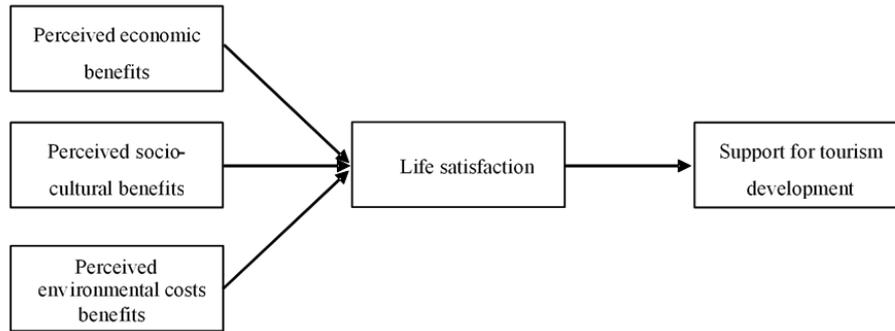


Figure 2. The bottom-up model

### 3. Methodology

Since Macao is one of the top tourist destinations in the world, we target as participants permanent residents of Macao aged 18 and above. After deleting the invalid ones, the total number of completed questionnaires is 544. The questionnaire includes 3 sections and all items are measured with a 5-point Likert-type scale (1 = “strongly disagree”, 5 = “strongly agree”). In Section 1, participants are asked to indicate their agreement or disagreement with statements of perceived benefits and costs in the process of tourism development. In Section 2, respondents are questioned on how satisfied they are with various life domains. Section 3 measures residents’ support for tourism development.

### 4. Results

After conducting the confirmatory analysis, the two models are estimated by AMOS structural equation modeling (SEM) with Maximum Likelihood estimation. As we can see from Table 1, the results of the top-down model show that life satisfaction affects PEB and PSCB significantly in a positive manner. However, no significant relationship can be derived for life satisfaction relative to PEC. Moreover, PEB and PSCB are significantly positively related to support for tourism development, whereas PEC has no significant effect on tourism support. The results of the bottom-up model show that PEB and PSCB affect life satisfaction positively and significantly, while no significant relationship can be found between PEC and life satisfaction. In addition, the relationship between life satisfaction and support for tourism development is confirmed to be significantly positive.

Table 1. Estimation results

The Top-down model			The Bottom-up model		
<i>Effect</i>		<i>Result</i>	<i>Effect</i>		<i>Result</i>
Life satisfaction	→	PEB	PEB	→	Life satisfaction
		0.34***			0.31***
Life satisfaction	→	PSCB	PSCB	→	Life satisfaction
		0.28***			0.27***
Life satisfaction	→	PEC	PEC	→	Life satisfaction
		-0.06			-0.03
PEB	→	Support for tourism development	Life satisfaction	→	Support for tourism development
		0.37***			0.32***
PSCB	→	Support for tourism development			
		0.38***			
PEC	→	Support for tourism development			
		-0.04			

Note: \*\*\*  $p < 0.001$

## 5. Discussion and Conclusion

The research explores the relationships among residents' perceived impacts of tourism development, life satisfaction and support for tourism development from the new perspective of the top-down theory. It also examines a modified version of the bottom-up model in the literature by identifying three domains of perceived tourism impacts in congruence with the cost-benefit approach. Results of the top-down model are consistent with our proposition that higher level of life satisfaction or happiness make people perceive more positive outcomes of tourism development and therefore more supportive of tourism development. Findings of the bottom-up model confirm the hypothesis in the previous studies that residents' perceptions of positive tourism impacts affect their life satisfaction and attitudes of tourism development positively (Woo et al., 2015; Styliadis et al., 2014; Gursoy & Rutherford, 2002).

Thus, the research provides new and strong evidence for the notion that life satisfaction is not only an important outcome variable but also an influential factor of residents' perception of tourism development. Residents' well-being should always be a top priority of governments and tourism developers. On the one hand, local residents are encouraged to participate in the decision-making process of tourism development. On the other, governmental provision of more social welfare may be a viable way to improve residents' life satisfaction. As a whole, promotion of life satisfaction of residents is conducive to enhancing residents' support for tourism that is vital for the sustainable development of the tourism industry in the long-run.

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## **Cooperation between tourism enterprises and schools in China: Motivation and the pursuit of value**

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### **Abstract:**

China's tourism industry has entered a development stage of transformation, upgrade, efficiency, and quality improvement, which places high requirements on the cultivation of tourism talents. As universities cultivate tourism talents, increasing attention has been given to collaborative education with tourism enterprises. However, enterprises' lack of enthusiasm has become widespread. Therefore, clarifying the motivation of tourism enterprises for school-enterprise cooperation has strong practical significance in the cultivation of tourism management professionals who can adapt to new tourism formats, models, and technologies. This study uses means-end chain theory and the soft ladder interview method to interview the executives of 17 domestic tourism companies. Moreover, NVivo 11.0 is used to analyze the interview data, as this study explores the deep motivation of tourism companies for as well as the value of school-enterprise cooperation. Nine means-end chains are obtained, which indicate that the deep-level value motivation of tourism enterprises for school-enterprise cooperation is dominated by a "continuous supply of employees." In the long run, tourism enterprises expect to improve their competitiveness, brand recognition, and "cost control." However, overall, the school-enterprise cooperation of domestic tourism companies remains in the growth stage. This study makes up for the lack of theoretical research on tourism enterprise school-enterprise cooperation motivation. Moreover, this study has certain practical significance for domestic tourism application-oriented universities and tourism vocational colleges to adopt methods and models that can attract outstanding tourism enterprises to engage in school-enterprise cooperation.

**Keywords:** means-end chain, school-enterprise cooperation motivation, tourism enterprises, value

**[Central Picture Classification Number]** F59

**[Document Identification Code]** A

### **1. Introduction**

Presently, China's tourism industry has entered a development path of transformation, upgrade, efficiency, and quality improvement, which places high requirements on the cultivation of tourism talents<sup>[1]</sup>. The 2015 China Tourism "515" strategy proposed to strengthen the training of undergraduate tourism majors to cultivate professional application-oriented talents who can adapt to the new tourism industry as well as novel models and technologies. The 2016 "Outline of China's 13th Five-Year Plan for Tourism Talent Development" also clearly supported the development of tourism application-oriented undergraduate colleges and majors and formed a tourism talent team that is compatible with the development of the tourism industry by 2020<sup>[1]</sup>. At the beginning of 2019, the State Council issued the "National Vocational Education Reform Implementation Plan" (hereinafter referred to as the "Plan"). The "Plan" emphasizes that vocational education should be placed prominently in education reform innovation and

economic growth. In addition, the “Plan” presents a series of specific measures for improving vocational education in the new era. The favorable policies of vocational education will also have a profound impact on China’s vocational tourism education. Furthermore, the overall quality of vocational tourism education will gradually show an upward trend. The involvement of tourism application-oriented colleges will surely help schools overcome the challenge of increasing competition, thereby forcing them to stimulate school vitality, improve talent-training quality, and seek increased school–enterprise cooperation and support. The domestic school–enterprise joint training of tourism talents began early, in which a variety of models and several successful examples emerged, such as the “industry–education integration” and “school–enterprise cooperation” education model of Zhejiang Tourism Vocational College. By mixing management platforms, such as the running of schools under an ownership system, Songcheng College, and the Wuzhen Modern Apprenticeship Class, relationships among schools and enterprises became close. However, overall, the domestic school–enterprise joint training of tourism talents shows a small scope of cooperation as well as shallow, changeable, and nonsustainable characteristics<sup>[2-3]</sup>. Moreover, enterprises’ lack of motivation has become widespread<sup>[4]</sup>. Therefore, clarifying the school–enterprise cooperation motivation of tourism enterprises has a strong practical significance for the cultivation of tourism management professionals who can adapt to new tourism formats, models, and technologies.

Domestic academic circles have previously conducted research on school–enterprise cooperation, and several scholars have combed such studies. The main achievements of school–enterprise cooperation research are concentrated on the following aspects: the importance of school–enterprise cooperation, the internal reform of schools in school–enterprise cooperation, the connotation of school–enterprise cooperation, school–enterprise cooperation models, and research on operating mechanisms<sup>[5]</sup>. Among the different aspects, research on the mechanisms of school–enterprise cooperation will inevitably include works on motivation for the main component of school–enterprise cooperation. The academic community has learned from school–enterprise cooperation practices and has conducted in-depth research on the motivation of school–enterprise cooperation subjects with the help of game theory, “three spirals” theory, and resource dependency theory<sup>[5]</sup>. For example, Fan Gongxiao pointed out that the core motivation of parties to participate in industry–academia cooperation is to improve the quality of students’ training<sup>[6]</sup>. Huang Yiwu proposed that the three integration points of industry–academia cooperation are talents, benefits, and mutual benefits<sup>[7]</sup>. Zhou Yi believed that reasons for the difficult implementation of industry–academia cooperation education are reflected in three aspects, that is, differences in organizational behavior and values, differences in the use and cultivation of human resources, and differences in information exchanges<sup>[8]</sup>. The aforementioned studies have shown that the internal motivation of companies to engage in school–enterprise cooperation is multidimensional. Specifically, enterprises do not decide to cooperate with universities based on only a single motivation. At the same time, different types of enterprises have different motivations for engaging in school–enterprise cooperation<sup>[9]</sup>, which drives researchers to find deep and general factors that affect corporate–school–enterprise cooperation motivation. Furthermore, studies have shown that the value of a company affects its motivation<sup>[10]</sup>.

From a philosophical perspective, value is based on practical activities and exists in the relationship between subjects and object interactions and combinations. Value is the result of harmonious opposition, interaction, and dialectical unity between a subject and an object<sup>[11]</sup> and will affect behaviors. Means-end chain (MEC) theory is an effective framework for analyzing the relationship between value and behavior<sup>[12]</sup>. In MEC theory, means refer to products or activities related to an individual, and purpose refers to value. MEC tries to explain how an individual chooses a product or activity to obtain the ultimate value that he/she desires.

In school–enterprise cooperation, application-oriented colleges and enterprises form a supply–demand relationship, with talents as links. Colleges are the producers and suppliers of talents, whereas enterprises are the demanders and users of talents. For enterprises, a certain “value” purpose can be achieved through “school–enterprise cooperation.” Based on this idea, the present study will use the MEC theory ladder method to explore the motivation for and the value of school–enterprise cooperation of domestic tourism companies.

## 2. Literature review

### 2.1 Enterprises’ motivation for school–enterprise cooperation”

Motivation theory describes the dynamic process of imbalance or tension caused by internal psychological factors (e.g., needs, hopes, and goals), which will allow people to use certain behaviors to meet their needs<sup>[12]</sup>. Although an enterprise is not an individual, the specific behavior of the former is ultimately determined by the decisions of a few individuals. Therefore, applying motivation theory to the behavior research of an enterprise is reasonable and scientific. The motivation of an enterprise for school–enterprise cooperation refers to their prompting to cooperate with higher education institutions to meet their short- or long-term interests. A search on CNKI with “school–enterprise cooperation motivations of enterprise” as key words generated only 10 journals and master’s dissertations from 2007 to the present. Thus, enterprise motivations, as a key component of school–enterprise cooperation, have not received adequate attention from scholars. According to a review and analysis of the existing literature<sup>[4,13–21]</sup>, at least two research aspects exist on enterprise motivation for school–enterprise cooperation. First, existing studies have basically realized that motivation for school–enterprise cooperation can affect the influence of school–enterprise cooperation. However, few studies on the deep causes of motivations exist. Second, five documents have used high-tech enterprises as examples, thereby discussing the motivation of high-tech enterprises for school–enterprise cooperation, such as technological innovation, knowledge transfer, and so on. However, these studies lack research on the motivation of tourism enterprises for school–enterprise cooperation.

**Table 1. Review of school–enterprise cooperation motivation**

Author	Periodical	Year	Main Content
Wang, Jiao <sup>[13]</sup>	Master’s thesis from Xi’an University of Technology	2007	Overall, the technological innovation situation of school–enterprise cooperation in China is not optimistic, and the underlying reason is the lack of motivation for cooperative innovation. The power of school–enterprise cooperative innovation is believed to consist of three parts, that is, motivation for school–enterprise cooperative technology innovation, decision-making choices for cooperative innovation, and power factors for cooperative technology innovation. To promote technological innovation for school–enterprise cooperation, the study presents several countermeasures and suggestions from various aspects, that is, clarifying the property rights of cooperative innovation, clarifying the distribution of interests, improving cooperative management, and strengthening the government’s support and guidance for technological innovation.
Fan, Xiangyang and Ding, Jinzhu <sup>[14]</sup>	Modern Education Management	2010	In school–enterprise cooperation, the main motivation for enterprise cooperation is to solve the problem of enterprise employment, obtain technical support, solve employee training, introduce advanced technology as well as scientific research and development cooperation, gain social reputation, and speculation.
Pan, Tingting	Master’s	2012	School–enterprise cooperative R&D can make full use of the advantages of enterprises and

[15]	thesis from Huazhong University of Science and Technology		universities. However author believes that intellectual property risk is the most important risk in the process of school–enterprise cooperation. Thus, exploring the influencing factors and prevention methods of such a risk is particularly important. The study analyzes the influencing factors of intellectual property risk in school–enterprise cooperative R&D, namely, the realizability of cooperative technology, the credit degree of enterprises, the cooperative motivation of enterprises, the economic strength of enterprises, the rationality of cooperative risk sharing, the current situation of the intellectual property management of enterprises, the uncertainty of cooperative technology prospects, the rationality of cooperative achievement distribution, relevant legislation and policies, background technology intellectual property retrieval, cooperative technology evaluation, the completeness of cooperation contracts, the technical strength of enterprises, the turnover frequency of important enterprise employees, cooperation experiences between enterprises and universities, the market intellectual property risk index, and communication and supervision mechanisms between both parties.
Lan,Xiaoyun [16]	Doctoral thesis from East China Normal University	2013	The study takes the school–enterprise cooperation mechanism of vocational colleges in China as the research object. Moreover, the study holds that the supply and demand relationship between schools and enterprises is the core and foundation, whereas vocational colleges are the main contradictions and the key for solving the problem of school–enterprise cooperation. The study concludes that the main factors affecting the school–enterprise cooperation of vocational colleges include the following: the school-running idea and innovation decision-making ability of leaders, the schools’ executive power, internal management mechanisms, the professional setting, the quality of talent training, business philosophy, the demand for talents, and technology development. Moreover, vocational colleges should establish marketing concepts in school–enterprise cooperation, which are determined by the business purpose of maximizing the interests of enterprises. In addition, with the transformation of the economic growth mode and the continuous promotion of school–enterprise cooperation, the school–enterprise cooperation mechanism, which is composed of “integration, values oriented,” will become the advanced stage of school–enterprise cooperation.
Li,Shan [17]	Jiangxi University of Finance and Economics	2013	Focusing on the motivation of high-tech enterprises for school–enterprise cooperation, the study holds that knowledge transfer is an important channel for high-tech enterprises to acquire external knowledge as well as an important means for promoting the upgrade of industrial structure in China. Moreover, numerous problems on the open innovation of knowledge transfer between universities and enterprises clearly exist, such as the low efficiency of knowledge transfer, unstable cooperation between universities and enterprises, the imperfect mechanism of knowledge transfer, and the unsmooth innovation chain. However, by combing the literature, author finds that most of the research focuses on the impact of open innovation behavior on innovation performance, whereas research on the efficiency and influencing factors of the knowledge transfer process is insufficient. The results show that (1) only the survival motivation has a significant impact on the open innovation behavior of school–enterprise knowledge transfer. However, enterprises expect to carry out knowledge transfer activities through innovation cooperation with universities and are willing to maintain long-term trust and cooperation relationships to improve their competitive advantage. However, school–enterprise cooperative innovation in China remains in the initial stage of growth. Enterprises are faced with low-level survival motivation needs, such as funds, labor resources, and shortening R&D cycles. Therefore, their motivation behavior is realistic and rational. (2) Intellectual property rights conflicts have a negative impact on the breadth and depth of school–enterprise innovation. How to deal with intellectual property rights conflicts has become a key factor for improving innovation performance. (3) At present, school–enterprise knowledge transfer activities are focused on the knowledge transaction mode, which is consistent with the conclusion that open innovation motivation for school–enterprise knowledge transfer is a survival motivation.
Tian,Xiao, Wang,Cailiao, and Luo,Exiang [18]	Research on Science and Technology Managem ent	2013	School–enterprise cooperation has become a mainstream trend in the development of high-tech industries; thus, research on motivation for school–enterprise cooperation is particularly important. From the perspective of automobile enterprises on the basis of setting the driving force for the innovation of school-enterprise cooperation, quantitative analysis is mainly performed through factor analysis based on the obtained questionnaire survey data, thereby verifying that four strong motive factors exist for school–enterprise cooperation, that is, a reasonable benefit distribution system, the development speed of science and technology to adapt to enterprises, to attract innovative talents, and to use university resources to develop

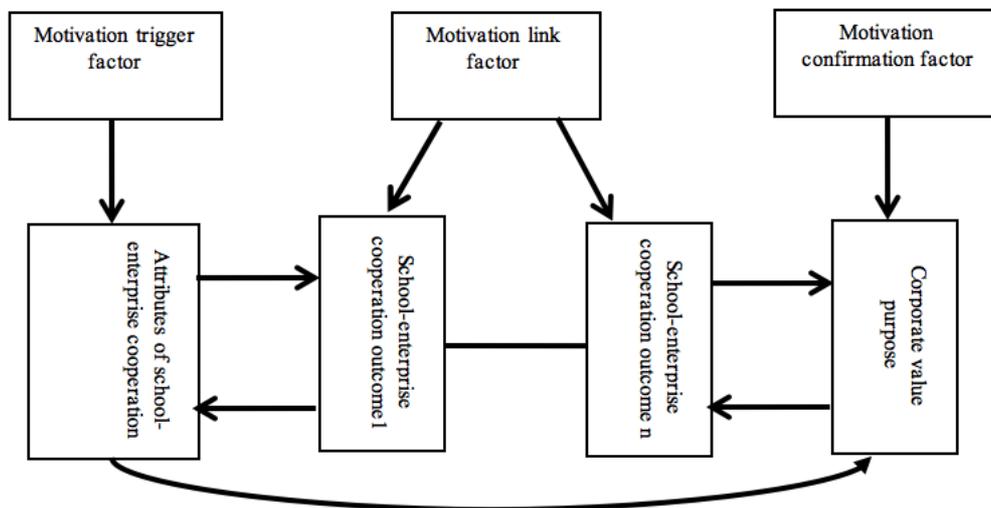
			new technologies and products.
You, Yong <sup>[4]</sup>	Journal of Nanjing Institute of Industry Technology	2015	School–enterprise cooperation is the only means for higher vocational education. In the field of higher vocational education, the strengthening of school–enterprise cooperation to realize sustainable development has become the consensus. Based on the current situation that the effect of school–enterprise cooperation on higher vocational colleges is not ideal, the study examines motivation for and the mechanisms of cooperation between schools and enterprises from the perspective of enterprise benefit analysis. By doing so, the study enhances internal motivation for school–enterprise cooperation through mutual benefits and win–win results to promote the sustainable and healthy development of higher vocational education.
Quan, Xizhen, Tang, Chunsheng, and Zhang, Yaling <sup>[19]</sup>	Higher Education Forum	2016	By taking 13 higher vocational colleges and 47 enterprises in Guangxi as research samples, the results of the study show that the economics and management departments of higher vocational colleges and enterprises in Guangxi have a growing awareness of school–enterprise cooperation and are willing to engage in school–enterprise cooperation. However, the experience of school–enterprise cooperation, the motivation and demand for school–enterprise cooperation, the content and form of school–enterprise cooperation, the evaluation of the close degree of school–enterprise cooperation, the best times for student internships, the main factors affecting and restricting school–enterprise cooperation, difficulties encountered in school–enterprise cooperation, and key points for establishing long-term and stable school–enterprise cooperation exhibit similarities and differences in their key aspects. To promote the in-depth development of school–enterprise cooperation, government policy guidance and guarantees, initiatives from both sides of schools and enterprises, the establishment of a cooperation mechanism and a platform for exchanges between schools and enterprises, and effective communication are needed to ensure mutual benefits and win–win results.
Zhao, Xiaoshuang <sup>[20]</sup>	Hebei Enterprise	2018	In view of the fireplace phenomenon in the school–enterprise cooperation of higher vocational education in China, the study holds that the different interests of parties involved in cooperation and market failure and the absence of the government make it difficult to carry out cooperation. Moreover, according to the causes of the difficulties in cooperation, the study presents corresponding improvement countermeasures from the perspective of economics, that is, schools and enterprises should seek common interests and think differently. Schools, enterprises, and the government should make up for market failures.
Shen, Jianguang, Ye, Shengnan, and Zhang, Jianjun <sup>[21]</sup>	Vocational and Technical Education	2018	Deepening school–enterprise cooperation is the basic direction of the future development of modern vocational education in China. Against a background of significant changes in the human resource demand of enterprises in China, a sampled survey on the willingness of 766 enterprises in 15 cities in 8 provinces to engage in school–enterprise cooperation as well as its influencing factors shows that (1) at present, the willingness of enterprises to participate in school–enterprise cooperation is relatively strong, and (2) the motivation of enterprises to carry out school–enterprise cooperation is mainly based on the strategic development of enterprises, with human resources as the core, which is inclined to primary cooperation forms. Different types of enterprises show certain regular differences in motivation for and form of school–enterprise cooperation. Numerous influencing factors exist for cooperation among enterprises, in which the cooperation performance of vocational colleges is the primary factor. Based on this finding, professional suggestions are presented, such as actively responding to the needs of enterprises, implementing differentiation policies by the government, and carrying out systematic changes in colleges.

### 3. Research design and process

#### 3.1 Research framework

MEC theory states that consumers consume certain products because they give the products meaning. Similarly, tourists engage in tourism activities because they give meaning to the tourism activities<sup>[22]</sup>. Although an enterprise's school–enterprise cooperation is not a universal product consumption behavior, this cooperation will inevitably generate transaction costs. If these transaction costs are converted into currency, whether an enterprise chooses school–enterprise cooperation will become whether an enterprise is willing to spend money to purchase

“school–enterprise cooperation products.” Thus, the company gives meaning to this activity. Popularly speaking, companies can benefit from school–enterprise cooperation activities, and the formation of different purposes is related to different corporate needs and value perceptions. Therefore, the meaning given by an enterprise to the attribute of the “school–enterprise cooperation product” can guide the purpose of enterprise organizational behavior. In this study, we visit the executives of tourism companies to ask why school–enterprise cooperation is important to their company and to make further explorations based on their answers. We will determine that the answers are related to the attributes of school–enterprise cooperation, to outcomes produced by the activity, and to values produced by the activity. This connection is a means-to-an-end link. Specifically, attributes are the triggers of corporate school–enterprise cooperation motivation, outcomes are linking factors of corporate school–enterprise cooperation motivation, and values are confirmation factors of corporate school–enterprise cooperation motivation, as shown in Fig. 1.



**Figure 1. Research Architecture Diagram**

### 3.2 Interview design

This research adopts the mainstream approach of the purpose chain of collection method<sup>[23]</sup>, including hard laddering and soft laddering, to explore the relationship between attributes, outcomes, and values of enterprise–school cooperation behavior. No mature analysis framework exists for studying the motivation of enterprises for school–enterprise cooperation; thus, this study uses the soft laddering method.

In this study, we take tourism companies that have cooperated with schools in the past 3 years as the research object and interview their executives. We strive to be representative in sampling the travel agencies, online travel agencies, theme parks, traditional tourist attractions, convention and exhibition companies, integrated tourism operation companies, tourism transportation companies, and other types of tourism enterprises involved. Semistructured interviews with 17 executives of tourism companies are conducted between August 2017 and April 2019. Before starting the interview, we outline the interview process and ask the respondents, “Why did you choose to engage in school–enterprise cooperation?” and “What are the characteristics of school–enterprise cooperation?” (guiding them to identify the attributes of school–enterprise cooperation). Based on the respondents’ answers, we ask, “Why do these

characteristics of school–enterprise cooperation attract enterprises?” and “What outcomes will it bring to the enterprise?” (guiding them to think about outcomes). Finally, we ask, “Why is this outcome important to the enterprise?” This process is repeated until the interviewee is unable to provide new information, thereby ending the interview. The duration of each interview is 30 to 50 minutes. A written record of the interview process is made after consent is obtained. The respondents’ statistics are shown in Table 2.

**Table 2. Information statistics of interviewees**

Interviewee	Years of cooperation with college	Company name	Position
A	9	Sichuan Shanghang Holiday International Travel Agency Co., Ltd.	HR director
B	7	Chengdu Tianfu Overseas Chinese Town Industrial Development Co., Ltd. Happy Valley Tourism Branch	HR head
C	6	High-tech First Branch of Chengdu Overseas Tourism Co., Ltd.	General manager
D	6	Intercontinental Long Island Paradise Hotel, Sancha Lake, Sichuan	HR manager
E	6	Chengdu Tianyi Exhibition Service Co., Ltd.	HR director
F	5	Chengdu Cultural Tourism Development Co., Ltd., Xiling Snow Mountain Operation Branch	Scenic operations manager
G	3	Shanghai Disneyland	HR director
H	3	Chengdu Dige Exhibition Co., Ltd.	General manager
I	3	Chengdu Yiyou International Travel Agency Co., Ltd.	General manager
J	3	Chengdu US–China International Travel Agency Co., Ltd.	General manager
K	2	Chengdu Dingxing International Travel Agency Co., Ltd.	General manager
L	2	Chengdu Wenlv Bus Tourism Development Co., Ltd.	HR director
M	2	Beijing Tuniu International Travel Agency Co., Ltd., Chengdu Branch	HR director
N	2	Sichuan Air Travel International Tourism Group Co., Ltd.	General manager
O	1	Chengdu Elmo Culture Media Co., Ltd.	General manager
P	1	Sichuan Xingyu Group (Tourism Comprehensive Operation Enterprise)	Administrative personnel director
Q	1	Chengdu Nongyuan Culture and Art Communication Co., Ltd.	School–enterprise cooperation supervisor

### 3.3 Content analysis

First, we extract basic elements from the original interview data, group similar elements into the same category, and use NVivo 11.0 to classify similar elements into attributes, outcomes, and values for encoding. To avoid subjective cognition, we (i.e., the two authors) code the data separately, explore the differences, and finally reach an agreement. A total of 25 types of items are generated during the encoding process, which are generalized in Table 3.

**Table 3. Category of attributes, consequences, and value motivation of tourism enterprises' school–enterprise cooperation**

Attributes (A)	Outcomes (C)	Values (V)
A1 Internship	C1 Hiring employee	V1 Cost control
A2 Simple and easy to manage	C2 Product innovation	V2 Continuous employee supply
A3 Systematic expertise	C3 Understanding post-90s needs	V3 Brand recognition
A4 High comprehensive quality	C4 Corporate culture promotion	V4 Talent training
A5 Easy to accept corporate culture	C5 Solving employee training	V5 Competitiveness improvement
A6 Clear job search	C6 Gaining social reputation	V6 Knowledge cocreation
A7 Strong desire for promotion	C7 Getting intellectual support	
A8 Intellectual achievement concentration	C8 Increasing profitability	
A9 High visibility of college	C9 Service improvement	
	C10 Talent pool	
	C11 Resource sharing	

Second, value links are constructed from the data of the 17 respondents. For example, attributes directly related to outcomes and outcomes directly related to values. Basic elements in each category of attribute–outcome and outcome–value items are correlated in the interview according to frequency, and A–C and C–V correlation matrices are established (see Tables 4 and 5). In a matrix, the higher the code association frequency, the stronger the connection between the two codes<sup>[24]</sup>. Owing to space limitations, the association matrix sorts only the number of direct associations. A–V is connected through C, which is an indirect relationship; thus, details will not be provided.

**Table 4. “Outcome–value” correlation matrix of tourism enterprises' school–enterprise cooperation (m = 17)**

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
A1	<b>16</b>			5	<b>8</b>					3	
A2	<b>8</b>			5					3		1
A3		3						2		5	
A4		<b>6</b>					2		<b>6</b>	<b>10</b>	
A5				<b>8</b>		<b>6</b>					
A6	4			4						2	
A7		3			5					<b>11</b>	
A8		<b>6</b>			4		<b>8</b>	2			<b>8</b>
A9				5		4					

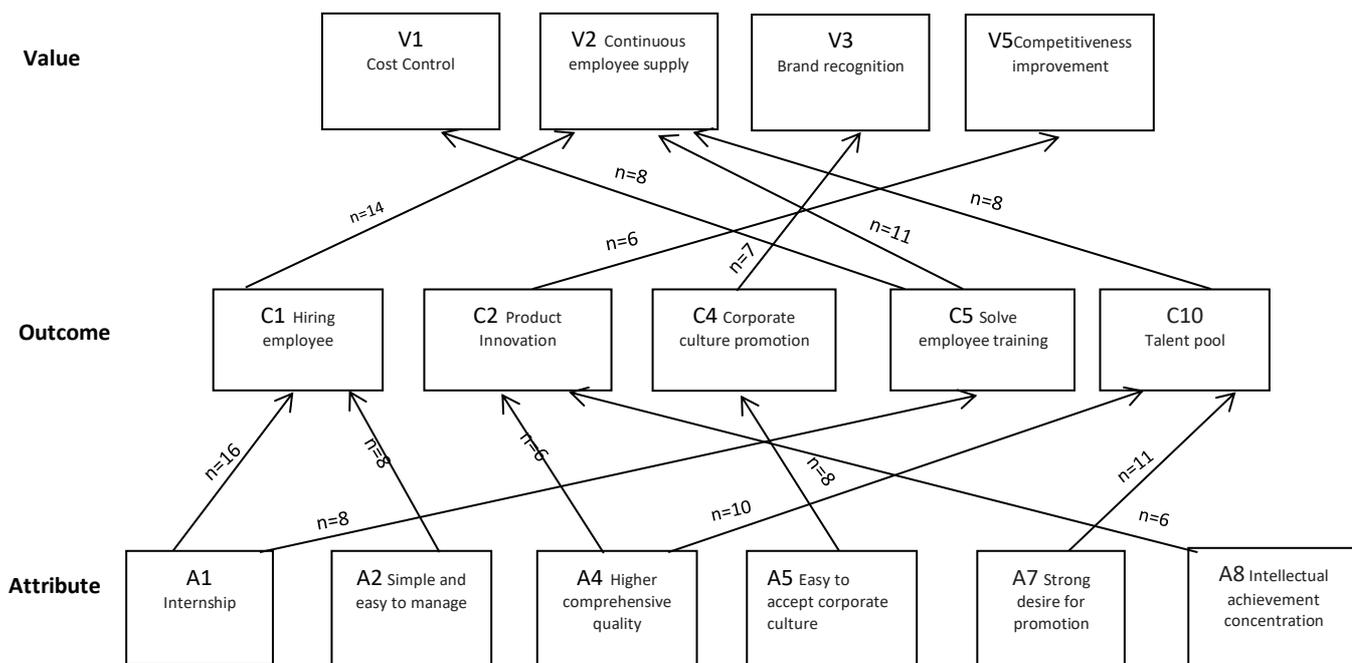
Note: Correlation is in bold when threshold is  $\geq 6$ ; m = total number of interview samples

**Table 5. “Attribute–outcome” correlation matrix of tourism enterprises’ school–enterprise cooperation (m = 17)**

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
V1	5				<b>8</b>						
V2	<b>14</b>			5	<b>11</b>					<b>8</b>	
V3				<b>7</b>		3		<b>7</b>			
V4	4									4	5
V5		<b>6</b>	2			1	4	1	3		
V6		2					2				2

Note: Correlation is in bold when threshold is  $\geq 6$ ; m = total number of interview samples

Finally, a value hierarchy diagram is drawn based on the correlation matrix. The correlation matrix depicts the number of associations among codes. If all the relationships are drawn into the value hierarchy diagram, then the diagram will become too complicated, and important connection relationships will not be sorted<sup>[24]</sup>. Therefore, we need to determine the threshold to find how many connections will be drawn into the value hierarchy. However, no theory or statistics standard exists to determine threshold. Thus, drawing via trial and error until an appropriate threshold is selected is necessary<sup>[24]</sup>. After several attempts, we finally determine the threshold value as 6; thus, association relationships below 6 are considered secondary connections or cases and will not be discussed in detail. We find codes in the correlation matrix with a threshold equal to or greater than 6, link the codes with arrows, and optimize the position of the coded numbers to draw a hierarchical value map (HVM) of school–enterprise cooperation for tourism companies<sup>[25]</sup>.



**Figure 2. Tourism Enterprises’ School–Enterprise Cooperation HVM (contains only related factors; threshold = 6)**

#### 4. Main findings and analysis

The connection between attributes, results, and values can explain the motivational relationship shown by tourism companies for school–enterprise cooperation. From the tourism enterprises' school–enterprise cooperation HVM, attributes, outcomes, and values are correlated according to six important attributes of school–enterprise cooperation, and nine MECs are obtained, as follows:

- MEC1 (A1 Internship → C1 Hiring employee → V2 Continuous employee supply)
- MEC2 (A1 Internship → C5 Solving employee training → V1 Cost control)
- MEC3 (A1 Internship → C5 Solving employee training → V2 Continuous employee supply)
- MEC4 (A2 Simple and easy to manage → C1 Hiring employee → V2 Continuous employee supply)
- MEC5 (A4 High comprehensive quality → C2 Product innovation → V5 Competitiveness improvement)
- MEC6 (A4 High comprehensive quality → C10 Talent pool → V2 Continuous employee supply)
- MEC7 (A5 Easy to accept corporate culture → C4 Corporate culture promotion → V3 Brand recognition)
- MEC8 (A7 Strong desire for promotion → C10 Talent pool → V2 Continuous employee supply)
- MEC9 (A8 Intellectual achievement concentration → C2 Product innovation → V5 Competitiveness improvement)

##### 4.1 Attribute motivation layer analysis

MEC1, MEC2, and MEC3 indicate that one of the direct attribute motivations of tourism companies to engage in school–enterprise cooperation is that universities can provide them with interns. The most common answers by the interviewees are, “College can provide stable long-term intern supplements to the guest department for Xiling Snow Mountain Scenic in the future... .” (F) “...should be concentrated in accordance with the winter summer vacation, short-term, weekly/monthly internship arrangements... .” (L) “Schools are welcome to use Happy Valley as a practical teaching place to enhance students' understanding of theme parks... .” (B) and so on.

MEC4, MEC5, MEC6, MEC7, and MEC8, specifically, five MEC attribute motivations, are not the same. However, most tourism companies value college graduates' characteristics, such as being unsocial, simple, and easy to manage; can easily accept corporate culture; have received systematic qualification education; possess high comprehensive quality; and so on. For example, “The group's ‘Go Global’ brand has also become a well-known outbound travel route developer and service provider in the country, and has opened up more than 30 unique tourist routes to five continents worldwide .... taking the operation as an example, this position requires: (1) Customized tours design capabilities, develop and design new products; (2) Business negotiation communication skills, discuss charter business with airlines, talk about cooperation with local agencies, and hotel to buy beds; (3) Grasping the sales rhythm, mastering the pricing strategy for off-peak season sales and market strategies for different target markets. Students majoring in tourism management have systematically learned professional knowledge and are familiar with tourism industry. Some students have obtained a tourist guide certificate and English level 4 or 6 certificates, which can better carry out

outbound tourism for the Group Service and work for overseas branches... .” (N). At the same time, college graduates are young, and their desire for promotion is a direct attribute for attracting tourism enterprises’ school–enterprise cooperation.

MEC9 (A8 Intellectual achievement concentration → C2 Product innovation → V5 Competitiveness improvement) shows that the concentrated intellectual achievement of universities is a direct attribute motivation for attracting tourism enterprises’ school–enterprise cooperation. More than one interviewee expressed the hope that colleges provide intellectual support for enterprises. For example, “Our company holds several large-scale exhibitions every year, this year’s pet expo, jewelry show, etc., but there are many exhibitors, how satisfied are the exhibitors, where are they dissatisfied? We often don’t know. I hope that the professional teachers of college can take students to help companies to do some exhibitor satisfaction surveys and other projects. At the same time, your students also get exercises... .” (E) “Chengdu Nongyuan is like a young boy from the wind. The company was established in 2005, focusing on promoting development of the culture and art industry and has won a number of Sichuan provincial honors, ‘Sichuan Cultural Industry Demonstration Base,’ the first batch of the ‘Sichuan Provincial Key Cultural Flagship Enterprise,’ the ‘Best Park in China’s Creative Industry,’ etc. In 2016, it was rated as an outstanding entity in protecting intangible cultural heritage in Chengdu. ‘National AAAA-level Scenic Spot,’ too many honors, haha, but we understand culture, art, not tourism, A-level scenic spot review, evaluation of Tianfu County, I hope to cooperate with your college, everyone shares intellectual property... .” (Q).

#### *4.2 Outcome motivation layer analysis*

MEC1, MEC2, MEC3, MEC4, MEC6, and MEC8, specifically, direct attribute motivations for the five MECs, differ slightly. However, the outcomes point to the employment motivation of tourism enterprises. Cooperation with universities can enable tourism enterprises to recruit a sufficient number of employees and employees who have received systematic training as well as to select employees for human resource reserves. For example, “Regular internships at the college every year also provide more talents for the enterprise to achieve a two-way choice... .” (L) “As an employee, execution and learning ability are a prerequisite for employees to successfully start their careers. Therefore, we prefer students with systematic education in colleges, especially those who did excellent during school. Their execution and learning ability should be good... .” (K). MEC7 demonstrates that tourism companies also pay considerable attention to the promotion of corporate culture during the school–enterprise cooperation process. For example, “During the enterprise open day, students can visit the company in batches to learn about the positions and product businesses, and focus on the promotion and display of the company's products and culture... .” (L). In the interview, the executives of five travel agencies said that they can reach young people through school–enterprise cooperation. Young people are attracted to emerging concepts and are sensitive to outdoor tourism, customized travel, research tourism, VR, AR, and so on, which can promote tourism product innovation for tourism companies. MEC9 illustrates this point clearly.

#### *4.3 Value motivation layer analysis*

From the nine obtained MECs, five have value motivations that point to “V2 Continuous employee supply” (i.e., MEC1, MEC3, MEC4, MEC6, and MEC8), two point to “V5 Competitiveness improvement” (i.e., MEC5 and MEC9), one points to “V3 Brand recognition” (i.e., MEC7), and one points to “V1 Cost control” (i.e., MEC2). This finding clearly shows that the current value motivation of domestic tourism companies for school–enterprise cooperation

is still based on “continuous employee supply.” In the long run, tourism companies look forward to achieving “competitiveness improvement,” “brand recognition,” and “cost control” through school–enterprise cooperation. Regrettably, though several tourism company executives said that, “Even if the student does not stay in the company after the internship, our company will provide him with systematic training because we hope to eventually cultivate useful talents for this industry” (E and G), which reflects the pattern and sentiment of tourism companies’ willingness to collaborate with universities to educate individuals, none of the nine MECs point to “V4 Talent training” and “V6 Knowledge cocreation,” as very few similar factors exist. This finding also reflects that at present, the value motivation of domestic tourism enterprises’ school–enterprise cooperation is obviously weak in cooperating with universities to cultivate talents for the cultural travel industry and in cocreation.

### 5. Conclusions and contributions

This study uses an MEC theory model to study the motivation of domestic tourism enterprises for school–enterprise cooperation and its value. Nine MECs are obtained with the soft ladder method, and an understanding of the relationship between tourism enterprises’ school–enterprise cooperation motivation and value is constructed. This study presents the following conclusions.

- (1) The deep-level value motivation of tourism enterprises for school–enterprise cooperation is still based on “continuous employee supply.”
- (2) In the long run, tourism enterprises expect to enhance their competitiveness and brand recognition as well as to control their costs through school–enterprise cooperation.
- (3) Domestic companies that have been accepting student internships may regard students as “cheap labor” [26]. To a certain extent, this study shows that the motivation of tourism companies for school–enterprise cooperation is not to consider the “cheapness” of interns in the short term but to focus on “continuous employee supply” from a long-term perspective. Moreover, “cost control” is not the most mentioned cooperation motivation.
- (4) In general, the school–enterprise cooperation of domestic tourism enterprises remains in the growth stage. “Continuous employee supply” and “cost control” are low-level survival motivations, such as capital and labor resources that companies face. Domestic tourism enterprises’ motivational behavior is realistic and rational<sup>[17]</sup>. However, “competitiveness improvement” and “brand recognition” belong to high-level value motivations. With the increasing influence of the tourism industry on the national economy, tourism activities have become normal lifestyle options. Personalized demands and the pursuit of quality brought about by consumption upgrades have generated considerable opportunities and challenges for tourism enterprises. In the long run, tourism companies’ survival motivation for school–enterprise cooperation will gradually stabilize, and a small number of tourism companies will emerge, seeking high-level motivational needs, such as collaborative education and knowledge cocreation.

The contributions of this research include the following. In terms of theory, first, this study systematically reviews the literature on the motivations of domestic enterprises for school–enterprise cooperation. Second, using an MEC model, this study attempts to treat “school–enterprise cooperation” as a type of consumer product for tourism enterprises. Moreover, using the “motivation-value” perspective, this study tries to make up for the theoretical deficiencies in the field of tourism enterprise school–company cooperation motivation. Furthermore, this research has practical significance for numerous tourism application-oriented universities and tourism vocational colleges in China who want to vigorously attract outstanding tourism

companies to develop school–enterprise cooperation.

### 6. Limitations and Recommendations

- (1) Owing to the long timespan of the interview cycle and interviews completed and written by different authors, differences resulting from the interviewers' different subjective understanding of the interview content are inevitable.
- (2) The MEC theory model is applied to qualitative and stereotyped research, and its results can provide a basis for the quantitative questionnaires of subsequent research, thereby improving the reliability of this study.
- (3) In the classification and coding of elements, if three or more professional coders are involved, then reliability and validity should be verified, differences should be checked and discussed, and a consensus should be reached to obtain true and reliable results.
- (4) Although the surveyed companies are diverse, their number is relatively small, and they are all located in Sichuan Province. The geographical location and number of the surveyed companies are the limitations of this study. In the future, in-depth research on the motivation of different types of tourism enterprises from different regions for school–enterprise cooperation and its value can be conducted.

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## **Balancing up ecotourism in Labangan channel Philippines: A mangrove rehabilitation program**

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### **Abstract:**

The present study was an attempt to conduct a mangrove rehabilitation program, propose possible mangrove based income generating project and eventually create an eco-tourism destination. The mangrove species feasible for planting in Labangan Channel for its rehabilitation includes; Api-api/*Avicenia* which, *Sonneratia-Alba/Pagatpat*, *Rhizophora Mucronata*, *Rhizophora Apiculata*, *Rhizophora Stylosa* and *Sasa/Nypa Fruiticano*. The data revealed that most of the respondents does not have enough education to get better jobs so they stayed in the island and concentrated in fishing. Before, the island of Tibaguin, Hagonoy, Bulacan has a beach named “Aroma Beach” which vanished due to negligence and carelessness of the residents. Also, the island possesses a “Parola” or lighthouse but had not been paid much attention and is now non-functional.

**Keywords:** Mangrove, Rehabilitation, Ecotourism, Livelihood

### **1. Introduction**

Viewed as one of a kind components of aquatic environment, mangroves are among the most beneficial biological systems, which directly give financial and natural advantages to man. They fill in as supports or between tidal defensive zones against tropical storms, storm floods and tsunamis, anticipating soil disintegration and limiting water contamination; are instrumental in building extensive regions of tidal land; and give interesting natural surroundings, sanctuary and reproducing ground for endemic, unusual and endangered types of amphibian and varied vegetation.

Any disruption in the structure of any natural system causes unfavourable consequences on the forces of the entire system. In certain cases, the disturbance surpasses the endurance of the ecosystem, resulting in environmental degradation bringing about permanent damages. Continuous exploitation of mangroves has serious implications to the coastal communities.

Demolition of mangroves will definitely affect the lives of the individuals, especially on their pay, nourishment security and other related fundamental needs.

Bulacan has a total land area of 262,500 hectares or roughly 14% of the total land area of Central Luzon, the biggest Philippine island, and 0.9% of the country’s total land area. The province has 21 municipalities, 3 component cities and 569 barangays.

The coastal perimeter of Bulacan is 25 kilometer or 15 miles. The first coastal barangay is Salambao, Obando and the last coastal barangay is Pugad, Hagonoy. Hagonoy has 12 coastal barangays.

The mangrove areas in Bulacan has a total of 293.7 hectares broken down as follows; Hagonoy which consists of Pugad, Tibaguin, San Pascual, Mercado, Sna Roque I and San Roque II has 120 hectares, Paombong which consists of Sta. Cruz, Masukol and Binacod has 50 hectares, Malolos which consists of Pamarawan, Babatnin, Masile and Caliligawan has 32 hectares, Bulakan which consists of Habulan, San Nicolas and Bambang has 21.79 hectares and Obando which consists of Tawiran and Salambao has 70 hectares.

Several exercises have been embraced in coastal communities. Mangrove rehabilitation programs have been widespread, from community undertakings to government-sponsored projects to large-scale international development assistance programs. However, regardless of the allocation of enormous funds to plant mangrove forests in recent decades in the Philippines, the survival rate of mangroves is 10-20%. According to Kodikara et al. (2017), mangrove restoration is notoriously unsuccessful. Primavera and Esteban in 2018 revealed that poor survival rates of mangroves is often because inappropriate species are planted in inappropriate locations.

## **2. Literature Review**

Mangrove ecosystem are among the most productive ecosystems that directly or indirectly provide ecological and economic benefits to human. It provides a unique habitat for animals, breeding ground for unique species of flora and fauna. Acanto, R., 2016, in his study found out that among the economic importance of the eco-tourism park, 4.4% of respondents identified both brings financial incentives to the community and served as sightseeing route for eco-tours.

The use of mangroves as a travel and tourism destination has not received much attention, but provides high-value, low impact use of these important ecosystems. If the island Tibaguin will be realized as an ecotourism destination, awareness on the types and kinds of mangroves present on Labangan Channel is very important. In a study conducted by Yao, C., 1999, he mentioned that most of the mangrove tourist destinations are not sustainable due to serious lack of mangrove interpretive components. Visitors were just ushered along lengthy boardwalk with limited information on the importance of mangroves or the socio-cultural uniqueness of the community.

The possibility of creating a plan for mangrove rehabilitation which will produce livelihood programs and with the participation local government and other organizations is assured. Galia, et al., 2009, revealed that the Nueva Valencia municipal government approved the Coastal Fishery Resources Recovery Program developed by KAMAMADO (Katilingaban sang Magagmay nga Manginisda sa Dolores) in 2004, which analysed the problem issues in fisheries; developed a work plan and budget and work out a partnership arrangement of all activities in Basyaw Cove, which formed part of the Municipal Five-Year Coastal Resource Management Plan. This included the establishment of milkfish cage culture as a livelihood project.

## **3. Methodology**

The process in the conduct of this study are; appointing key researchers, planning, preparing, surveying and visiting. The investigation was fundamentally led through supplementary information gathering, individual meeting of key sources, community immersion and personal observation.

The research method is a combination of qualitative and quantitative research. The researchers distributed two kinds of questionnaires for 2 groups of respondents namely; resident and fisher

folks of Tibaguin Hagonoy Bulacan, Philippines and Government Employees such as the Administrators and staffs of DENR, DAR, DOT and Local Government of Hagonoy, Bulacan.

#### **4. Results**

The mangrove species feasible for planting along the Labangan Channel includes; Api-api/*Avicenia* which has a high index with more than 6 species, *Sonneratia-Alba/Pagatpat*, also high index, *Rhizophora Mucronata*(Bakawan) and *Rhizophora Apiculata* (Bakawan) has a medium index with 2-5 species, a low index of *Rhizophora Stylosa*(Bakawan) which has less than 2 species and *Sasa/Nypa Fruiticano* having a high index with more than 6 species.

It is found out that the primary reason for mangrove degeneration along the Labangan Channel going to the island of Tibaguin, Hagonoy, Bulacan is oil pollution. Other reasons for mangrove degeneration includes; conversion to ponds, climate change and other pollutions carried by the river.

The community profile of Bulacan with regards to the number of fisherfolks had revealed that Hagonoy has the highest number of fisherfolks with 49% followed by 26% which is shared by other municipalities, 11% Malolos, 8% Bulakan and 6% Paombong.

Majority of the respondents ages 36-40. The oldest respondents are 61 above while the youngest respondents are 21-25 years of age. 70% of the respondents are male and 15 or 30% of the respondents are female. There are more male respondents because most of the respondents are fishermen. 76% of the respondents are married, 9 or 18% are single and 3 or 6% are widow. There are only 3 or 6% of the respondents have graduated from college while 20 or 40% had finished their elementary education and 17 or 34% were able to study in the elementary level but had not graduated.

The data revealed that most of the respondents does not have enough education to get better jobs so they stayed in the island and concentrated in fishing. The primary source of income with 76% is fishing and related to fishing, while the secondary source with 24% are others.

#### **5. Discussion and Conclusion**

In view of the preceding findings the following conclusions were drawn: (1) The primary reason for mangrove degeneration along Labangan Channel going to the island of Tibaguin, Hagonoy, Bulacan is due to oil pollution. It is assumed that since motorized pump boat is the only means of public transportation going to the island. Oil spills from these boats smother mangrove roots and suffocate the trees. (2) Although there have been numerous undertakings for mangrove rehabilitation along Labangan Channel going to the island of Tibaguin, Hagonoy, Bulacan, monitoring had also been a problem. (3) Mangrove species like *Rhizophora Mucronata* and *Rhizophora Apiculata* are particularly ideal for mangrove planting as they are both fast growing and lucrative. (4) Most of the residents who have not finished a higher education remains in the island and their primary source of income is fishing, and others related to fishing such as drying fish and making boats. Those who have had finished their college degree leaves the island and look for better opportunities in Manila and other areas and some abroad; and (5) Tibaguin island is a good ecotourism destination for having the widely accepted element of ecotourism such as undisturbed and under-visited areas, natural beauty, cultural and historical importance of the place.

To address the mangrove rehabilitation program, we involved the participation of the local government and a non-profit organization. This study is limited to the Labangan Channel going to Tibaguin island in Hagonoy, Bulacan.

### **Recommendations**

1. In light of the foregoing findings, the following recommendations are presented:
2. The municipal employees, as one of the program implementers, should give full support in terms of formulation and ordinance that can help protect and conserve the “protected areas” against man-made distractions and calamities. Allocation of funds will be recommended for protection and maintenance of the project.
3. The program beneficiaries as direct stakeholders would be aware of the role expected from them by the provincial and local government units to help sustain the project. Establishment of mangrove nursery and buffer zone on protected areas are recommended.
4. The educational institutions are primary agencies of the government that pave formal orientation and information dissemination to their clients. These institutions should make innovations in their curriculum that would encourage students to be vigilant, dedicated, committed and responsible users in order to protect the coastal resources and other marine products.
5. It is recommended that seminars and trainings for livelihood projects be done in order to create more livelihood for the residents, specifically for the housewives of the fishermen.
6. The researchers would also like to recommend to the local government to look for partners from private or non-governmental organization for funding of the proposed mangrove conservation and possible eco-tourism project. Suggested attractions would include the rehabilitation of the Aroma Beach and the Lighthouse which would serve as the main attraction of the island aside from the possible activities like fishing and trailing in a mangrove eco-park.

The matrix below outlines the mangrove rehabilitation plan:

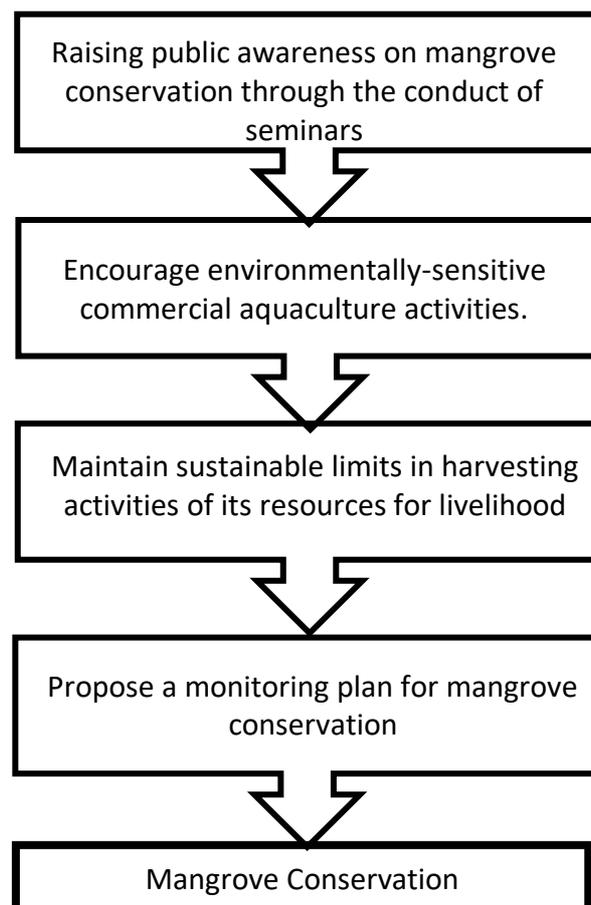
APacCHRIE 2020 Conference (27-28 October 2020)

Factor (what)	Method (how)	Schedule (when)	In-charge (who)	Location (where)
1. Length of coastline to be planted	-Site visit -Ground level photography	January 2021	Researchers in coordination with municipal officials and Barangay Tibaguin officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan
2. Occurrence and extent of anthropogenic activities on site	Visual encounter survey	January 2021	Researchers in coordination with municipal officials and Barangay Tibaguin officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan
3. Soil type	Soil test	January 2021	Researchers in coordination with municipal officials and Barangay Tibaguin officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan
4. Mud bank topography	Topographic survey / point sampling	January 2021	Researchers in coordination with municipal officials and Barangay Tibaguin officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan
5. Wave energy	Point sampling or surface buoys	January 2021	Researchers in coordination with municipal officials and Barangay Tibaguin officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan
6. Salinity	Salinity test	January 2021	Researchers in coordination with municipal officials and Barangay Tibaguin officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan
7. pH	pH test	January 2021	Researchers in coordination with municipal officials and Barangay Tibaguin officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan
9. Mangrove species for planting	Identifying of mangrove species suitable for planting	February 2021	Researchers, Good Neighbor Foundation, CESO, Municipal and Barangay officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan

8.Sourcing of seedlings	-request for mangrove seedlings	February 2021	Researchers, Good Neighbor Foundation, CESO, Municipal and Barangay officials	Hagonoy, Bulacan
9. Planting of mangroves	Assigning areas for mangrove planting	March 2021	Researchers, Good Neighbor Foundation, CESO, Municipal and Barangay officials	Labangan Channel going to Tibaguin, Hagonoy, Bulacan

It is shown above how the mangrove rehabilitation will be done and coordinated. The rehabilitation is limited only to the areas of Labangan Channel going to the island of Tibaguin, Hagonoy, Bulacan.

### Proposed Mangrove Conservation



The above flowchart is a step by step process in the conservation of the mangroves along Labangan Channel going to the island of Tibaguin, Hagonoy, Bulacan

**Proposed Livelihood Project**

Livelihood	Description
1. Backyard Mangrove Nurseries	<ul style="list-style-type: none"> <li>The objective is to include wives of fishermen in mangrove protection by preparing them in mangrove raising methods and develop enormous number of mangroves in backyards of every household in the island. This method will not just increase the production of mangroves but also will increase community responsibility. Each housewife will grow mangrove in her backyard and will get paid for every mangrove seedling. This continuous participation of fishermen’s wives will share commitment, responsibility and will provide financial benefits to the community.</li> </ul>
2. Souvenir Shops	<ul style="list-style-type: none"> <li>If the island would an ecotourism destination, the residents can put up a souvenir shops and sell items like keychains, mugs, shirts, etc. with the name of the island imprinted. This will not only give livelihood but it could also be the best way to promote the island.</li> </ul>
3. Eateries	<ul style="list-style-type: none"> <li>The influx of tourist in the future would generate more income to the island and one source of it will definitely come from foods. Eateries which will be managed by the residents and catering their heirloom recipes is also recommended.</li> </ul>
4. Tour-guiding	<ul style="list-style-type: none"> <li>Another good source of income is through tour-guiding. Residents will be trained on how to provide assistance and give information on the cultural and historical significance of the island and will be tasked to guide the tourist during their stay in the island.</li> </ul>

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## **Developing and validating an innovative entrepreneurship scale for Taiwan's hospitality and tourism sector**

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### **Abstract:**

This study employs relevant tourism and hospitality research to launch an innovative entrepreneurship scale that demonstrates the significance of this subject in the hospitality and tourism sector. Not only the reliability but also the validity of the innovative entrepreneurship scale, using samples gathered from 255 undergraduate hospitality and tourism students. The research results identify the following three important characteristics of the innovative entrepreneurship scale: entrepreneurial competence, entrepreneurial personality, and entrepreneurial innovation. Theoretical and practical implications are also discussed.

**Keywords:** Innovations, Entrepreneurship, Entrepreneurial personality, Tourism and hospitality

### **1. Introduction**

Tourism has become one of the largest and fastest-growing economic sectors in the world. Currently, tourism directly contributes to about 4.1% to GDP, 5.9% of employment and 21.3% of service exports of the OCDE economies (OECD., 2016). The continuing growth of this sector has a significant impact on labor markets, since tourism is a significant source of employment, due to its high labor intensive nature. Although the tourism workforce is often associated with low levels of education and limited entrepreneurial and managerial skills, this scenario has been changing.

Due to the highly competitive environment of the tourism industry, entrepreneurship and innovation are crucial for dealing with current consumer, technological and environmental trends. The growing demand of customers for unusual and unique tourism experiences are contributing to the development of new business opportunities. In this case, academics and entrepreneurs are key players to introduce innovative managerial and planning approaches that will provide the industry with intelligence, knowledge and tools that may have an impact on public and private tourism organizations competitive advantages (Buhalis & Costa, 2005).

This paper contributes to the literature (e.g., Boada-Grau et al., 2016; Wang, 2019) on innovation and entrepreneurship in the following ways. First, it presents a multidimensional view of innovative entrepreneurship and a conceptual framework for future empirical studies

in tourism and hospitality. Second, this paper develops an effective, predictive instrument to capture perceptions regarding innovative entrepreneurship in tourism and hospitality. Third, it provides practitioners with a framework for developing and structuring dimensions to ensure a set of innovative entrepreneurship expectations.

## **2. Literature Review**

In the past decades entrepreneurship education programs have grown in number and today, those are run in most higher education institutions all over the world (Katz, 2008). As claimed by Gundry, Ofstein, and Kickul (2014), entrepreneurship programs and courses aim at providing the context to help students apply skills and behaviours intended to create value in entrepreneurial firms. Thus, entrepreneurship education programs seek to enhance individual characteristics, to promote a more entrepreneurial culture, preparing not only an entrepreneur, who may become self-employed and owner of an enterprise, but also someone who is able to chase entrepreneurship and innovation as an employee and become a person who displays enterprising behaviour (Gibb, 2002). Several relevant political measures have highlighted the importance of promoting entrepreneurial skills, as well as enabling direct investment in the creation of structures to support entrepreneurship education. For instance, in 2006, the recommendation of the European Parliament and the Council on Key Competences for Lifelong Learning recognised “sense of initiative and entrepreneurship” as one of the eight key competences all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment (European Council, 2006, p. 1). It refers to an individual's ability to turn ideas into actions, and includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. In the case of Tourism and hospitality programs, Ahmad (2015) argues that currently the focus and process of education is too mechanistic and does not promote or encourage entrepreneurial behaviour. Thus, the purpose of teaching entrepreneurship in hospitality and tourism programs should be to give the students an exposure to entrepreneurship, as well as to help learners discover the possibilities and various opportunities in the business world, such as proactiveness, creativity, leadership, as well as to develop the attributes, techniques and experiences to help students get ready to enter the labor market.

## **3. Methodology**

### *3.1. Item Development*

Churchill (1979) indicated that if all terms and content are defined accurately, the research theme can be clarified. To generate the item pool, the current research reviews related studies on innovation management, creativity, entrepreneurship (Cardon, Gregoire, Stevens, & Patel, 2013, Ferreira, Jalali, Bento, Marques, & Ferreira, 2017; Halberstadt, Timm, Kraus, & Gundolf, 2019). Moreover, in-depth interviews were conducted to explore the distinct insights and validate the items from the literature. Through purposive sampling, three official representatives, ten industry experts and three academic scholars were invited. These experts had an average of more than 22 years of experience in relevant government, university and management positions in the tourism industry. To ensure that all of the topics were discussed during the in-depth interview, all of the participants followed a prescribed schedule. The open-ended interview questions included (1) From the education perspective, what types of capabilities, attitudes, and behaviors are necessary for tourism students and how can they be cultivated? (2) What personality is beneficial to innovative entrepreneurship in a company? Through a comprehensive review of the previous studies and an analysis of in-depth interview

recordings by content analysis, this research divides innovative entrepreneurship into 14 dimensions, with 80 items in total. The content validity was evaluated by inviting a total of 15 experts to comment, including 8 scholars in the field of entrepreneurship and 7 industry representatives from international hotels, travel agencies and restaurants. After eliminating repeated or vague items, 68 items were retained. A 7-point Likert scale (1=strongly disagree, 7=strongly agree) was applied.

### *3.2 Data collection*

Data were collected from undergraduate students who majored in tourism or hospitality management programs in Taiwan from September to October in 2018. We invited 4 universities to take part in the research: two from northern Taiwan, and two in the southern region. A total of 330 questionnaires were distributed at the 3 universities, and 255 valid questionnaires were returned, with a valid response rate of 77.27%. The demographic profile shows that 26% of the respondents were male, and 74% were female. In total, 37.7% of the students were majoring in hospitality management, 30.9% in hotel management, and 17% in tourism or leisure management. Moreover, 78.3% of the students were from northern Taiwan,, and 20.4% were from southern Taiwan. The majority (38.2%) of the students had worked in an internship for less than 1 year, 22.4% for 1-2 years, and 12.5% for more than 2 years.

## **4. Results**

### *4.1 Item purification*

To test whether the data were fit for factor analysis, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's sphericity test were applied before conducting the exploratory factor analysis (EFA). The KMO value was .897, and Bartlett's test showed significant results ( $p=.000$ ). The results showed that the sample data were suitable for the factor analysis. The principal axis factor method and promax rotation in the exploratory factor analysis were applied to assess the construct validity and to extract the latent factors. In sum, 20 items remained. The 3 factors were named according to the literature review and the expert interviews as follows: entrepreneurial competence, entrepreneurial personality, and entrepreneurial innovation.

Table 1 The results of CFA

Items	Factor loadings	Composite Reliability	Cronbach's $\alpha$
<b>Entrepreneurial competence</b>		.90	.90
I can detect the crisis in the market	.85		
I think I can identify market changes	.69		
I have the talent to recognize the potential crisis.	.68		
I can predict the growth trend of the market	.62		
I can detect potential problems with the company	.61		
<b>Entrepreneurial personality</b>		.91	.92
I like to challenge myself	.80		
Nothing is more exciting than achieving your entrepreneurial dream	.78		
I have a strong competitive spirit	.74		
I like a competitive learning environment	.72		
<b>Entrepreneurial innovation</b>		.85	.88
I hope to create something.	.67		
I hope my ideas come true	.58		
Innovation will give me significant performance.	.51		
Innovation will make me a leader in the market.	.44		
Innovation will make a significant profit.	.43		

#### 4.2 Confirmatory factor analysis

After performing EFA, the multidimensional innovative entrepreneurship was developed. To further improve the scale quality, this study used LISREL 9.0 and conducted confirmatory factor analysis (CFA) with the maximum likelihood method to examine the latent structure. First, we evaluated the overall goodness-of-fit according to the suggestion of Kline (2005) and Bagozzi and Yi (1988). The overall fit of the preliminary model was poor. After referring to the modification indexes, 14 items were eliminated to obtain a good fit to the data. ( $\chi^2(113)=275.18$ ,  $p<001$ ,  $GFI=.88$ ,  $CFI=.96$ ,  $NNFI=.95$ ,  $SRMR=.05$ ,  $RMSEA=.07$ ), resulting in 30 remaining items.

### 4.3 Measurement invariance

To compare the factor structures across different group, measurement invariance is a powerful method (e.g., Byrne et al., 2009; Vandenberg & Lance, 2000; Chen et al., 2005). The current research examined the invariance of the measurement of innovative entrepreneurship across tourism, hospitality, and restaurant and beverage students by conducting a multi-group CFA and performing the measurement invariance test (Vandenberg & Lance, 2000; Cheung & Rensvold, 2002). First, the fit indexes for the tourism sample ( $\chi^2(113)=369.86$ ,  $p<001$ , GFI=.93, CFI=.99, NNFI=.99, RMSEA=.06, SRMR=.04), hospitality sample ( $\chi^2(113)=275.18$ ,  $p<001$ , GFI=.88, CFI=.97, NNFI=.96, RMSEA=.07, SRMR=.04), and restaurant and beverage sample ( $\chi^2(113)=300.18$ ,  $p<001$ , GFI=.88, CFI=.97, NNFI=.96, RMSEA=.07, SRMR=.05) demonstrated data fits, confirming that the latent structure of innovative entrepreneurship fit into the three departments separately. Second, multi-group CFAs were conducted to test the measurement invariance of . Model 1 had a good model fit ( $\chi^2(226) = 799.19$ , CFI = .98, RMSEA= 0.06, SRMR= 0.08), demonstrating configural invariance across the three samples.

## 5. Discussion and Conclusion

This study advances the existing theoretical and empirical frameworks by incorporating innovation, entrepreneurship, and the personality perspective. Most of prior research addressed the measurement of entrepreneurship even focus on entrepreneurship, self-efficiency or social capital perspective, ignoring innovation should be one critical part while entrepreneur start a new business (Boada-Grau et al., 2016; Wang, 2019). Especially the intense competitive under tourism industry, the only way to success in the market is innovation. The attributes of innovative entrepreneurship scale development in this study also contribute to understanding the effectiveness of tourism students in entrepreneurship curriculum and evaluate the potential for start a new venture. Finally, the research has several limitations, which lead us to provide suggestions for future study. First, this research only invited tourism and hospitality students from Taiwan to participate. Second, A longitudinal design should be utilized to examine this issue because entrepreneurial activities are likely to be sequential, not concurrent.

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## **Cross-cultural adjustment of foreign hotel workers: Influence of hospitality job experience**

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### **Abstract:**

In preparation for the Tokyo 2021 Olympic Games and the 2025 World Expo in Osaka, the Japanese government has been calling for foreign workers to fill the labour shortage in the tourism industry. To develop a harmonious workplace with a culturally diverse workforce and have sustainable business growth in Japan, more preparation to adopt the change in the sector is essential. Therefore, this research aims to uncover foreign workers cross-cultural adjustment via hospitality job experience in Japan. The findings of this research revealed that having psychological comfort with existing norms and values is vital to develop professional adjustment in an unfamiliar cultural environment. Especially, the characteristics of hotel job such as labour-intensive tasks, emotional exhaustions and work-life imbalance showed a negative influence on the cross-cultural adjustment of foreign workers.

**Keywords:** Foreign hotel workers, Hospitality job characteristics, Cross-cultural adjustment, Job attachment, Social interactions, Japan

### **1. Introduction**

The Japanese government is calling for foreign workers to fill the labor shortage in the tourism industry in preparation of the mega events, the Tokyo 2021 Olympic Games and the 2025 World Expo in Osaka. Estimated 500,000 entry level position foreign workers will be required by 2025, especially in the labor-intensive sectors, including the service industry. This action is expected to benefit significantly to the growing hospitality and tourism industry in Japan.

Meanwhile, the hospitality industry in general has a reputation for poor working conditions with low-remuneration, long working hours and relatively insufficient employee benefit. Besides, workers in the hospitality industry are involved with labour intensive tasks which may lead to emotional exhaustion and further cause plenty of work stressors (Mooney & Baum, 2019; Robinson et al., 2019). As a result, service jobs in Japan have received bad reputations and not favoured by quality and young prospective workers. Despite the negative job characteristics, the main reasons for foreign workers joining in the industry is for better wage options in comparison to working in their home country, and to find opportunities for further career development.

In the growing number of foreign workers in the sector, their cross-cultural adjustment has become an issue for management. Hence, this research aims to uncover what work-related elements would influence cross-cultural adjustment of foreign workers in Japan. Based on the literate review, this research considered major work-related elements which includes

hospitality job characteristics (emotional work, long working hours and work/life imbalance), job attachment and social interaction.

## **2. Literature Review**

### *2.1 Cross-cultural adjustment (CCA)*

An individual's cross-cultural adjustment has a close association with psychological comforts, which may be decided by the level of perceived social difficulties at a host nation (Searle and Ward, 1990). Mostly it is influenced by various situational and individual factors (Black and Mendenhall, 1991). Especially for foreign workers, work-related factors have a high potential to inhibit or increase individuals' cross-cultural adjustment (Black & Gregersen, 1991; Aryee & Stone, 1996; Peltokorpi, 2008; Peltokorpi and Fabian, 2009). Aryee and Stone (1996) discovered work-related factors such as role conflict, role discretion, co-worker support, and work method ambiguity (clarity), which strongly influence the level of cross-cultural adjustment of many foreign workers. Meanwhile, Peltokorpi (2008) argued that not only work-related factors but also individuals' purpose of working at a cross-cultural context are an important element as well. For instance, among expatriates, self-initiated expatriates tend to show a higher level of engagement with host nationals than organizational expatriates (Peltokorpi and Fabian, 2009). The cultural integration of foreign workers would be more successful if self-motivated.

### *2.2 Hospitality job characteristics*

Everyday work tasks for workers in the hospitality sector provide tangible as well as intangible service products to deliver a satisfiable experience to customers. The role of service providers and hospitality workers is significantly more important than in any other industries when improving customer satisfaction and business outcomes. In hospitality studies, the relationship between job demand from the nature of the hospitality work and the workers' job satisfaction have earned major attention from many researchers (Law et al., 1995; Ledgerwood et al., 1998; Zhao & Ghiselli, 2016). Concerning foreign workers' cross-cultural adjustment, job related factors indicated strong associations with work related cross-cultural adjustment (Black, 1988). Therefore, the current research considered the nature of hospitality work to learn about foreign workers' perceived employment experiences and their cross-cultural adjustment in the hospitality industry. Three factors including emotional work, long working hours and work/life imbalance are known as the major hospitality job characteristics.

### *2.3. Job attachment*

Although an occupation has its responsibilities (both required and perceived), workers with higher job control can manage anticipated job stressors better than others (Karasek, 1979; Karasek et al., 1981). In other words, if workers are motivated by the aspects of learning and personal growth in their work, work stressors can be managed by them. According to Herzberg (1966), workers' growth needs (intrinsic motivation) are directly related to work itself; thus, they can improve job satisfaction and thereby it further enhances work motivation. Therefore, workers' employment experience in a specific industry cannot be explained without considering individuals' attitude towards their job. Depending on an individuals' work attitude, the perceived employment experience outcomes may differ significantly. Also, previous research has noted that discretion reduces uncertainty (Black, 1988), and it is highly associated

with the need for work adjustment by foreign workers (Black & Gregersen, 1991; Aryee & Stone, 1996).

#### 2.4 Social interactions

One of the major job characteristics of the hospitality industry is its intense reliance on people – both as consumers and providers of products and services. Having a people-oriented work environment may cause some work stresses but, at the same time, it can be a supporting element for workers' better work adjustment (Bauer et al., 2007). Having positive workplace relationships can be an important factor to enhance a pleasant work environment, which further reduces work involved stress. Positive workplace relationships have been explained from various perspectives such as organisational social support (Wayne et al., 1997), organisational socialisation (Feldman, 1981), and organisational climate (Litwin & Stringer, 1968). Thus, socialisation is an important factor, especially, for newcomers' work adjustment and the assimilation process (Bauer et al., 2007; Morrison, 2002), there is no doubt that creating social ties in the workplace is a critical element, especially for foreign workers, in adjusting to a new cultural environment.

Hypothesis 1: Hospitality job experience has an association with CCA (work)

Hypothesis 2: Hospitality job experience has an association with CCA (outside work)

Hypothesis 3: Hospitality job attachment has an association with CCA (work)

Hypothesis 4: Hospitality job attachment has an association with CCA (outside work)

Hypothesis 5: Social interactions at workplace has an association with CCA (work)

Hypothesis 6: Social interactions at workplace has an association with CCA (outside work)

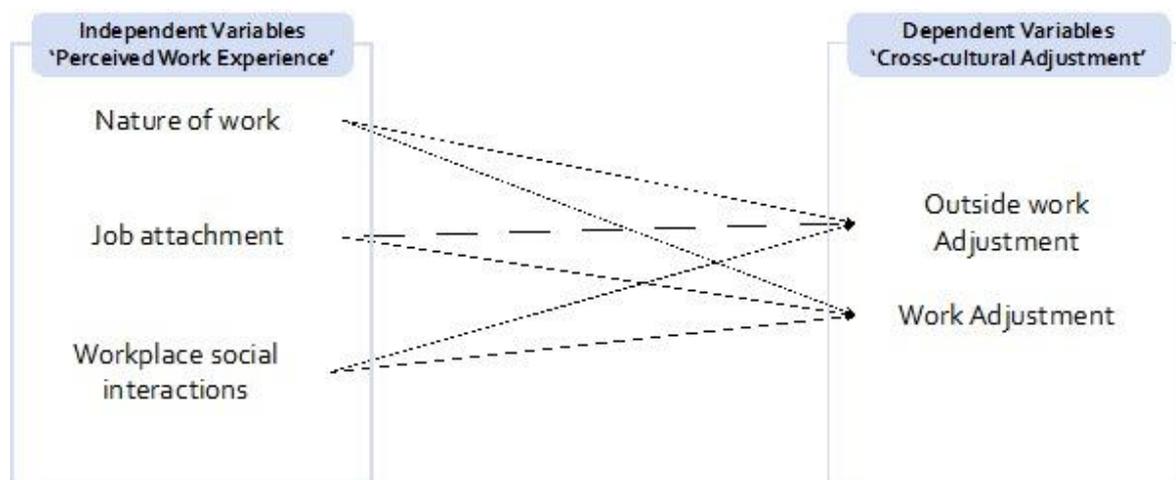


Figure 1. The conceptual model of the study

### 3. Methodology

For data collection, the current research employed Snowball sampling method via online self-administrated survey using Survey Monkey. Multiple regression analysis is the most suitable analytical method to test the research hypothesis. The central research question for this study

is whether perceived employment experience is related to cross-cultural adjustment. Here, perceived employment experience is measured by three factors (independent variables); nature of work, job attachment and workplace social interactions. Hence, in order to discover relationships between the variables, multiple regression analysis is chosen to be appropriate. The measurement for perceived hospitality work experience and work attachment with hospitality job were adopted by the research of Richardson (2010) and the measurement of cross-cultural adjustment was adopted by the research of Black (1988).

#### 4. Results

Total 196 foreign hotel workers from Kyushu area participated in this research. Age of the research participants was between 18 and 41. The foreign workers are originally from South East Asia (52%), South Asia (23%), East Asia (9%), Central Asia (7%), and others (9%). The primary purposes of working in the hotel industry was to earn money (64%) and to get career experience (27%). Most of the participants are working at Kitchen (30.8%), F&B (25.6%) and House Keeping (24.6%) departments. Their average Japanese language proficiency was intermediate level.

DV	IDV	B	Std. Error	$\beta$	T	p
Outside work Adjustment	(Constant)	3.67	0.38		9.61	0
	Nature of work	0.04	0.06	0.04	0.57	0.57
	Job attachment	0.22	0.06	0.26	3.751	.00**
	Workplace social interactions	0.06	0.05	0.1	1.36	0.18*
	R = .294, R <sup>2</sup> = .086, Adjusted R <sup>2</sup> = .063 F = 3.66, p = .00, Durbin-Watson = 1.00					
Work Adjustment	(Constant)	3.92	0.46		8.48	0
	Nature of work	-0.12	0.08	-0.11	-1.45	0.14
	Job attachment	0.3	0.07	0.3	4.19	.00**
	Workplace social interactions	0.06	0.05	0.08	1.07	0.29
	R = .316, R <sup>2</sup> = .10, Adjusted R <sup>2</sup> = .08 F = 4.301, p = .00, Durbin-Watson = 1.22					

Table 1. Multiple Regression Analysis Results

#### 5. Finding and Discussion

The findings of this research revealed that having psychological comfort with existing norms and values is vital to develop professional adjustment in an unfamiliar cultural environment. Specifically, a multiple regression analysis revealed that the cross-cultural adjustment had positive associations with job attachment and workplace social interactions with colleagues. On the other hand, the nature of hotel work such as labour-intensive tasks, emotional exhaustions and work-life imbalance showed a negative association with the cross-cultural adjustment of foreign workers especially building foreign workplace adjustment. It means that the nature of hotel work tends to interrupt foreign hotel workers' cross-cultural adjustment to the host nation.

Japan as a latecomer migration nation, there will be growing demands on foreign workers and these workers will play an important role, especially in the tourism sector. Yet, the work

environment and cultural adjustment issues have been much ignored by the employers. This research findings, therefore, are essential for the industry practitioners to understand how they can support foreign employees and maximise the performance. Based on the results, it can be suggested that building a team engagement via mentorship exercise between local and foreign employees will improve social interaction opportunities for foreign employees. Besides, in the recruitment process, hiring new employees with strong job attachment or providing job training for existing employees to build job motivation can create better work experiences for foreign. This effort will further improve work performance. Since the current research is pilot research, follow-up research will have developed research construction and organisation for better research outcomes.

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# The development of rural tourism cooperatives in tourism poverty alleviation: The experience of Qinba mountain area in Sichuan province

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## Abstract:

Qinba mountain area in Sichuan Province has made remarkable achievements in tourism poverty alleviation, and rural tourism cooperatives have made great contributions. As a tourism resource management organization based on market demand, it alleviates the problem that the poor households are marginalized in the industrial poverty alleviation. Based on the analysis of the function mechanism of rural tourism cooperatives, this paper selects three cases of poverty alleviation through tourism in Qinba mountain area, which shows that the rural tourism cooperatives have achieved considerable social and economic benefits by driving the development of tourism poverty alleviation.

**Keywords:** Rural Tourism Cooperatives, Tourism Poverty Alleviation, Qinba Mountain

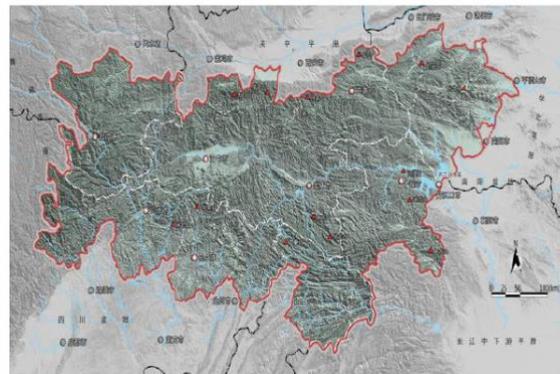
## 1. Introduction

Poverty alleviation is one of the main tasks of the economic development of governments around the world. China attaches great importance to poverty. Qinba mountain area in Sichuan Province is located in the mountainous area between Sichuan, Shaanxi, Gansu, Chongqing, Hubei and Henan provinces or cities, which is one of the ethnic minority areas and one of the eleven extremely poor areas in China. There are 34 districts and counties widely distributed in Mianyang, Guangyuan, Nanchong, Guang'an, Dazhou and Bazhong City. Qinba mountain is a combination of old revolutionary areas, remote mountainous areas, poverty-stricken areas and earthquake-stricken areas. The regional development is relatively backward, the economic level is low, the ability to accumulate funds is weak, and the local government and enterprises have limited investment in funds. The comprehensive influence of the above factors has aggravated the difficulty of tourism poverty alleviation development in Qinba mountain area.

Figure 1: Location of Qinba mountain area



Figure 2: Topographic map of Qinba mountain area



In the tourism poverty alleviation, all the districts in Qinba mountain have actively promoted the integrated development of tourism and poverty alleviation and the tourism has developed into a pillar industry. Qinba mountain area has made remarkable achievements in tourism poverty alleviation, and rural tourism cooperatives have made great contributions. As a tourism resource management organization based on market demand, it alleviates the problem that the poor households are marginalized in the industrial poverty alleviation. Due to the lack of funds, labor force and technology, the poor households participate in the development of rural tourism industry and benefit less. The experience of Qinba Mountain Area in Sichuan Province shows that the rural tourism cooperatives drive the poor farmers to develop rural tourism characteristics, and run farmhouse and country house. Cooperatives help poor households to provide services for tourists through a variety of business forms and ways, increasing their income, thus achieving poverty alleviation and income increase.

## 2. Literature Review

There are few special research on rural tourism cooperatives in the West, because the development mode and management mechanism of rural tourism are different from those in China. In some documents about the development mode of rural tourism, we can see the research on the participation of basic-level organizations in rural tourism. The structural model, types and effectiveness of these basic-level organizations are similar to the rural tourism cooperatives in China. There are two types of rural tourism development models in Europe (Augustyn & Marcjanna, 1998). One is the type of government intervention, such as Poland, Spain, France. The other is that the government intervenes less and mainly guides investment into development, such as Britain, Germany and Austria. The latter has the active participation of basic-level organizations, which promotes the cooperative development between the government and enterprises (Fleischer & Pizam, 1997). These basic-level organizations are mainly non-governmental organizations, whose non-profit and third-party nature is different from rural tourism cooperatives in China.

As an organizational model, rural tourism cooperatives often appear in the research of institutional structure of rural tourism. The research results of domestic scholars mainly focus on the hybrid driven mode (Dai, Zhou, & Liang, 2006; Wang, 2017). Due to the different degree of sponsoring and participation of village committees, enterprises, and rich talents, the degree of contact between members of cooperatives is different (Xu, 2018). Moreover, there are many types and organizational modes of rural tourism cooperatives (Yin, 2016), including village committee driven, village committee and enterprise joint driven, enterprise driven and capable person driven (Liu, 2012), and related organization driven. In terms of development benefits, scholars have studied the social and economic benefits of rural tourism cooperatives, among which economic benefits are obviously more concerned, such as improving the scale efficiency of rural tourism development and ensuring the rights and interests of farmers to the greatest extent (Yang & Deng, 2012). From the perspective of industrial organization, cooperatives not only play the role of resource integration platform (Li, & Yi, 2017; Bao & Xu, 2018), but also play the triple roles of intermediary, spokesperson and maintainer (Shan & Wang, 2013), which is an important means to improve the level of rural tourism intensification and specialization (Hu, 2009). Therefore, we need to combine theory with practice, summarize the mechanism of rural tourism cooperatives, explore the best development path of rural tourism cooperatives, and ensure the healthy and sustainable development of rural tourism cooperatives.

The rural tourism cooperative is a voluntary group of stakeholders related to rural tourism. Without being forced to intervene, rural tourism cooperatives are spontaneously established by villagers, relying on formal rules and regulations and informal norms to achieve villagers' self-

management (Cao, 2020). The characteristics of self-organization of rural tourism cooperatives are obvious. Compared with direct government intervention, rural tourism cooperatives pay more attention to self-management and service among members. Villagers take shares in cooperatives in the form of land resources, labor force and capital, and obtain income through land rent, wage, surplus dividend and company salary. By using self-organization theory and stakeholder theory, scholars have analyzed the self-organization mechanism and self-organization ability of rural tourism cooperatives through a large number of case studies, in order to discuss how rural tourism cooperatives play a role in tourism poverty alleviation and realize the real benefits of the poor. The research mainly focuses on how to cultivate the endogenous strength and motivation of poverty alleviation in poor villages through the establishment of autonomous organizations, so as to continuously optimize the structure and function of various systems in the rural areas, so as to form multiple benefits. The cases are mainly selected from the relatively developed areas of rural tourism in China, including Meiquan Village of Yunnan (Ma & Zhang, 2009), Shizhu County of Chongqing (Huang, 2016), Renshou County of Sichuan (Yin, 2016), Guojiagou Village of Tianjin (Duan, 2016), Hetang Village of Henan (Qu, 2017), Gaonan Village of Fujian (Bao & Xu, 2018), Yawudu village of Yunnan (Cao & Zhu, 2019), Xingdun village of Zhejiang (Nie & Liu, 2019), Pingxiang City of Jiangxi (Leng, He & Zhang, 2019), Xingguang Village of Sichuan (Wang, 2019), Huixian village of Yunnan (Cao, 2020).

### **3. Methodology**

Using the qualitative research method with typical inductive logic, this paper specifically explores how rural tourism cooperatives absorb farmers and poor households to invest in land, real estate, labor force, self owned funds or poverty alleviation funds to realize the coordinated development of tourism poverty alleviation and cooperatives. The collection of data adopts the method of field investigation, and obtains the real research data through interview and observation. During the service period of 2016-2017 for the tourism poverty alleviation center in Qinba mountain area of Sichuan Province, the author extensively collected data of 34 districts and counties, especially focused on Dazhou, Bazhong and Guangyuan. The development of rural tourism, the implementation of tourism poverty alleviation policy, and the experience and effect of rural tourism cooperatives were investigated.

This paper uses the method of case study to verify the mechanism and effect of rural tourism cooperatives. In the selection of cases, this paper follows the typical sampling logic and adopts the typical case sampling method. The selected case is the advanced tourism poverty alleviation project which was awarded by the state or province from 2016 to 2017. They take rural tourism as the core business of cooperatives as a resource integration platform, which effectively enlivens rural idle resources and realizes the endogenous development of poverty-stricken villages. Three typical cases: Pingchang County of Bazhong, Zhongchengzhai village of Guang'an and Qingchuan County of Guangyuan were selected.

In the design of two questionnaires on participation behavior and income of rural tourism cooperatives, we try our best to adopt easy to understand expression to ensure the authenticity of the questionnaire. The questionnaire is mainly divided into two parts. The first part is the basic information of poor villages based on the demographic characteristics. The second part is the income obtained by villagers through rural tourism cooperatives. The content and income of villagers, especially the poor, participating in rural tourism through cooperatives are measured by Likert 5-level scale. The questionnaire is distributed in the form of household distribution, filling in and recycling. A total of 300 questionnaires were distributed, 289 of which were valid, and the effective rate was 96.3%.

In order to improve the richness and reliability of the investigation, the key figures were selected from different groups including villagers, foreign enterprises, cooperative members, government, village committee and so on. This paper uses the method of semi-structured interview to obtain the perception and attitude of stakeholders on the development of rural tourism cooperatives, which better fills the problem of incomplete data in the questionnaire. It mainly includes the original intention and opportunity of establishing rural tourism cooperatives, how to mobilize villagers to join the cooperatives, the way and enthusiasm of villagers to participate, the services and training provided by cooperatives for villagers, the incentive measures of cooperatives, the main business and profit points of cooperatives, and the role of cooperatives in driving the development of local tourism, etc.

In the process of investigation and interview, the paper adopts the methods of "non participation observation" and "open observation". Through careful observation on Villagers' daily life, number of houses, area, decoration, getting along with foreign owners and participation in festival activities, the paper obtains a large number of perceptual materials. At the same time, the paper collects the relevant statistical data of the Statistical Bureau, the Industrial and Commercial Bureau, the Agricultural Bureau, the Tourism Bureau and other departments (table 1-2), and analyzes the changes of the local resource utilization efficiency after the establishment of the rural tourism cooperatives.

**Table 1: Rural tourism income and number of tourists in Qinba mountain area (2016)**

Division	Total income of rural tourism (100 million yuan)	Proportion (%)	Reception of tourists (10000 person times)	Proportion (%)
Bazhong	53.1	16.62	913	9.85
Dazhou	36.27	11.35	1728	18.64
Guang'an	60.6	18.97	894.25	9.65
Guangyuan	55.61	17.41	1574.57	16.99
Mianyang	35.6	11.14	2733	29.48
Nanchong	78.3	24.51	1427	15.39
Total	319.48	100	9269.82	100

**Table 2: The villages and the people who benefit from the rural tourism in Qinba mountain area (2016)**

Division	Villages developing rural tourism		people who benefit from the rural tourism	
	Villages	Poverty stricken Village	Peasant	Poor people
Bazhong	104	33	51673	9126
Dazhou	225	64	370316	30156
Guang'an	136	23	231219	10752
Guangyuan	687	167	258300	32818
Mianyang	22	15	5000	2000
Nanchong	53	37	54170	10356
Total	1227	339	970678	95208

## 4. Results

### 4.1 *The development of rural tourism cooperatives*

Farmers' professional cooperatives are mutually beneficial economic organizations that voluntarily unite and democratic manage the producers and operators of similar agricultural products or the providers and users of similar agricultural production and operation services on the basis of rural household contractual management (Editorial Board, 2007). In May 2016, the General Office of the Sichuan Provincial People's Government issued the Guiding Opinions on Developing Rural Tourism Cooperatives, the first of its kind at the provincial level. The Opinion defines rural tourism cooperatives as a type of peasant cooperatives. It is a new type of economic organization in which peasants voluntarily unite and democratic management according to the principles and rules and regulations of the cooperatives and share the profits through the development of tourism services.

The development of rural tourism cooperatives can be divided into the following two stages according to the ways of registration and the management institutions. The first stage is characterized by association, mainly registered in the civil affairs department. As the Law on Farmers' Professional Cooperatives does not specify the rural tourism cooperatives, nor can it correspond to the appropriate categories in the registered directory, the industrial and commercial departments do not register. Through the internal management system, supervision mechanism and market competition mechanism, rural tourism cooperatives unify service standards, avoid mutual imitation and vicious competition among operators, and improve tourism service quality. It can be said that this stage of rural tourism cooperatives are analogous to the rural tourism associations, and do not have economic attributes.

The second stage is characterized by the nature of the enterprise and can be approved for industrial and commercial registration. The role of rural tourism cooperatives is reflected in speeding up the integration and development of rural tourism resources, expanding the scale of rural tourism economy, increasing farmers' income and strengthening rural collective economy (Liu, 2012). Such as, Wenjingjiang Rural Tourism Cooperative in Chongzhou, and Guangan Ganen Lake Rural Tourism Professional Cooperative.

The rural tourism cooperatives in Qinba mountain area began to develop under the promotion of tourism poverty alleviation policy since 2016, but it started slowly. From June to August 2016, the field investigation of tourism poverty alleviation in Dazhou City found that there are no rural tourism cooperatives. The professional cooperatives are mainly in agriculture, planting, animal husbandry and aquaculture. The establishment of rural tourism cooperatives is still in the exploratory stage. The main problems are how to establish, how to operate, how to pay dividends, how to coordinate the interests of the village and other specific operational level. The village committee, the rich leader and enterprises hope to get guidance in the management rules and regulations of the cooperatives. Generally speaking, the villages with good foundation for rural tourism development are more active in establishing rural tourism cooperatives, such as Dashan Village and Linggan Village in Qu County, Huashiyuan Village and Shiti Town in Dachuan District, while the villages with weak industrial foundation and traffic conditions needs to be improved are on the sidelines.

### 4.2 *The important role of rural tourism cooperatives in tourism poverty alleviation*

Tourism poverty alleviation is an industrial poverty alleviation, not a simple money supply, but through the construction and extension of the tourism industry chain, to form an industrial scale, so that rich rural tourism resources in poor areas can effectively dock the market. Rural tourism cooperatives are tourism resource management organizations based on market needs. Their

important role is embodied in the three dimensions of resources, market and products.

#### *4.2.1 Resource integration and management*

The rural tourism cooperatives can solve the problem of how the poor households, especially the poor households without labor ability and capital, integrate into the tourism industry chain. It is the key to achieve the efficiency and equity of tourism poverty alleviation for poor households really participate in the planning, development, decision-making, management and other aspects of rural tourism and benefit from them. Rural tourism cooperatives can help poor farmers who want to join the cooperatives but have no start-up funds become a shareholder with abandon land, idle farm housing and other assets and resources, so as to achieve the goal of poverty alleviation and becoming rich. Cooperatives can change the situation of unequal power, resources and income between companies and farmers in the cooperation between companies and farmers, so that farmers become the main body. The assets of rural tourism cooperatives include not only funds, but also woodland, houses, fish ponds and livestock, such as the cattle of “ 100 cattle crossing the river” in Pengan ancient town of Nanchong. These objects are an important part of rural tourism resources. In order to maintain and increase the value of assets, rural tourism cooperatives manage rural tourism resources effectively and avoid “tragedy of the commons”.

#### *4.2.2 Market demand*

The rural tourism cooperatives provide highly participatory, recreational, recreational and fitness functions of complex rural tourism products through large-scale and industrialized development. Under the guidance of the National Tourism Leisure Program and the Tourism Law, the national leisure consciousness has been gradually enhanced. With the improvement of social economy and consumption level, the trend of scattered tourists in China’s tourism market has become more and more obvious. The demand for rural tourism, leisure, vacation, health care, special tourism and other levels has been greatly enhanced. In recent years, with the support of the state, provinces and cities, the transportation infrastructure conditions in Qinba mountain area have been improved continuously, the industrial structure has been adjusted rapidly, urban and rural construction has been promoted obviously, and the economic and social basis for tourism development has been established. Establishing rural tourism cooperatives can break the fragmented development of rural tourism and concentrate the dispersed capital, technology and labor force (Niu, 2014). Provide rural tourism products which integrate the production of agriculture, forestry, animal husbandry and fishery, the processing of secondary products and the service of tertiary products by reasonably gathering and allocating the elements of the rural tourism industry chain.

#### *4.2.3 Product upgrading*

Most of the rural tourism in Qinba mountain of Sichuan Province is mainly managed by independent peasant households, while the rural leisure and rural hotels are mainly under 3 stars. Due to the lack of funds, technology, management and marketing capabilities, the poor households have long remained at a low level in rural tourism product innovation, service quality and management. Rural tourism cooperatives can solve the problems of small scale, weak strength and low level of development of rural tourism by improving the organizational level of farmers, speed up the improvement of quality and efficiency of rural tourism under the new normal, face the market in the unified management with standardization, standardization,

scale and brand.

### *4.3 Case study of rural tourism cooperatives*

#### *4.3.1 Pingchang County of Bazhong*

In the scenic spot of Sima Water Township in Pingchang County, 106 poor households were guided to set up tourism cooperatives with idle houses, land contractual management rights and forest rights as their investment. Tourism projects such as water recreation, rural residential accommodation and farming houses were vigorously developed. The cooperatives achieved an income of over 94 million yuan, which led to the employment of more than 360 poor households and increased their per capita income 3950 yuan in 2016. 176 farmhouse resorts in Pingchang had been developed, and the average household income increased by 15 thousand yuan by the end of 2016. The county has five 4A-level tourist attractions, successfully established one provincial-level tourism poverty alleviation demonstration area, built five rural poverty alleviation demonstration villages and six provincial-level rural demonstration towns, as well as 15 provincial-level rural tourism demonstration villages. The county has received 4.2812 million tourists and achieved a comprehensive tourism income of 3.352 billion yuan in 2016, an increase of 39.93% and 36.15% respectively over the same period of last year. The per capita income of farmers has increased by 2,950 yuan. The tourism poverty alleviation has achieved remarkable results.

#### *4.3.2 Zhongchengzhai village of Guang'an*

The Zhongchengzhai Village in Shizha Town, Linshui County of Guang'an City, has vigorously developed rural tourism since 2015. Through rural tourism cooperatives, the village innovates the interest linkage mechanism to promote the development of the combination of agriculture and tourism. In order to increase the income of poor households and solve the difficult problem of collective economic development, the villagers' representative conference and congresses were held many times. Three kinds of interest linking mechanisms were established. The 350 mu base of Yellow Gardenia jasminoides, Cherry, Golden Pear and Cuiguan Pear, which were jointly developed and established by the two Committees of village branches, was divided into income shares in the proportion of 10% of the village collective and 90% of the peasant households according to the mode of village collective and peasant household. The 300 mu base of Huanghua Pear, kiwifruit and crisp red plum sponsored by the owner's is divided into 10% of the village collective, 20% of the peasant household and 70% of the owner's income according to the mode of village collective, peasant household and owner. For tourism project development, the village collective to state investment in the formation of infrastructure shares, the villagers to land and forestland shares in joint participation in the development, according to the village collective 10%, farmers 20%, tourism development company 70% of the proportion of income sharing. These three modes work effectively, not only the interests of the owners and the company are guaranteed, but also the investment of the people is ensured, and the goal of the villagers and the village collective prosperity is achieved.

#### *4.3.3 Qingchuan County of Guangyuan*

Established in 2014, Qingchuan Zhichen Network Service Co., Ltd. is a tourism poverty alleviation demonstration project, with a registered capital of 1 million yuan, mainly engaged in e-commerce information consultation, e-commerce service trusteeship, promotion, network brand planning, maintenance, management and so on. The company adopts the management

mode of farmers, cooperatives, companies and e-commerce, and promotes the sale of Qingchuan honey, Qingchuan delicacies and other tourism commodities through both online and offline channels. The company relies on the Shurui bee industry professional cooperative of Qingchuan County, which developed on the basis of self-built apiary farm and breeding base. The company develops local bee colony, promotes scientific beekeeping, promotes farmers to increase their income and become rich based on local advantages. Thus, forms a new modern industrial model of bee farmers, cooperatives and companies to sell one-stop bee honey. The Qingchuan honey has walked out of Qingchuan and move towards the whole country. Since 2015, the company and cooperatives joint with beekeeper construction of bases, brand creation and market expansion. The cooperatives has fixed training time, and sent at least twice a year technical personnel to study and exchange with the broad masses of bee farmers. So far, they have organized training five times/a total of 678 people. Shurui Apicultural Professional Cooperatives of Qingchuan County were recognized as the fifth batch of demonstration farmers 'cooperatives in Guangyuan City in April 2015. The cooperative has about 400 members, driving more than 200 precision card poor households, directly and indirectly benefiting more than 5,000 people by 2016.

#### *4.4 Remarkable achievements*

The rural tourism cooperatives have just started in 2016, and have developed rapidly under the vigorous promotion of relevant policies since then. The rural tourism cooperatives have made remarkable contributions to tourism poverty alleviation in Sichuan Province. In the process of exploring the new development model of rural tourism, these rural tourism cooperatives show different characteristics. 13 of 280 National Tourism Poverty Alleviation Projects in 2016 in Sichuan Province were in the Qinba mountain area, which rural tourism cooperatives were the main body.

Sichuan Province achieved 228.3 billion yuan in rural tourism income in 2017, an increase of 13% over the same period of last year, which is equivalent to 403 yuan of contribution to the per capita income increase of 66.46 million farmers in the whole province, and boosted the employment income of 37,000 households and 126,000 poverty-stricken people, accounting for 11.6% of the 1.085 million poverty-stricken people in the whole province. According to statistics, there are 5759 rural tourism cooperatives registered by Industry and Commerce in Sichuan province at present. There are 690 rural tourism cooperatives in Bazhong City and 564 rural tourism cooperatives in Dazhou City in Qinba mountain area, ranking second and third separately.

## **5. Discussion and Conclusion**

### *5.1 Discussion and implications*

#### *5.1.1 Raising awareness and giving full play to the economic benefits of rural tourism cooperatives*

It is found that the understanding of rural tourism cooperatives is still at the level of associations in various places. It is believed that rural tourism cooperatives are merely organizing the villagers to receive tours and unifying the service standards and prices within the village. It does not realize the enterprise nature of rural tourism cooperatives. We should take measures to improve the understanding of rural tourism cooperatives by governments at all levels, especially by leading cadres at the township level. To help them fully grasp the economic attributes of rural tourism cooperatives, expand the existing unified service standards and price

business areas, highlight the role of rural tourism cooperatives in fund operation, project docking, product sales, brand marketing and other aspects. We should integrate rural tourism cooperatives with the development of regional tourism industry. It is possible to realize the win-win development of all business types and participants in the region, as long as we take the innovation and entrepreneurship of rural tourism cooperatives as the development opportunity, integrate tourism resources and market advantages.

#### *5.1.2 Spread experience and bringing into play the social benefits of rural tourism cooperatives*

There exist the relatively bad natural environment and regional conditions, low level of regional opening to the outside world, backward science and technology education, lack of villagers' democratic consciousness and market economy consciousness. The government departments and tourism enterprises play a very important role in tourism poverty alleviation at present. There are still some barriers between rich leaders, foreign investors and villagers, especially poor households. Poor people are marginalized in the development of rural tourism industry. Therefore, the rural tourism cooperatives in Qinba mountain area should be regarded as the breakthrough point of tourism poverty alleviation. Make rural tourism cooperatives truly become self managed and self benefiting farmers' own collective organizations through upgrading villagers' democratic consciousness, market subject consciousness and providing practical opportunities to participate in market economy, so as to participate in the development of the rural tourism industry and really benefit from it.

#### *5.1.3 Straighten out the relationship between resources and capital, activate the enthusiasm of rural tourism cooperatives*

It will take some time for the impoverished villages in some districts and counties in Qinba mountain area because of the remote location and the thorough improvement of the tourist traffic conditions. In addition, the development of rural tourism resources and product design are not yet mature, the development of tourism market is still in its infancy, and the economic benefits of tourism have not yet fully emerged. Therefore, there are ideological worries and insufficient investment in the construction of rural tourism cooperatives. Rural tourism cooperatives need to straighten out the relationship between resources and capital, give full play to the driving role of powerful enterprises and projects in tourism poverty alleviation, combine with local resources, and use their own funds for rolling development. At the same time, the mode of rural tourism cooperatives, companies and farmers should be adopted to activate the rural tourism cooperatives' entrepreneurial enthusiasm and drive the poor households to engage in tourism services, tourism products processing, sales, etc. with the help of external forces.

#### *5.1.4 Increase policies and financial support to ensure the development of rural tourism cooperatives*

The Qinba mountain is a special and difficult area, which combines ethnic minority areas, poverty-stricken areas and old revolutionary areas. The financial institutions have increased their support for tourism poverty alleviation in recent years. For example, Guang'an Branch of the People's Bank of China (PBOC) has loaned 10 million yuan for poverty alleviation projects, and local financial institutions have increased their credit allocation in proportion to their own funds. The total amount of tourism poverty alleviation credit in Guang'an City has exceeded 100 million yuan in 2016. However, there are few funds and project support for rural tourism

cooperatives at present. The development projects of rural tourism cooperatives have not been fully implemented, such as linking with various agricultural support funds, and applying for micro-loans for tourism reception facilities of members of rural tourism professional cooperatives. In order to give full play to the role of rural tourism cooperatives, we should strengthen financial support to rural tourism professional cooperatives, give preferential policies in terms of funds, taxation, land and so on, and provide strong support in terms of start-up funds, marketing publicity, facility renovation, small loan discount and so on.

#### *5.1.5 Cultivate professionals for rural tourism cooperatives*

The professional management talents of rural tourism cooperatives in Qinba mountain area are extremely deficient restricted by the disadvantage factors of funds, technology, management and talents. We found that the managerial positions of rural tourism cooperatives are basically not qualified for professional ability. For example, most of the local able persons go out to work and accumulate a certain amount of funds to return home to start their own businesses, and the rural hotels are generally small-scale and low-grade. In addition, most foreign investors have the background of building materials and real estate development, and very few have the experience of tourism industry. We should increase investment in the training of professional managers of rural tourism cooperatives in Qinba mountain area, select colleges and universities to introduce and train rural tourism cooperative professionals through School-enterprise cooperation, school-site cooperation. To cultivate the rural tourism cooperatives professional managers with good moral character and professional quality, rich rural tourism professional knowledge and comprehensive management ability and practical experience of tourism enterprises.

#### *5.2 Conclusion*

Rural tourism cooperative is a type of farmers' professional cooperatives, which is a new type of agricultural business entity growing up in the deep integration and development of agriculture and tourism. Rural tourism cooperative is an effective form to promote the scale operation of rural tourism, which is of great practical significance to further play the role of tourism in poverty alleviation and promote rural life towards prosperity. The practice of poverty alleviation in the Qinba mountain area of Sichuan province shows that the rural tourism cooperatives have made great contributions to the poverty alleviation of tourism, and played an important part in the three dimensions of resources - market - products. We should give full play to the ecological environment and natural resources advantages of poverty-stricken areas and vigorously promote poverty alleviation through tourism. Drive poor farmers to increase their incomes, and strive to promote better and faster economic and social development in poverty-stricken areas through promoting industrial restructuring and enhancing endogenous driving force.

#### *5.3 Limitation of this study*

The rural tourism cooperatives in Qinba mountain area of Sichuan Province has developed rapidly under the promotion of tourism poverty alleviation policy. However, it can not be ignored that there are certain environmental conditions for the development of rural tourism cooperatives, including perfect rules and regulations, strong government support, smooth investment and financing channels, high degree of democratization and high quality of residents (Zhou, Jiang, & Wang, 2009). The three cases selected in this paper are reflected in the

government's tourism poverty alleviation policy, democratic decision-making, rules and regulations, but lack of data collection and Analysis on the quality of community residents. Although there are various types of rural tourism cooperatives, as an autonomous organization of people's voluntary association, common ownership and democratic control, the core of cooperatives is to respect the wishes of farmers. Therefore, the quality of residents is not only the condition for the establishment of the cooperative, but also the guarantee for the cooperative to realize the benefit balance and win-win cooperation of all parties through institutional arrangement and innovation. In the future, it is necessary to strengthen the research on the quality of residents, and conduct in-depth analysis on the coordination of interests between cooperatives and village committees, enterprises and villagers under different modes.

### Acknowledgments

This work was financially supported by National Social Science Fund of China (No. 19BJY210), Sichuan Ethnic Mountain Economic Development Research Center (the Key Research Base of Humanities and Social Sciences of Sichuan Education Department, No. SDJJ1815) and Sichuan Revolutionary Old Area Development Research Center (SLQ2018B-11).

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## **Incorporating arts into tourist retention – The future of art tourism in the 2020 era**

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### **Abstract:**

This study examined the first innovative art event of Macao, when the government tried to meld art tourism into the community by cooperating with the commercial sectors and held 33 exhibitions at 19 different places throughout the city. The study examined the motivation of the tourists with respect to four aspects, service quality, socialization, relaxation and explore, and novelty exploration. It also examined how these four motivation factors will correlate with satisfaction and if the satisfied experiences can lead to retention of tourists. Quantitative research method was applied with the use of a bilingual questionnaire. Five hypotheses were developed with the generation of an empirical model that examined how the motivation factors can predict the level of tourist satisfaction. All the hypotheses are supported. The findings show that amongst the four motivation aspect, the art event can best provide the feeling of relaxation and escape to the tourists. It can also satisfy their expectation on novelty exploration. In regard to satisfaction, service quality and novelty exploration are found to implement significant impacts, when the final model explained 87.2% of the variances. Nonetheless, tourist satisfaction is not able to be transformed into visiting retention. The results provide focal notions to the event organizers to prioritize the sense of relaxation and escape while providing opportunities for novelty exploration into the design, content and marketing of the art tourism event. Moreover, the experience of art tourism events should be able to transform into a sense of expectation for future events of the type.

**Keywords:** Art, Tourism, Satisfaction, Retention, Service Quality, Relaxation

### **1. Introduction**

The gaming industry has always been the backbone of Macao's economy and the major reason for visit. Being the legal monopoly of casino gaming of China, it has drawn many thousands of visitors from China and Hong Kong (Liu et al., 2015). The profit from the gambling industry is the biggest source of the government revenue, which accounts for 86% in 2019 (Macao Financial Services Bureau, 2019). However, the strong gaming industry has eliminated the developing opportunities of other industries and limited economy diversification. However, after the first decline of gaming revenue in 2014, the government has been issuing incentives that encourages casino concessions to invest in non-gaming attractions and new convention space (International Monetary Fund, 2019). To the defect of the economy structure, Macao struggled to develop a broad-based economy. The Macao government seeks to diversify its economy and reallocate its resources to other tourism-related industries (Choi et al., 2019).

#### *1.1 Art Tourism in Macao*

According to the Analysis Report of Statistical Indicator System for Moderate Economic Diversification of Macao in 2018, one of the industries that the government had been developing is the cultural industries which includes cultural exhibitions and performances.

These years, the Macao government has been putting efforts in attracting tourists through different cultural festivals in relation to art. The examples include the Macao Arts Festival, Macao International Music Festival, Macao Light Festival, Outloud Street Art Festival and International Youth Dance Festival. Though the results were not all as expected, the Macao Arts Festival had been holding for more than three decades despite being unpopular (McCartney & Ip, 2018). Thus, the government introduced a brand-new event to tourists – “Art Macao 2019”. It enhances the art experience of tourists through displaying the beauty of traditional Chinese and Western culture in exhibitions and installation. Unlike ordinary art exhibitions that usually took place in museums, it held exhibitions in different hotels which were more accessible to tourists. It is believed that by taking the initiative in connecting the tourists can evoke tourists’ interests in art experiences and better develop the future goals of Macao in the field of “Innovative Macao”, which involves in various aspects such as media art, folk art, and handicrafts, design, movies, gastronomy, literature, music, innovative technology. This paper aimed at revealing the reception of tourists who participated in art events. It examined how satisfaction is affected by motivational factors in art tourism by investigating a genuine art event in Macao – Art Macao 2019.

## **2. Literature Review**

### *2.1. Art and tourism*

Art is the embodiment of the beauty of a culture, it is a way to communicate with foreigners with our souls (Americans for the Arts, Inc., 2015). From dancing to music, cuisine to paintings, architecture to poetry, these are all arts. To explore the culture of place, it is inalienable with arts when it conveys a heap of rich information that relates to history, daily routine of the locals, quality of living, intelligence of the tribe, habits and even the manner of communication. As stated by Buczkowska (2014), there was a long history on the relationship between art and tourism. Through the passage of time, it is found that the form of art tourism is transforming.

The curiosity of the tourists is growing and they are expecting more personal and unique experiences from a place. A study by Americans for the Arts, Inc. (2015) on the idea of “vacation” by the Baby Boomers to the Millennials (i.e. Generation Y) suggested that unlike the Baby Boomers, who are satisfied with being sightseers, the Generation Y are looking for more authentic experiences to explore the “real culture” of their vacation destinations. They desire to join workshops of handicraft, chinaware, gastronomy, pottery, tea-making, dancing and alike, which incorporated local elements (Richards & Wilson, 2006). They like to experience the destination through their participation and engagement in local arts and heritage. They perceived personal experiences in arts and culture will allow their discovery of the real truth of the destination (Zhang & Xie, 2018). Art is thus a growing attraction to visitors, a component that added to the richness of a tourism destination.

### *2.2 Motivation, satisfaction and customer retention*

Previous literatures demonstrated strong bonds between tourist motivation and satisfaction. According to Meng et al. (2008), the satisfaction of sightseeing tourists is affected by the tourist motivation factors, destination attribute importance and performance factors, of which the tourist motivation factors played a crucial role. As such, studies from Ibrahim and Gill (2005) found that motivation and satisfaction are sharing some common attributes in terms of knowledge seeking, socialization and escape.

### *2.2.1 Motivation factors*

As stated in Zhang and Xie (2018), one of the essences to develop the participatory experiences is service quality. Tkaczynski et al. (2020) echoed the idea and revealed that the service quality of festival performances has significantly influenced attendees' satisfaction. In the study, three service quality factors were identified and examined, including performance, environment, professionalism. All the factors are found to significantly impact both satisfaction and behavior intention, with festival performance quality illustrating the strongest influence. In addition, Radomir et al. (2010), MacIntosh and Parent (2017) demonstrated that the interaction quality of the staff contributed to the satisfaction of the customer. Based on the aforementioned, the following hypothesis is developed,

H1: Service quality is positively correlated with satisfaction.

McCartney and Ip (2018) illustrated that the psychological perceptions of socialization and escape are the motivations of people to attend the arts festivals. In the findings of Fakeye and Crompton (1992), socialization works as the connection between the event and its tourists, when it planted the revisit intention in the tourists and prevent them for switching over to otherwise destinations. Furthermore, socialization will also shape the trust between the locals and tourists, while bridging different people segments (Richards & Wilson, 2006). The participants showed to be more tolerant on the quality and uniqueness of a festival if they can socialize with the other participants. Thus, the following hypothesis is generated,

H2: Socialization is positively correlated with satisfaction.

The studies of Zhang and Xie (2018) found that tourists who likes to discover authentic cultures were motivated by escape and relaxation. Tourist expressed enjoyment in art space as they were able to run out from stress and feel relaxed. Sung et al. (2016) and Vigolo et al. (2018) also elucidated that high-income tourists and the elderly (60-69 years old) preferred destination that allowed them to feel relax and escaped from their ordinary lives. This is more pronounced for the elderly segment when relaxation is only motivation that is significantly correlate with the level of satisfaction. Tourist with higher income also tend to relax, escape and spend more quality time with their family and friends while visiting a destination. These worked to stem the hypothesis underneath,

H3: Relaxation and escape is positively correlated with satisfaction.

Another key motivation factor found in past literatures is novelty exploration within the visit. From the findings of Uysal et al. (1991) and Uysal et al. (1993), despite different events, novelty exploration has significant impact on satisfaction. Novelty has played a significant role in the formation of satisfaction, as tourists tend to look for novelty experience in a familiar destination (Toyama et al, 2016). Thus, marketers are encouraged to offer new experiences and attractions to the target markets and provide adequate information to enhance the familiarity of the tourist with the destination. Novelty experience is also showed to positively correlate with the satisfaction of food tourism (Ji et al., 2016). The aforesaid structured the following hypothesis,

H4: Novelty exploration is positively correlated with motivation.

### *2.3 Retention*

Earlier researches illustrated an intimate relationship between satisfaction and retention. Thenya (2016) and Anderson et al. (1994) both verified that satisfying services will result in customer retention, especially those little acts that makes the customers feel at home. Customer

satisfaction is found to closely relate with customer retention. Based on the customer service theory, Thenya (2016) attests the more satisfied customer will have higher intention to revisit the destination. Tourism is an industry serving people, it is thus important for the practitioners to have an in-depth understanding on the needs of the tourists. The “equation of fantastic service” established by Anderson et al. (1994) on customer retention states that the rules of thumb for superb service are namely, first, greet the customers in a way to make them feel recognized and important; second, understand the needs of the customers and meet their needs; third, build up a personal and friendly long-term relationship with the customers. These rules of fantastic service can lead to customer retention and motivate them to make second approach. Hence, the following hypothesis is developed,

H5: Tourist satisfaction is positively correlated with tourist retention.

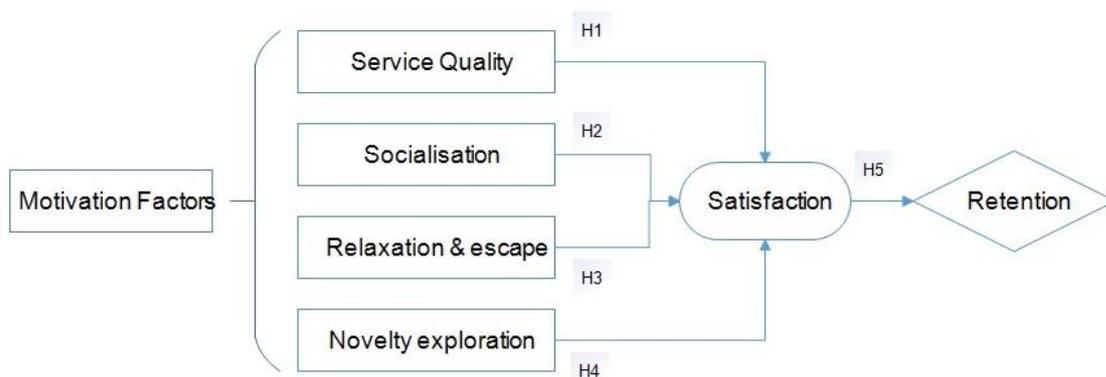


Figure 1: The theoretical framework on the relationship between motivation, satisfaction and retention

### 3. Methodology

#### 3.1 Research design

A quantitative approach was applied to examine the bonds between motivation factors, satisfaction and retention of tourists to Art Macao 2019. Art Macao 2019 hosted more than 33 exhibitions in different places of Macao from June to November 2019. A pilot study was carried out before the data collection process to ensure the reliability and validity of the survey. The target samples were tourists who have visited the event, Art Macao 2019. A non-random sampling was used and paper questionnaires were distributed to the targets at both the venues of the event and major incoming ports. A total of 106 questionnaires were collected and 101 valid questionnaires were included in the final analysis.

#### 3.2 The Measurement

The questionnaire was bilingual in Chinese and English and reviewed by professionals. It consisted of three sections with two screening questions. The two screening questions checked if the sample is a tourist and has visited Art Macao 2019. The first section is on demographic information of the sample, while the second section examined the motives of the samples at visiting the event. It included 13 statements on the four attributes of the motivation factors service quality, socialization, relaxation and escape, and novelty experience, that were sourced from previous literatures (Ibrahim & Gill, 2005; Meng et al., 2008; Anderson et al., 1994; Zhang & Xie, 2018; McCartney & Ip, 2018; Fakeye & Crompton, 1992; Uysal et al., 1991).

All the statements in this section were measured on a five-point Likert-type scale, with 1 being totally disagree and 5 being totally agree. The third section studied the satisfaction level of the tourist and their propensity of revisit through four statements based on past literatures (Fasha, 2007; Thenya, 2016; Radomir et al., 2010).

### 3.3 Data analysis

The collected data was analysed using IBM SPSS Version 26. The data was first tested on reliability, the means and standard deviation of the motivation factors, satisfaction and retention were then found. The hypotheses on the correlation between the four motivational factors and retention with satisfaction were examined by means of Pearson correlation. This was followed by the investigation on how satisfaction is affected by the motivation factors through the use of multiple regression. With the objective to bring arts into the city to enhance the tourism experience, Art Macao 2019 has cooperated with different organizations to host the 33 exhibitions, these included hotels, museums and exhibition venues.

## 4. Results

### 4.1 Profile of the respondents

As shown in Table 1, there was a fair distribution of female and male samples, with the majority aged 44 and below (80.1%) and visiting from China (49.5%). Visitors from China has made up the largest segment of tourist in Macao, mounting up to around 70% (Macao Statistics and Census Service, 2020).

Variable	Frequency	Percentage
<b>Gender</b>		
Female	52	51.5%
Male	49	48.5%
<b>Age</b>		
15-24	29	28.7%
25-34	26	25.7%
35-44	26	25.7%
45-54	12	11.9%
55-64	6	5.9%
65 or above	2	2.0%
<b>Place of origin</b>		
China	50	49.5%
Hong Kong	21	20.8%
Korea	5	5.0%
Japan	2	2.0%
Others	23	22.8%

**Table 1: The profile of samples**

#### 4.2 Reliability, means and correlation

The Cronbach alpha was used to test the reliability of the data collected. The overall reliability achieved a high alpha score of 0.944 with 16 items, well above the minimum threshold of 0.6 (Hair et al., 2006).

Reliability Statistics	
Cronbach's Alpha	N of Items
0.944	16

**Table 2: Reliability test of 16 items**

From the mean of the four motivation factors (Table 3), the tourists perceived Art Macao 2019 has provided the highest level of relaxation and escape ( $\bar{x}=3.92$ ,  $\sigma=0.99$ ), followed by the opportunity of novelty exploration ( $\bar{x}=3.85$ ,  $\sigma=1.00$ ) and quite good level of service quality ( $\bar{x}=3.75$ ,  $\sigma=1.00$ ) but offered the least likelihood on socialization ( $\bar{x}=3.47$ ,  $\sigma=1.01$ ). The retention potential of tourist however was obviously low ( $\bar{x}=1.78$ ,  $\sigma=0.41$ ).

	Satisfaction	Service quality	Socialization	Relaxation & escape	Novelty exploration	Retention	H
Satisfaction	1						
Service quality	.907**	1					1 Yes
Socialization	.739**	.782**	1				2 Yes
Relaxation & escape	.776**	.753**	.716**	1			3 Yes
Novelty exploration	.895**	.859**	.783**	.788**	1		4 Yes
Retention	.630**	.643**	.493**	.565**	.574**	1	5 Yes
Mean	3.90	3.75	3.47	3.92	3.85	1.78	
Standard Deviation	1.00	1.00	1.01	0.99	1.00	0.41	

N=101; \*\*p<.01 (2-tailed); H=Hypothesis; Yes=Supported

**Table 3: Mean, standard deviation and correlations of the motivation factors, satisfaction and retention**

The hypotheses were then examined by means of the Pearson correlation. The four motivation factors of service quality ( $\rho=0.907$ ,  $p<.01$ ), socialization ( $\rho=0.739$ ,  $p<.01$ ), relaxation and escape ( $\rho=0.776$ ,  $p<.01$ ), and novelty exploration ( $\rho=0.895$ ,  $p<.01$ ) all found to be positively correlated with satisfaction. These supported hypotheses 1 to 4. Amongst which, service quality has the strongest correlation with satisfaction. This implied that service quality is deemed most influential to determine the satisfaction of the tourists in art tourism. Likewise, the satisfaction of tourist is positively correlated with their retention to revisit at ( $\rho=0.630$ ,  $p<.01$ ).

To test the model, multiple regression using the stepwise method was applied to examine the association between the predictor variables of motivation factors and the outcome of tourist satisfaction. The stepwise model was used to determine the predictor variables that should be

included in the regression model. As demonstrated in Table 3, the final model is significant (F=340.7, p<.01) and explained 87.2% of the variance on satisfaction (adjusted R<sup>2</sup>=0.872), with two predictor motivation factors of service quality and novelty exploration in the final model (2).

$$\text{Satisfaction} = 0.529 \text{ Service Quality} + 0.444 \text{ Novelty Exploration} + 0.201 \dots \dots \dots (2)$$

### 4.3 Regression analysis

Based on past literatures, the empirical model between motivation factors and satisfaction is illustrated as in (1).

$$\text{Satisfaction} = \text{Service Quality} + \text{Socialisation} + \text{Relaxation and escape} + \text{Novelty exploration} \dots (1)$$

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin - Watson
1	.907 <sup>a</sup>	0.823	0.822		0.823	461.670	1	99	0.000	
2	.935 <sup>b</sup>	0.874	0.872	0.35937	0.051	39.624	1	98	0.000	2.249

- a. Predictors: (Constant), Service Quality
- b. Predictors: (Constant), Service Quality, Novelty Exploration
- c. Dependent Variable: Satisfaction

**Table 4: Model Summary of the motivation factors and satisfaction**

The Durbin-Watson value is 2.249, which is below the threshold of 2.5 indicating there is no autocorrelation. The Durbin-Watson value ranged from 0 to 4, values that are closing to 0 indicates positive correlation, while those closing to 4 indicates negative correlation (Boef, 2004). The variance inflation factor (VIF) is reported at 3.818, well below the threshold of 10, which implied there is collinearity between the variables.

## 5. Discussion and Conclusion

### 5.1 Discussion and implications

From the results, it is found that from an event specific aspect, art event is most probable at providing the sense of relaxation and escape to the tourist, while satisfying their expectation of novelty exploration. This provides focal notions to the event organizers, when they should prioritize these two criteria in the design, content and marketing of the event. Concurrently, service quality is another crucial aspect that have to be considered. Service quality is found to have the strongest correlation with tourist satisfaction, good service quality can provide a memorable experience to the memory, as it acts as a value add to the core content of the event. Good service quality can satisfy the customer at spot and enrich their visiting experience. Nonetheless, the low revisit intention of satisfying visitors is a caveat that the content of the art event itself cannot generate the necessary elements to transform the satisfaction of the customers into the thought of retention. The richness of the event and how it should be

organized in a way that the experience should not terminate at the event itself but should transmute into a sense of expectation for future events of the type.

### 5.2 Conclusion

To conclude, Macau has a well-developed hotel industry from which the non-gaming industries can benefit from. One of the smartest arrangements of Art Macao was to hold exhibitions in tourist-intensive hotels to introduce and promote the brand-new event to the targeted market. Although the survey results showed that there were distinctive reviews at different exhibition locations, it seemed that the visitors understood that Art Macao was a new event and there was room for improvement. The competence of art tourism at the provision on a sense of relaxation and escape must be appropriately used to motivate and attract the tourists. The opportunity to provide novelty exploration was another strength of art tourism event. Organizers should consider how to fully intermingle local culture and art into an art event that could allow tourists to enrich their knowledge while satisfying their expectation on novelty exploration. However, the arrangement of the art event itself should not be disregarded, as that will hinder the retention of the tourist if not properly managed. The thematic types of Art Macao should also be studied to increase the appeal of art tourism events to regional and international audiences.

### 5.3 Limitation of this study and suggestions for future study

In regard to the research structure, this paper included a relatively small sample size with only 101 valid respondents and focusing on one single art event. Only post survey data has been collected when a comparison with the pre-survey perception probably can provide more thoughtful information. To address the limitation of current research, future research is suggested to expand the sample size and researchers can investigate in more than one art event. It is also recommended to look for factors that affect the retention of tourists for art events.

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## **Sustainable tourism development in the traditional craft village festival in Hue**

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### **Abstract:**

Festival tourism is one of the most prominent forms of tourism in recent years. The sustainable development of festive tourism has become a concern of numerous researchers. Standing as a visitor's perspective on the factors affecting the sustainable tourism development of the traditional craft village festival in Hue, a study was conducted. With the interview based on the questionnaire using the Likert scale for 127 visitors, primary data were collected. Combined with information from secondary data, SWOT analysis was made to point out the strengths and weaknesses; opportunities, and threats of the Festival activities. Research results show that the traditional craft village festival in Hue is a potential festival tourism activity that brings many benefits to the locality. In the process of organizing, according to the visitor's perception, the six factors related to the sustainable development of festival tourism are not much different. However, the maximum benefits for cultural heritage factors have the lowest value. With the SWOT analysis, solutions have been proposed to improve the sustainable development of tourism in the traditional craft village festival in Hue.

**Keywords:** Festival in Hue, Festival tourism, Sustainable tourism development.

### **1. Introduction**

The festival is the spirit of a long and persistent cultural process. The values of history, customs, literature, art, humanities crystallized throughout history are also clearly shown in the festival (Mackellar, J., 2010; Shin, H., 2013).

Festival tourism has grown in recent decades and has been gaining popularity lately. Thousands of festivals take place worldwide each year (Yardimci, S., 2007). Tourists come to the festival to satisfy their religious, spiritual, and entertainment needs. It may also be the need to interact, learn, and show solidarity; contribute to improving the cultural life of the community (Quinn, B., 2011). Festival tourism promotes the tourism development of a locality and a country and promotes the economic development of the relevant industries, through system planning, development, and use of cultural traditions to conservative local uniqueness, ethnic customs, and enhance the specific industries (Formica, S. 2012).

When the festival tourism develops, besides economic values, cultural and social values are often noticed. However, it is not possible to neglect the environmental issues arising during the exploitation of festive activities for tourism (Donald Getz, 2009). In this case, the sustainable development of festive tourism is the content that receives much attention, considering the full range of economic, cultural, social, and environmental factors (Diane O'Sullivan & Marion J. Jackson, 2002; Donald Getz, 2009). When analyzing the sustainability of holiday tourism, one of the objects that need to receive attention is visitors. Visitors' appreciation of the festival's sustainability factors, as well as their participation in the festival sustainability process, are important issues in the process of improving the festival's exploitation process towards sustainable development targets (M. van Niekerk & WJL Coetzee, 2011).

The traditional craft village festival in Hue is one of the typical festivals exploited for tourism. To assess the sustainability of tourism development of this Festival, the study was conducted with three main objectives: (1) An overview of the traditional trade village Festival in Hue; (2) assess the factors for sustainable tourism development based on visitor perspectives; (3) SWOT analysis of the traditional craft village festival in Hue, thereby making recommendations for sustainable tourism development.

## **2. Literature Review**

### *2.1 Social network*

Currently, there have not been many researches as well as studies to be done on the traditional craft village festival in Hue. In fact, the festival is not really known to many tourists, when it comes to festival tourism in Hue, visitors often think of Hue Festival immediately because of its scale and attractiveness. Therefore, we can consider studies related to Hue Festival to draw lessons learned to develop the traditional craft village festival in Hue.

Some studies on the Hue Festival viewed from many different angles of the event. Vu Hoai Phuong with his master thesis in 2005 with the title "Assessment of economic impacts of Festival Hue for hotels and restaurants in Hue city" has evaluated the economic efficiency this event brought to local tourism businesses, "Hue Festival Assessment Report- Cultural integration and development story" of the Center for Cultural Research, Support and Development published in 2009, approached Hue Festival from a different angle. Considering the previous research works, we can realize that there are still a number of issues that have not been exploited and studied such as: Researching the impact of the Hue Festival on factors related to ancient architecture, the historic, cultural, spiritual, and material life of Hue residents; Research on sustainable development of Hue Festival tourism; Research on sustainable investment methods for Hue Festival,...

### *2.2 Conceptualization*

#### *2.2.1 Festival tourism*

Festival tourism should be considered as a separate type of tourism, because this type of tourism uses a specific tourism asset, specifically the festival, to attract tourists. Festivals should be understood as organized events, representing different cultures of people, during the festival, people gather to experience the activities of the festival without caring about the distinct their work (except for business and sports meetings) (Cudny, W., 2013).

#### *2.2.2 Sustainable development of festival tourism*

Festival tourism, in the process of being conducted, creates impacts on many factors. Depending on the interest and impact of the festival tourism, these effects could be negative or positive for cultural, social, economic, and environmental factors at the venue where hold the festival tourism ( Table 1).

**Table 1.** The main functions and dysfunctions of festival tourism in the context of tourist space elements

<b>Tourist space element</b>	<b>Festival tourism functions</b>	<b>Festival tourism dysfunctions</b>
Natural heritage	Promote the formation of environmental protection activities as well as sustainable development	Polluting the environment or negatively affecting the natural environment For outdoor festivals, green areas may be affected
Cultural heritage	Increase visitor interest in heritage facility materials, such as museums or galleries. Developing local and regional cultural heritage. Allow tourists to be exposed to cultural heritage.	Lose the authenticity of local and regional heritage by adjusting to the needs of tourists. This leads to the misrepresentation of cultural heritage, due to the desirable design to meet tourists' expectations.
Infrastructure	Building tourism infrastructure related to culture and entertainment. The development of tourism-related infrastructure for purpose Meet the needs of festival travelers.	Faster degradation of infrastructure elements due to exploitation with high intensity and frequency.
Man as a subject of tourist space	Create space for tourists to explore their free time in an interesting and useful way. A place to create and develop social networks. Promote the concept of multiculturalism, creating a space for ethnic minority groups to express the values of their communities. Creating jobs for the local residents in the festival services sector	There may be conflicts between tourists and local residents. Opposition of a part of residents in the festival area. Substance abuse, criminals and riots occurred during the festival.

*Source: Adapting from WŁODARCZYK, B. (2009)*

### 3. Methodology

#### 3.1 The method of data collection

To ensure the inheritance and novelty of the research content, the study data collection was carried out on both types of data. Secondary data collected helped the authors to approach the research targets in a general way by referring to the results that exist from the previous studies. Meanwhile, the collection of primary data brought up-to-date information, as well as go directly into the research content of the paper.

- Secondary data: The data of natural characteristics, socio-economic situation, number of visitors ... of Hue traditional trade festival were aggregated through documents from documents, reports of the People's Committee and cultural information office of Hue City. Moreover, the relevant documents from the tourism bureau, tourism industry ... and statistical documents from the Internet, books, magazines were collected.

- Primary data: Conducting visitor interviews from existing questionnaires by sampling method (random sampling through the distribution of random questionnaires to tourists).

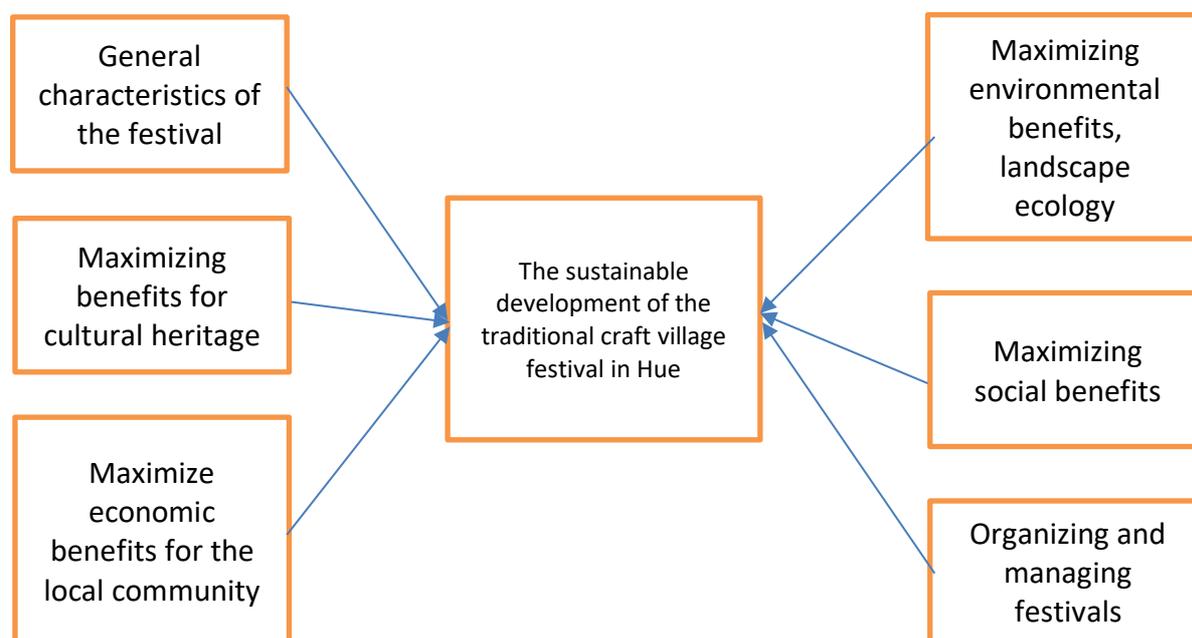
#### 3.2 Methods of analysis and data processing

The collected data were processed using SPSS 20. The study used the Likert scale to evaluate visitor agreement on factors affecting the sustainable tourism development of Hue traditional

craft village festival. SWOT analysis was also applied to assess the strengths and weaknesses; Opportunities and Threats in the process of organizing the festival. From there, put forward measures to improve festival tourism activities towards sustainable development.

### 3.3 Research models

To assess the level of sustainable development of the traditional craft village festival in Hue, the authors chose to evaluate through 6 criteria. These are the general characteristics of the festival; maximizing benefits for cultural heritage; maximize economic benefits for the local community; maximizing environmental benefits, landscape ecology; maximizing social benefits; organizing, and managing festivals.



**Figure 1.** Criteria for evaluating sustainable development of festival tourism

## 4. Results

### 4.1 Overview of the traditional craft village festival in Hue

With the policy of restoring and developing traditional crafts and villages, contributing to promoting economic development and diversifying products for tourism, since 2005, the traditional craft village festival in Hue has been the Hue City People's Committee held in odd years has become a convergence of artists and craft villages typical of Thua Thien Hue province and many localities across the country.

Over 8 traditional career festivals have achieved certain achievements, typically with attractive activities, the traditional trade festival has attracted a lot of tourists as well as local people to participate. Below is Table 2: the number of tourist arrival participating in the traditional craft village festival in Hue:

**Table 2.** The number of tourist arrival to the traditional craft village festival in Hue

No.	Year	Time	Total tourist arrival	International	Domestic
1	2005	15 – 17/7	11,898	4,374	7,615
2	2007	8 – 10/6	42,621	10,330	32,291
3	2009	12 – 14/6	44,240	9,441	32,149
4	2011	30/4 – 3/5	49,071	14,171	34,149
5	2013	27/4 – 3/5	69,981	18,242	51,467
6	2015	28/4 – 3/5	110,000	22,405	87,595
7	2017	28/4 – 2/5	170,000	33,000	63,000
8	2019	26/4 – 2/5	400,000	-	-

*Source: Cultural information office of Hue City, 2019*

It can be seen that the time for the organization of the traditional vocational festivals has been significantly increased, compared with the first year held, particularly in 2005, it was only held within 3 days, however, by 2019, it has increased to 7 days. Therefore, the number of tourists to Hue in the Festival is also significantly increased. This is a good signal for the tourism industry in Thua Thien Hue Province and is a driving force to promote the development of traditional craft festivals.

#### *4.2 Tourists' evaluation of sustainable tourism development of the traditional craft village festival in Hue*

##### *4.2.1. Basic information of tourists surveyed*

The interviewees of the study are that tourists directly participate in the traditional craft village festival in Hue. During the study, the authors conducted a survey of 140 guests, but only collected 127 votes to meet the requirements and complete information. Therefore, the authors decided to choose 127 questionnaires. Through a preliminary assessment of tourists' characteristics at the traditional craft village festival in Hue, specifically as follows:

**Table 3.** Characteristics of interviewees

Characteristics	Classification	Frequency	%
Sex	Male	56	44.1
	Female	71	55.9
	Total	127	100
Age	Under 18	11	8.7
	18 – 35	43	33.9
	35 – 60	51	40.2
	Over 60	22	17.3
	Total	127	100

Occupation	Student	15	11.8
	Officer	48	37.8
	businessman	33	26
	Retired	28	22
	Other	3	2.4
	Total	127	100
Monthly income (USD)	Under 128	7	5.5
	128 – 214	40	31.5
	214 – 429	55	43.3
	Over 429	25	19.7
	Total	127	100
Literacy	highschool	30	23.6
	Under graduate	44	34.6
	graduate	53	41.7
	Total	127	100
permanent address	Northern of Vietnam	45	35.4
	Central of Vietnam	59	46.5
	Southern of Vietnam	23	18.1
	Total	127	100

*Source: Results of analyzing survey data, 2019*

#### *4.2.2 Factors affecting the sustainable tourism development of the traditional craft village festival in Hue*

Factors affecting the sustainable development of festival tourism include:

- General characteristics of the festival: Including elements such as time and festival schedule; content of the festival; promotional information and accompanying services; quality festive service team.

- Maximizing benefits for the cultural heritage: Identify traditional cultural identities of ethnic minorities; promoting and preserving festivals that are valuable materials for tourism development in the province, in recent years, all levels and branches have paid attention to preserving and promoting the cultural values and indigenous festivals associated with travel activities.

- Maximizing economic benefits for local communities: The economy has a great influence on the preservation and promotion of cultural values, cultural heritage has always been a source of stimulation for local economic development, especially through tourism. The economy helps improve the lives of local people, improves the quality of life, and creates many opportunities for the development of tourism services.

- Maximizing social benefits: Social factors are one of the factors affecting the sustainable development of traditional craft tourism festivals, guarantee criteria for festive security, and

tourists' safety, improve the quality of public services in the festival area, create many entertainment opportunities to impress and attract tourists.

- Maximizing environmental benefits, the landscape ecology: The tourism industry is most affected by climate change, ecological environment. Therefore, tourism and the environment are inseparable parts. If the environment is good, tourism will develop sustainably.

- Organizing and managing festivals: Organizing and managing festivals are extremely important, greatly affecting the success of the Festival. To ensure a successful Festival, the organization needs to be focused, implemented carefully, the festival management must be really professional and tight to avoid risk factors affected the Festival.

#### 4.2.3 Travelers' evaluation of factors affecting the sustainable tourism development of the traditional craft village festival in Hue

**Table 4.** Average value of the factors

Factor	Maximize economic benefits for local communities	Maximize benefits for the cultural heritage	Maximize social benefits	Organizing and managing festivals	General characteristics of the festival	Maximize environmental benefits, the landscape ecology
N	127	127	127	127	127	113
Average value	3.5571	3.4702	3.5602	3.5827	3.5287	3.5748

*Source: Results of analyzing survey data, 2019*

*Note: Likert scale: 1 = Strongly disagree, 5 = Strongly agree*

*Distance value = (Maximum - Minimum) / n = (5 - 1) / 5 = 0.8*

*Mean value Meaning*

- 1.00 - 1.80: Strongly disagree / Strongly disagree / Very unimportant
- 1.81 - 2.60: Disagree / Disagree / Not important
- 2.61 - 3.40: No comments / Medium
- 3.41 - 4.20: Agree / Agree / Important
- 4.21 - 5.00: Strongly agree / Strongly agree / Very important

In Table 4, between the factors, there is not much difference in the average value. Although the level of tourists' evaluation of the factors is not high, they are all within the scope of the agreement, except the factor "Maximize benefits for cultural heritage" is rated lowest but still in the normal range (Means = 3.47). From that, tourists quite agree on the common characteristics; Maximize benefits for cultural heritage; Maximize economic benefits for the local community; Maximize environmental benefits, landscape ecology; Organization and management; Festival management need to preserve and promote the factors above to bring greater satisfaction to tourists. In addition, tourists assess that there is no sustainable development with the element of maximizing benefits for cultural heritage. Therefore, the

Management Board of Festival should have policies to improve cultural exchanges, exchange of village products, and more culturally appropriate activities for tourists.

#### *4.3 SWOT matrix on sustainable tourism development of the traditional craft village festival in Hue*

##### *4.3.1 Strength*

**Tourism human resources:** In Thua Thien Hue province, there are now many universities, colleges, or specialized vocational training centers on tourism, annually supplying and supplementing a large number of tourism human resources for Thua Thien Hue province in particular and the Central region in general. Abundant human resources ready to meet the needs of tourism.

**Infrastructure for tourism:** Hue has convenient infrastructure and transportation for tourism development including air routes (Phu Bai international airport), roads (Hai Van pass tunnel, National Highway 1A, Hong Van-Cu Tai border gate, A Dot-Ta Vang border gate, railways (North-South railway line) and waterways (Chan May deep-sea port and Thuan An seaport).

**Tourism facilities:** Currently, Hue has many hotels, resorts of medium and large scale, meeting the standards of international and domestic tourists. Travel agencies and companies have gradually formed more in the trend of tourism development. Accommodation and catering services are becoming more and more invested.

**Favorable geographical location:** Located on the "Central Heritage Road" with a lot of natural resources, combined with traditional cultural factors make Hue one of the five tourist centers of the country. Diversified ecosystem, rich and unique appearance creates an attractive space, built in the space of marvelous natural landscapes from Ngu Binh mountain, Thien An hill - Vong Canh, the city meets all types topography: hills, plains, rivers, and lakes, forming an ideal cultural urban natural landscape space to organize various types of festivals and sports activities.

**Regional cultural identity:** The ancient capital of Hue has a unique cultural heritage with a complex of Hue imperial architecture, Hue people, and impressive cultural features, attractive features of Hue cuisine. Traditional cultural elements expressed in festivals, traditional village products, etc. are now converged at the traditional craft village festival in Hue.

##### *4.3.2 Weakness*

There is no long-term plan to guide the vision for the next thematic festivals.

Propaganda and promotion of traditional craft festivals have not been closely linked with tourism promotion activities at home and abroad.

The organization is not comprehensive, still confused, and confused in the implementation of plans, program development, and limited funding has had a significant impact on the results of the organization of operational contents, to the festival has expanded its space, there are still some technical errors in some shows.

The coordination between members of the Organizing Committee and agencies of provinces and cities in the process of direction and organization is not really coherent.

At the traditional trade festival, there have been exchanges and trade exchanges between artisans, craft villages, and tourists, products from craft villages introduced at the traditional craft festival are highly appreciated by the public. However, the economic activity in the

traditional trade festival is still not limited, not meeting the needs of tourists, because the craft villages and vocational facilities have not estimated the number of visitors this time is too large, although the organizers have had a predetermined orientation.

The coordination between the Organizing Committee with the economic sectors and businesses in exploiting traditional craft festival activities, strengthening, building tours, and creating new tourism products to meet the needs of tourists. Guests have been set but the results are not high. The consolidation and development of the profession as well as the promotion of Nguyen Dinh Chieu walking route after the festival have not been focused on implementing to make more positive changes to promote the fruits of the traditional trade festival.

#### *4.3.3 Opportunity*

Although the organization level is only the People's Committee of Hue City, the stature of the traditional craft village festival in Hue is beyond the borders of the locality, gradually affirming the position of a leading and typical festival in the country. Therefore, the traditional craft village festival in Hue is known more and more by domestic and foreign tourists, this will be an opportunity for the Festival to further promote its attractive activities and programs.

By participating in traditional craft festivals, many craft villages in the province and in the province have really revived and tend to develop again. This is a key factor for further development of the Hue traditional craft festival. The festival also gradually towards socialization, where there is not only material sponsorship but also the response of artisans in and outside the province. Many artisans see the traditional craft village festival in Hue as an opportunity for them to show their talents, introduce their most elite products in their career creation process to the public as well as to their colleagues.

At the conference to collect ideas on the organization of the traditional craft village festival in Hue, many researchers, Hue cultural experts were very happy about extending the time to organize the traditional craft village festival in Hue 2019 which is 2 days longer than the Festival in 2017 (takes place in 7 days from April 26 to May 2, 2019) because it takes time long enough for visitors to experience, the artisans introduce their skills and enthusiastic products. Not only that, but this is also an opportunity to improve economic efficiency through the introduction of trade villages and more products to tourists.

The attention of tourists combined with the right and serious investment will promote the development of the traditional craft village festival in Hue, thereby promoting more widely to visitors.

#### *4.3.4 Threats*

In addition to the success beyond expectations, the traditional craft village festival in Hue has also encountered difficulties and challenges in developing the traditional trade festival.

The programs and activities taking place in traditional vocational festivals are not really attractive, promoting all cultural values to be able to attract tourists and unable to meet the inherent potential. Therefore, a major challenge for the traditional craft village festival in Hue is how to build a reasonable, attractive program, engaging activities, attracting visitors to participate.

Human resources serving and managing tourism have not really met the requirements to develop the traditional trade festival more. The management is not really good, there are still many levels.

Infrastructure cannot fully meet the needs to be able to further develop tourism.

In addition to creating conditions for artisans and traditional craft products to have the opportunity to promote the quintessence of the craft villages, many artisans and traditional villages gradually fade away. This has affected many diverse industries, products and quintessence from traditional villages. It will be a big challenge for traditional craft festivals when artisans, traditional village products are important subjects contributing to the success of festivals.

In recent years, cities and provinces in Vietnam have gradually formed many tourist festivals. This has a significant impact on the development of the traditional craft village festival in Hue as the competition is getting bigger. Therefore, choosing the time to organize and build an attractive and novel the traditional craft village festival in Hue and follow the tastes of tourists will greatly contribute to sustainable development.

#### *4.3.5 Solutions to improve the sustainable tourism development of the traditional craft village festival in Hue*

##### a) Solution on organization and management

- Socializing Hue traditional craft festival, take initiative in collecting revenue from investors, businesses participating in advertising and selling to have a fixed income, in return, they must give them the privilege of communication and promotion at certain points. Unlike the current situation, it must be passive waiting for the state budget.

- Assigning clear responsibilities to each agency, industry, event organization, business, and individuals that are right and competent to avoid duplication of work as well as an overview of the advantages, shortcomings of each part to offer corrective measures.

##### b) Solutions for developing Hue traditional craft tourism products

- Combining with travel business units, design tourism programs to combine with participating in traditional vocational Festival activities. In addition, the incentives, exclusive service rates should apply for travel agencies to increase the number of tourists coming to the traditional craft festival.

##### c) Solutions on investment, construction of technical facilities

- Finding sources of funding from organizations, promoting the improvement of infrastructure for the traditional craft village festival in Hue. Typically, a convenient transport infrastructure system, public transport means should be deployed on the streets for more convenient travel, limiting traffic congestion.

##### d) Solutions for developing tourism human resources

- Regularly recruiting experts and experts with domestic and international experience to supplement senior management resources.

- Establishing a regular and intensive training environment for the festival. Suggest to coordinate with colleges, universities in the country, and internationally to open training courses, professional training for the festival.

##### e) Solutions for communication and promotion of Hue traditional craft festival

- Upgrading the brochures on information about Hue Festival

- Publication of leaflets to distribute advertising leaflets to people in the province, outside the province and abroad.

- Putting up posters and panels to advertise the events in the province, foreign provinces, foreign countries, especially new markets, potential markets.

## **5. Discussion and Conclusion**

### *5.1 Discussion and implications*

This paper discussed the tourism sustainability of the traditional craft village festival in Hue based on visitor reviews. Six criteria related to characteristics of the festival; benefits for cultural heritage; economic benefits for the local community; environmental benefits, landscape ecology; social benefits; and organizing and managing festivals have been used to analyze the sustainability of this type of tourism.

After analyzing with six criteria of sustainable tourism development, the analysis method using the SWOT matrix continued to be used to indicate what has been achieved and what needs to be changed, as well as how to improve Hue craft village festival closer to the target of sustainable development.

### *5.2 Conclusion*

The traditional craft village festival in Hue is an attractive tourist activity, bringing visitors many unique cultural values. Thanks to the interest in the program content, the Festival has increasingly attracted many domestic and foreign tourists to visit and experience.

Regarding the factors affecting the sustainable development of tourism in traditional craft village festivals, tourists said that the factor of maximizing economic benefits for the local community was highly appreciated by tourists. It shows that Maximizing economic benefits for the local community at the festival is very popular with tourists, respected and appreciated by tourists. The extent to which a traveler 's assessment of the maximum benefit for cultural heritage factors is low.

From visitor reviews combined with SWOT analysis, measures to improve the sustainable development of festival tourism have been proposed. In particular, focus on the content related to the organization and management; developing festival tourism products; improve infrastructure; human resource development; and introduce and promote tourism products festival traditional village.

### *5.3 Limitations of this study and suggestions for future study*

Stakeholders involved in sustainable tourism development research are diverse. Since research resources and research time were limited, the paper was made based on visitor reviews only. In the future, research will continue to be conducted based on the assessment from the perspective of other stakeholders such as local people; local government; tourism businesses; and tourism experts.

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## **The adoption of augmented reality technologies in hotels: From the managers' perception**

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### **Abstract:**

Current studies indicated that Augmented Reality technology can enhance tourists' experience in museums and theme parks. Despite the potential benefits of creating a better stay for the customers, there are only a handful of hotels in the world have implemented the technology. This paper aims to explore senior management's perception to the potential adoption of AR technologies in their establishments. Qualitative interviews were conducted with four senior managers in Hong Kong, content analysis was adopted, and four themes were derived. Senior management's knowledge and interest was found to be the most critical factor that influence the final decision of technology adoption.

**Keywords:** AR technology, management perception, technology adoption, hotel

### **1. Introduction**

Technology is evolving extremely fast, from desktop computer to mobile phones; from information provider to an Ultra-Intelligent Electronic Agent. The invention of mobile phone, brings convenience and stay connected with people around the world. According to Tan, Lee, Lin & Ooi (2017), the creation of application of mobile phone enable consumers to access to a variety of services and resources, such as social networking, news and etc. (Tan, Lee, Lin, & Ooi, 2017) These technologies may bring not only convenience but to enhance the consumers' experience.

The concept of Virtual Reality (VR) was established in late 1980s, "*as a description of where computers might take us as a society, it was both radical and yet strangely attainable*" (Hunt, 2014, p. 98). The military and medical sectors heavily use this technology. It allows them to train, practice, and perform operations or operate unfamiliar environment without dangers. In the commercial section, such as Nintendo's WiiMote and Virtual Boy, as gaming devices for entrainment (Hunt, 2014). With the evolvement of VR, Argument Reality (AR) has bought the consumers more convenience by using their own mobile phone as a device.

Fox (2012) defines "*Argument Reality, an emerging type of digital content that combines real imagery with virtual 3D digital graphics and /or text, is likely to alter the IT industry*" (Kim & Hyun, 2016, p. 1). In other words, it provides a real-time and real-environment by addition virtual digital graphics to it. The difference between AR and VR is that AR presents the reality or real-world objects and VR is based on the imitation or man-made settings. Currently, it has been using by the education, healthcare, commerce, sports, and entrainment, design, and tourism industries. According to Alkhamisi & Monowar (2013), the AR technology has bought a total of US\$5.2 billion in 2017 (Kim & Hyun, 2016).

This AR application take the advance of using the installed camera lens in the smartphones as a device. The smartphone works with the location-based service or marker-based, such as GPS, to detect the device and user's location.

*“The smartphone stores image-based data from the camera into a database, allowing it to recognize what the camera is looking at (i.e., visible markers placed on objects in the real environment). The AR systems pulls the digital data from web-based sources (e.g., Google, Twitter, Flickr, SNS applications) to overlay onto the markers that the camera is tracking. As a result, the user has more digitalized virtual information that reality provides”*(Kim & Hyun, 2016, p. 1)

AR is also at large in the hospitality field, heritage sites and museums have adopted the technology, theme parks such as Universal Studio and Disney has been researching on adding VR/AR into their theme parks as they believed AR technologies can enhance their crafted attractions (Singletary, 2017). Lately, there are more and more examples of hotels adopting the latest technologies in their service delivery process, and Henna hotel in Tokyo has even “employed” more robots than human in their outlet, but up-to-date, there are comparatively fewer examples of hotels adopting AR technologies into their daily operations. On the other hand, Yovcheva (2013) suggested adopting AR does not automatically boost positive experience, therefore, the aim of this research is to have a better understanding how the hoteliers perceive the possibility of adopting AR technologies in hotel setting.

There are number of research that are foundational in the study of acceptance of latest and established technology. For instance, a large number of researchers have adopted the technology acceptance model (TAM) to identify the acceptance of technology innovations within their field of study (Tom Dieck, M., Jung, T., Kim, W., & Moon, Y. (2017). Researchers applied TAM to various industries, including hospitality (Kang et al., 2011; Kim et al., 2010; Ayeh et al., 2013a; Parra-Lopez et al., 2011); however, those are mainly focus on user's perspective and there is a gap from the view of suppliers. To address these concerns, researchers will focus on internal factors from hotel management of apply augmented reality in property.

RQ 1: Identify what are the perceptions towards adoption of AR technology in hotels.

RQ 2: Examine other external factors that may hinder managers' choice of AR technology in hotels

## **2. Literature Review**

The AR application with the mobile technologies is to enhance the tourists' experience. According to Kounavis et al (2012), there were experimental research on the hindered VR/AR technology back in 1960s, however they did not go into the details of it (Tom Dieck & Jung, 2018). Many disciplines have research on VR/AR technologies including health, education, and retailing and consumer services. In Health disciplines, they are more focusing on VR which was used to simulate the experience in a controlled setting for clinical improvement of a treatment (Yung & Khoo-Lattimore, 2017). In terms of education, the studies are more focused on improving student's motivation and interaction and enjoyment of learning (Yung & Khoo-Lattimore, 2017). For retailing or consumer service sector, it is the geolocation and personalization and tailor-made marketing features for gaining business and higher intention to purchase their products/ services (Yung & Khoo-Lattimore, 2017).

### *2.1 AR in Tourism*

Today, the tourism industries have used the development of AR, such as museums, historical sites and attractions. Destinations or buildings that are recognized by UNESCO World Heritage Sites have become one of the popular tourists' attractions. This urban heritage is known as subcategory of tourism (Tom Dieck & Jung, 2018). However, June and Han (2014), identified the negative use of space in these urban heritage destinations and suggested to use AR as an ideal solution. Garau (2014) commented that by providing the attraction information through three-dimension content available for tourists' convenience and knowledge learning (Tom Dieck & Jung, 2018). In near future, this dynamic and interactive experience will create a new type of cultural tourism. Using this attentiveness, it will bring tourists to explore the destinations or attractions in a new level of experience enhancement, as well as a way to educate tourists and appreciation of the historical culture.

Researchers, Fino, Marin-Gutierrez, Fernandex & Davara (2013), they introduced the implementation of Augmented Reality (AR) into a World Heritage city of San Cristobal de La Laguna, in Spain, as a tourist guide. Their design required to use the application of AR and QR Codes (also known as two-dimensional barcode) so the tourists can get access to both textual and multimedia information (Fino, Martín-Gutiérrez, Fernández, & Davara, 2013). This has not only increase the knowledge but also bring the history to today's world.

The tourism industry has already adopted these VR/AR. Mesaros et al. (2016) discussed the AR experience which is delivered through smartphones for museums and attractions and Dieck et al. (2016) concerned on the acceptances of it (Yung & Khoo-Lattimore, 2017). Tung & Khoo (2017) have done an in-depth analysis of the VR and AR technology over the past decades. Among all the articles related to this topic, they have identified the challenges of technology awareness; usability; time requirement to learn; and the acceptance of it.

### *2.2 AR in Tourists' perspective*

Anuar (2013) found that because of tourists' interaction with AR application, they are able to gain more knowledge of the destinations, hence this will bring more enjoyment from a new perspective. Some felt of excitement as like they got-away, even they were in familiar surroundings. The overlaid graphical annotations over reality facilitated tourism experience. Majority of the research articles mentioned how AR enhanced the tourists' experience, as well as the advantages and effectiveness of AR towards the destinations/ attractions. Chung, Han, & Joun (2015) rose that a user's readiness to accept new technology is an important, particularly in the usage of this state-of-art technology such as AR. One of the key elements of using AR is the esthetic response caused by the synthesis of its virtual objects in the real world. People use AR is necessarily to accept visual appeal as a stimulus factors influencing usefulness of the technology. In short, optimism and innovativeness are enablers of new technology use, whereas discomfort and insecurity are inhibitors (Parasuraman, 2000). People have both positive and negative perceptions about technology; the general belief continuum for a technology ranged from strongly positive to a strongly negative attitude toward technology (Lin et al., 2007). There were vast literatures on how AR can influence tourist experience, how tourist perceived AR and how technology impact of the development of tourism attraction, but there are limited research focusing on the understanding of the managers' perceptions of the adoption of such technologies in hotel and tourism industry, this study will focus on exploring the possibility of adopting AR in the hotel context.

### 2.3 AR in Heritage, Museums, Theme Parks

According to Fritz, Susperregui & Linaza (2005), AR technologies are gaining importance in the virtual rebuilding of historical monuments, helping curators, archaeologists or historical reproduce on-site historical experiences. Casella and Coelho (2013) commented that AR mobile applications are the useful technologies for understanding the cultural tourism. Since it is getting popular, a variety of AR unitization examples in heritage can be found. Han, Jung & Gibson (2013) tried to understand urban heritage tourism AR user requirements such as accessing destination information, other's user reviews, design interfaces, multi-lingual aspects, and maps. Chung, Han & Joun (2015) investigated important factors for using AR at heritage destinations and how those factors influence visitors' beliefs, attitudes, AR usage intention and destination visit intention.

Since AR technologies are relatively new, most of the previous literatures are more focusing on the research heritages sites including scholars Chung et al. (2015), Fino et al. (2013); Tom Dieck & Jung (2018). Furthermore, these scholars, Lu et al. (2005); Tan et al. (2017); Tom Dieck & Jung (2018) were using TAM (Technology Acceptance Model) and later these scholars used a modified version of TAM, known as TRA (Theory of Reasoned Action) to study about the acceptance of AR technologies. These TAM or TRA models are mostly used to identify the external factors (such as Information quality, System quality, Cost of use...); Perceptions (usefulness, ease of use...); Attitude (positive or negative); and Behavior (related intention to use or recommendation) (Kim & Hyun, 2016; Tom Dieck & Jung, 2018). There is limited research on AR particularly in hotels, therefore there is a potential area to explore. Furthermore, according to Le & Arcodia (2018) argues that "due to the tourism characteristics of high uncertainty and high financial and personal risks, risk perception and safety concerns have become a central issue in the complex travel decision-making process" (Le & Arcodia, 2018, p.106). Thus, this study aims to address the gap in AR adoption qualitatively focusing on the hoteliers' perception.

### 2.4 AR in Hotel context

Augmented reality has emerged as an important concept within the hospitality industry in recent years, the technology backed augmented reality marketing in tourism and hospitality sector appear as a theme of a purposeful research. Literally, augmented reality is the forward step and variation of virtual reality, where consumers can experience real world with the support of graphical imposition and relevant applications (Azuma, 1997). Augmented reality is believed to be helping individuals or consumers to enjoy more freedom in searching, viewing, selecting and purchasing products or services. Thus technological infrastructures and its use in tourism and hospitality will aid in designing effective marketing strategies in the future (Daim, et al., 2012).

Johnson (2014) believes that expectedly AR technology is expanding in areas of AR contacts, eye tracking, education or even facial recognition. Augmented reality is a form of digital marketing while, augmented reality in marketing is featured as, 'Augmented reality "augments" the viewer's surroundings with new digital imagery and information. Augmented reality in and of itself usually isn't the goal of any marketing campaign; the goal is to use AR in such a way that it creates an interactive experience, engaging the customer through a rich and rewarding experience' (Vong, 2014).

The trends and impacts of AR have been increasing in associated areas of tourism and hospitality. Accordingly to Hotels.com's wacky, the 3D augmented reality virtualvacay.com project is regarded as a pioneering ARM initiative in tourism and hospitality. The traffic of

Hotels.com soared to 26% with 36% increased booking, mainly due to launch of the Virtual Vacation micro-site and few related factors. In addition, the loyalty program registration also increased by 32% as a result of AR (USA Travel Today, 2014).

Best Western Hotels & Resorts has been a willing participant in the implementation of both augmented and virtual reality devices on both the guest facing side of the business as well as back of house. Dorothy Dowling, SVP and chief marketing officer at Best Western, said the company first partnered with Disney years ago to develop an augmented reality program for younger guests, and in 2015 came out with a new AR experience paired with the Disney Movie Experience (Hotel management, 2016).

Marcus Hotels & Resorts reported that its flagship property, The Pfister Hotel in Milwaukee, Wis. will be the first hotel in the U.S. to offer an augmented reality (AR) tour available to guests. According to a company release, to be launched during Milwaukee's Gallery Night, participants will be invited to download an AR application from their smartphone that will prompt them on a guided tour of the hotel's extensive art collection (Marcus Hotels & Resort, 2014).

### **3. Methodology**

The application of AR in hotels is a relatively new concept in the hospitality literature, little is known on this topic, a qualitative approach was employed for data collection to generate deeper understanding of complicated behavior and also uncover the feelings and thoughts which may even be beyond their awareness (Kwortnik, 2003) and to discover the not-so-obvious perspectives that are remote to academics (Walsh, 2003). Semi-structured in-depth interviews were conducted to accumulate useful insights from hotel managers (Guion et. al, 2001), researchers are believed to be able to learn about organizational culture from different interviewees' point of view by utilization the ethnographic method of questioning (Qu & Dumay, 2011).

The quality of the implementation of interview and data analysis will be affected by the quality of the interview guide, a well-developed guide will enhance the credibility of the study (Kallio et al., 2016), the interviews had included a set of predetermined open-ended questions and subsequent probing questions emerging from the dialogue between the interviewees and interviewers informed (DiCicco-Bloom & Crabtree, 2006; Walsh, 2003) by recent research on the implementation of technologies in hotels to guide the conversations.

Participants in this study were recruited by purposive sampling, which is useful when a random sample inadequate to access the relevant cases (Furunes & Mykletun, 2007) and is suggested to be suitable for studies where researchers are interested in informants who are experts in the phenomenon (Blanford, 2013).

Hong Kong Tourism Board (HKTB) has classified the hotels in Hong Kong into three categories according to their Tariff classification system: "High Tariff A", "High Tariff B" and "Medium Tariff". The hotels were classified based on their location, facilities, staff to room ratio, business mix and achieved room rate. Four hotels from four different hotel groups, covering all three types of Tariff categories, were contacted by email to explain the purpose of the research, two hotel general managers, one director of sales and a group managing director/owner who are responsible for decision making process for their establishment agreed to be interviewed. Face-to-face interviews were conducted in their hotel offices with an average duration of 45 minutes to an hour each. The interviews conducted in Cantonese, were recorded, transcribed, and then translated to English.

**Table 1. Summary of interviewees**

<b>Interviewee</b>	<b>Position</b>	<b>Hotel Size</b>	<b>Tariff</b>
Respondent A	General Manager	559 rooms	High Tariff A
Respondent B	Director of Sales	453 rooms	High Tariff B
Respondent C	General Manager	524 rooms	High Tariff B
Respondent D	Managing Director/ Owner	48 rooms	Medium Tariff

Content analysis was used to reveal a collective understanding of buyers' perspective of the use of AR technologies on hotel sales and operations. The data analysis process involved two stages, in the first stage, two coders conducted data analysis independently and separately on the same set of information using an inductive approach, and different codebooks of themes were created and supported by narratives from the transcripts. To ensure the creditability of the data gathered, triangulation is used (Kvale, 1996), an independent researcher was assigned to verify are all the themes generated grounded in data and supported by sufficient evidence, all divergent opinions in coding were discussed and resolved to yield the final themes (Elo et al.,2014).

#### **4. Findings and Discussion**

Four themes were derived from the analyzing of data obtained from the interviews, the themes will be discussed in this section to explore and develop an understanding of the senior management's perception towards the adoption of AR in the hotel industry.

##### *4.1 Senior Management's Influence*

Knowledge and interest of the managers are found to be a critical issue to the decision of AR technology adoption in hotels. Failure to foresee the potential benefits of implementing AR technology, which may outweigh the possible problems and costs it may bring to the company was seen to be the sole reason for such decision. None of the respondents is aware of the current technologies that are using in other industries or other types of establishments in the hospitality field, such as museums and theme parks. All of them mentioned that they do not know much about the technology, do not know how can they make use of such technology and cannot estimate how AR technology can assist the advancement of their business, so they have never consider adding the new technology to their outlet. Personnel psychologists Morris and Ventakesh (2014) suggested older employees are less likely to have basic knowledge and skills of latest technological advancements due to associated psychological and sociological factors of ageing, which may further elevate their anxiety to technology adoption. Therefore, for senior managers who are generally older in age, may have a higher tendency of not adopting new technologies.

Senior management have different concerns as well when making a decision for their outlets. Respondents A and B mentioned that their hotel group has set strict corporate culture that they have to follow. Therefore, regional general managers may not bother suggesting headquarters to add any major implementations to the outlet themselves although the group have empowered them with certain authority to make decisions for their responsible outlets. Another concern for the regional general managers is the complexity of their corporate management structure, which may hinder the efficiency of penetration of new ideas to local branches. Hotels that are

physically smaller in size have other concerns as well; respondent D claimed that they do not have actual space to implement such technologies with the installments of different equipment to support the ideal effect. Most importantly, they do not want to keep a crowd gathering around a certain point of interest and create chaos in their small lobby.

Last but not least, senior management tend to have their own perception of the needs of their customers, which may or may not reflect the real picture, as according to the first gap identified in the SERVQUAL model, there are differences between customers' actual expectations and the managers' perceptions of their customers' expectations, managers do not really know what level of service quality their customers desire (Luk and Layton, 2002). None of the respondents mentioned that they think that their customers will need such technologies when consuming their products and services, the assumptions made was not supported by actual data from conducting surveys or market research on the area, but was purely from their own perceptions.

#### 4.2 Market Segmentation

Although AR technologies have been proved that it can enhance the experience of the tourist in a number of literatures, hotel managers may not see it the same way, due to the actual need of such technologies to their businesses. Different strategies will be employed for hotels targeting different market segments due to different needs of the customers.

For hotel D which mainly target budget customers, they may focus on minimizing operational costs by providing basic facilities so as to offer a competitive price for the customers. Therefore, adding AR technologies, on the contrary, will add on to the cost which will go against their corporate goals.

*“We are targeting customers who values competitive prices with basic facilities that satisfy guests' needs instead of luxury seekers, so going after the latest technology trends is not our corporate goals” (Respondent D)*

For hotels that are targeting business tourists, both respondents A and B believed that AR may not have any impact on increasing occupancy rate as most of the current room nights were sold and booked by corporate groups through a guaranteed contract rate, hotels being selected according to the corporate deals instead of personal wants. Besides, as AR technology at current is not too common in the business world, respondent A suggested business tourists favor other facilities more than AR technologies, such as Wi-Fi connection, convenience of having a working desk during their stay instead of the availability of AR technologies to enhance their experience in the hotel.

#### 4.3 Profitability

Most respondents believed that AR technology able to help to make hotel environment more enjoyable to spend time in. The research finding support prior literature that Augmented information systems not only merely provide valuable and crucial information about a tourist attraction or destination but also maximize their experience in their travels and offer entertainment opportunities as well (Kounavis et al, 2012). Respondent B shared that

*“integrated AR in different parts of the hotel may enrich guest experience in hotel. For example, some hotels created an AR hotel experiences and allow guest to point their smartphone and see realistic virtual depictions of the hotel's celebrities. Some of the resort hotel integrated some famous cartoon character AR, allow guests see themselves together with characters. Some of the heritage*

*hotel utilized AR to introduce the background and history about different sculptures which placed in both lobby and rooms to guests”.*

All respondents agreed that the application of AR in Hong Kong property is very much depends on the costing, total investment and the ratio of return on investment; on top of enriched overall guest experience in hotel, if AR compatible with revenue generation, it will stimulate the initiative of hotel management’s investment decision of AR. Augmented reality is utilized in marketing and advertising sectors as a tool to enhance particular features of a product, which makes it more appealing to the customers and in return increases sales. (Sumesh & Azizul, 2016).

*“Place AR room services menus in guest room, guests able to view all dishes in 3D via their phone instead of traditional in room menus. Guest may even able to order via the apps to entitle certain discount which may stimulate their consumption, and which also provided one of the important information of calculating the ROI ratio.*

*“We do not need these fancy technologies in our hotels as they will not add value to our outlets.” (Respondent B)*

*“AR may apply to hotel F&B, Spa or Banquets to stimulate sales... Currently, the customers may watch a video such as youtube, which is 2-D as marketing /pre-sell. Spa may use AR to demonstrate how the message may be done on the particular room/ environment. F&B may use AR to promote certain food items. For example, currently they have the ‘lobster bisque’ which they will cook the soup in front of the customer. This may present in the AR technology so that the restaurant staffs may sell to the customers during afternoon tea. This will lead to increment business for the lunch or dinners. (Respondent A)*

#### *4.4 Technology Flexibility*

Some respondents believe AR can be used as a demo which take the ‘visualization one step ahead’. Currently, the customers may view photos or watch videos for the finalized products for pre-sell, which are two-dimension. AR may enhance the product expectation into a three-dimension visualization as a marketing tool. This was supported by scholars Sumesh & Azizul (2016), whom supposed AR technology is a powerful marketing tool. With the integration of effective marketing communication and information through AR, it will lead to increase the consumer buying decisions (Sumesh & Azizul, 2016).

Respondent A believed that this AR may be applicable to hotel F&B, Spa, and Banquet. This leads to the concerns of the maturity of this technology, other than the affordable cost and how it may gain profit. The hoteliers need to take consideration for a balance of how this technology may ‘customize their needs’, increase experience and user friendly. This relates to the marketing plan; including the lead time for the users’ ability of tailor-made the videos and other activities before implementation. A marketing plan has the ability to bring business to success and outlining the tactics and marketing details by focusing on a specific period of time (Duermyer & 2017). If the technology is mature and at affordable prices, the turnaround of customize animation or images will be concerned, hence the flexibility of the new technology is critical. For instance, hotel restaurant requires constant updates in menus, does this technology give the hotel flexibility for constant update in this ‘storyteller’? Lead time and planning need to be forecasted according to the business needs. Respondent A shared:

*“... hotel needs planning, we normally plan for marketing and other campaigns a few months in advance. Let’s say next quarter we are planning to have ‘lobster promotion’. How flexible is this technology allowing us to create videos, or if we need to pay additional for this creation? Also, we need to know how much time for the creation and testing, so that it is ready and incorporate with the other marketing plans such as social media or other marketing activities...”*

According to Li (2015), he has examined the relationship between new technology implementation, flexibility of new technology, and innovation performance. Resulting that the technology flexibility will improve a company’s overall competitive advantage (Li, 2015). In summary, the developers need to ensure this AR technology do provide flexibility for the hotel managers to tailor-made their needs (ease-to-use) and training in order to hinder their decision in using AR technology in the hotel industry.

## **5. Conclusion and Implications**

The development of technology and innovation in the hospitality and tourism industry is to enhance customers’ experience, and hopefully leads to satisfaction and loyalty, resulting for positive revenue. Daim et. al (2012) believed the tourism and hospitality industry may take advantage of these technologies in designing effective marketing strategies. For the tourism industry, AR has been used for historical or heritage sites, and museums, as a tool to share knowledge of the destination and background stories. There are not too many articles examining the adoption of AR technologies in the hotel context. Furthermore, there is minimum researchers have investigated this AR technology in the users’ perspectives, particularly the hotel industry. Hence, this study was focused on the hoteliers’ perspective on how this AR technology may or may not bring benefits for the business. Thus, this discussion of the user’s perspectives has the implications and insights for the suppliers (AR companies) to consider for further development for the hotel industry. It has broadened the interdisciplinary perspective for future research in AR developments in the hospitality literatures.

AR is still in a pre-mature stage as all the interviewees are not too familiar of this technology, or sometimes they are confused with VR. Most of them do not perceive any risk in using the application of AR. One of the respondents commented that most hotel has the concern on data privacy which this technology do not contain any personal data. He further elaborated on the concern of ‘mis-representation’ from the video to the actual items. However, he does not believe it will be an issue. In summary, the decision of using this AR is associated with the senior management influence according to their knowledge and interest, the nature of business, such as the hotel size, location and segmentation of types and customers. Since AR is still not yet mature, mostly their concerns are related to the profitability, costing, and the flexibility of usage including the video creation and lead time for planning. In other words, supplier’s knowledge is the most critical factor to hinder the manager’s choice of AR technology of using at the hotel. The knowledge including the technical supports when producing the AR video at the hotel, the production time and costs.

This research has interviewed four key executive members in Hong Kong, including GM, hotel owners and Director of Sales. Due to different positions, each person has different interest and business concerns according to their specific job duties. Since the research was only conducted in Hong Kong with a small sample size, there are few limitations to the study. In order to resolve the above concerns, this research should be replicated in different locations with more

different management roles being interviewed to verify its findings. Furthermore, this research provides a manifest of user's overview aspect, a latent analysis may require for more in-depth analysis on specifically AR technology's function and operation.

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## **Effects of innovative entrepreneurship strategies instruction on hospitality undergraduate students**

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### **Abstract:**

This study developed and evaluated creative module comprised of mentoring and creative problem solving (CPS) methods for undergraduate hospitality innovative entrepreneurship programs in Taiwan. A quasi-experimental design, with a sample of 122 students, was used to estimate the causal impacts of educational intervention. Students in the experimental group participated in a mentoring and CPS-based course for a semester. The results showed that students who received the intervention significantly enhanced their innovative entrepreneurship as assessed by their GET2test scores.

**Keywords:** Innovative entrepreneurship, Hospitality, Mentoring, Creative problem solving, Curriculum design, Teaching strategy

### **1. Introduction**

In today's society, all walks of life emphasize the importance of innovative entrepreneurship. Hospitality and tourism businesses are quite commonly initiated by entrepreneurs who play significant roles in modifying the supply of leisure and recreational opportunities (Chang, 2011). Hospitality education should also catch up with the times. In order to meet the industry needs, students' innovative entrepreneurship can be evoked through in-class education and teaching strategies (Cárcamo-Solís et al., 2017; Christina et al., 2015).

Mentoring is the most commonly used teaching method on entrepreneurship education. Many researchers suggest that mentoring programs can help to learn entrepreneurship (Adriana, 2016; Cárcamo-Solís et al., 2017; Christina et al., 2015; Morgan & Pritchard, 2019). Innovation competency should be included in the development of courses to improve the success rate of

hospitality education (Hornig & Hu, 2009). Therefore, this study expects to show improvement in hospitality students' innovative entrepreneurship ability through mentoring and CPS-based course. The research purposes include enhancing students' innovative entrepreneurship ability through teaching intervention, and providing suggestions for mentoring and CPS teaching strategies for hospitality curricula.

## **2. Literature Review**

Entrepreneurship has received increased attention within hospitality and tourism research, reflecting the important role of entrepreneurs and new firm start-ups within the hospitality and tourism industry for innovation and value creation (Solvoll et al., 2015). Hotel industry products are difficult to protect through patents. Therefore, continuous product innovation is very important for the hotel industry and is the main factor in retaining the leading competitive edge in the industry (Agarwal et al., 2003; Hjalager, 2010). Enz and Siguaw (2003) believe that hoteliers can gain more competitive advantage if they can integrate and implement innovations in daily operations.

Christina et al. (2015) state mentoring programs can help students learn entrepreneurship through interaction. Educators and lecturers should take roles as advisor. As the advisor, the lecturers should be able to carry out different kinds of roles: a mentor, a teacher, and a leader. As lecturers, they are demanded not only to master academic aspect such as learning techniques, but also to acquire entrepreneurship in residence, to be professional and experienced at their expertise. Cárcamo-Solís et al. (2017) suggest to instruct mentors in entrepreneurship and provide good teaching skills and experience. Acting as mentors help advisors and tutors to reinforce their own knowledge about entrepreneurship and gain more insights about how to improve the learning experience and their mentoring. The mentoring activity gives trainees self-confidence, and also a good point in working on "barriers" and makes them open their mind (Adriana, 2016).

## **3. Methodology**

To carry out mentoring and CPS-based teaching intervention through course design, the research invited five tourism and hospitality education experts who have relevant teaching and research experience to join a curriculum development panel. The research employed a quasi-experimental method to implement an innovative entrepreneurship course, which is an elective course. A quasi-experiment is an empirical study used to estimate the causal impact of an intervention on its target population. The target population of the education intervention consisted of 81 senior students enrolled in innovative entrepreneurship courses in the hospitality department in a Taiwanese university. These students were the experimental groups (including experiment group 1 and experiment group 2). A total of 41 students who took a similar course were assigned to the control group. Pre- and post-tests were administered to both the control (41 students) and experimental (81 students) groups. The experimental group students participated in a mentoring and CPS-based course for a semester. The course used multiple teaching methods such as lectures, panel discussions and Power Point presentations. In the 18-week experimental instruction program, mentoring and three educational interventions (i.e., CPS, including brainstorming, the mandala method, and mind mapping) were adopted. The syllabus of both groups is shown in Table 1.

**Table 1** Syllabus of innovative entrepreneurship course.

Category	Unit	Content	Hours
Professional basic knowledge	Entrepreneurship relevant knowledge	Basic concepts of entrepreneurship	2
		Entrepreneurship process	2
Practice of innovation and entrepreneurship in hospitality	Innovation strategy relevant knowledge	Essence of innovation strategy	2
		Meaning of innovation strategy	2
	Innovative entrepreneurship	Innovative entrepreneurship concept	2
		Innovative entrepreneurship planning	2
		Innovative entrepreneurship process	3
Proposals for innovative entrepreneurship planning	Creative problem solving	Innovation planning and production	2
	Project planning	Team development	2
		Presentation skills	2
		Planning and production	3

Enterprise may be expressed by starting own business, operating as an entrepreneur within an organization or setting up community ventures. The GET2test offers a self-assessment test and will give an idea of enterprising potential, defined as the tendency to start up and manage projects (Caird, 2013). The measurement items used in this study include the following key entrepreneurial characteristics: need for achievement, need for autonomy, creative tendency, calculated risk taking, and locus of control (Caird, 1990a; Caird, 1990b; Caird, 1991a; Caird, 1991b; Caird, 1991c; Caird, 2013).

Administered before and after the educational program, the pre- and post-tests were conducted to evaluate the effectiveness of the program. This research employed GET2test to measure students' innovative entrepreneurship. The results of the pretests served as a co-variant for ANCOVA analysis to identify the difference between pre- and post-tests.

#### 4. Results

The researchers then tested the single-factor analysis of covariance (ANCOVA) using SPSS. The experimental and control groups served as the independent variables for the ANCOVA analysis. Table 2 shows the GET2 test covariance analysis. The main effect result of the GET2 test showed that the covariance effect had a significant value ( $F = 82.409$ ,  $p < 0.05$ ). The results also showed that there were intragroup GET2 test differences. Post hoc comparisons also showed that the experimental group had higher GET2 test scores in the posttest than in the pretest. The effect between the groups was significant ( $F = 37.385$ ,  $p < 0.05$ ). This result indicated that the mentoring and CPS-based course had a positive performance on the posttest results.

**Table 2** Single-factor analysis of covariance (ANCOVA).

Source	SS	df	MS	F	Sig.
Pretest	14.088	1	14.088	82.409***	.000
Group	6.391	1	6.391	37.385***	.000
Error	20.52	120	.171		
Total	2417.396	122			

\*\*\* $p < 0.001$ .

## 5. Discussion and Conclusion

The findings of this study highlight the positive effects of hospitality education on undergraduate students' innovative entrepreneurship. It is worth noting that education contributes to a positive response to academic controversy (Ayikoru et al., 2009; Gurel et al., 2010). Compared with previous studies (Hernandez & Newman, 2006; Munger et al., 2002), both the specific roles and attributes of entrepreneurship education are identified in this study, including mentoring and CPS-based courses. Although previous literature has emphasized the importance of mentoring and CPS-based courses in education (Cárcamo-Solís et al., 2017; Chen et al., 2015; Christina et al., 2015; McMullen & Kier, 2017; Servoss et al., 2018), this study specifically concludes that mentoring is more of a leading factor than CPS and that mentoring plus a CPS-based course will strengthen students' innovative entrepreneurship. Undoubtedly, this study confirms through empirical tests that cultivating students' innovative entrepreneurship via education influences their entrepreneurial potential.

In addition, this study provides a more detailed theoretical mechanism for the innovative entrepreneurship curriculum development of hospitality undergraduate students' entrepreneurial potential. Compared with previous studies (e.g., Dzwigol-Barosz et al., 2019; Koev et al., 2019), this study highlights the important mechanism of mentoring and CPS-based courses in innovative entrepreneurship curriculum development. The research conclusion of this study is the first to not only propose a more comprehensive cultivation model of undergraduate hospitality students' innovative entrepreneurship but also to provide a new perspective to predict the entrepreneurial potential of undergraduate hospitality students and broaden the critical roles of mentoring and CPS-based courses in undergraduate hospitality students' entrepreneurial potential.

The curriculum design of this study focuses on nurturing ability rather than inculcating knowledge contents directly. Teachers can refer to the teaching strategy and prepare course contents. Thus, through verification, this study suggests that schools and companies can use mentoring and CPS training to increase students' and employees' innovative entrepreneurship.

## Acknowledgments

The authors would like to thank anonymous reviewers for useful suggestions and the Ministry of Science and Technology of Taiwan for financial support (Grant number: MOST 106-2511-S-228-001-MY3).

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## **Climb the hotel loyalty program ladder: Does progress framing matter?**

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### **Abstract:**

Building on goal pursuit theory, this paper addresses an important issue concerning the management of hierarchical loyalty programs (LPs), which are widely used in the hotel industry: how to—through customized communications—motivate LP members to either maintain or upgrade their membership status. An experimental study conducted with actual hotel LP members provide converging evidence that a to-date (to-go) frame highlighting the accomplished (yet-to-be-accomplished) progress is more effective in motivating LP members to maintain (upgrade) their membership status. This research confirms the progress-framing effect, establishing progress framing as an effective LP communication strategy for motivating hotel LP members toward membership maintenance or upgrading.

**Keywords:** hotel loyalty program, goal pursuit, motivation, feedback

### **1. Introduction**

Loyalty programs (LPs) have become a mainstay in the hotel industry, and most hotel LPs are usually structured in tiers that are designed to segment members based on the required spending level (Drèze and Nunes, 2008; McCall and Voorhees, 2010; Tanford, 2013). For example, silver elite members of Hilton HHonors Program are required to accumulate 10 nights in any calendar year to maintain their current membership level or 40 nights to upgrade to gold elite membership. In other words, tier-based hotel LPs have two distinct types of memberships goals: maintaining current membership level (i.e., membership maintenance goal) and upgrading to more advanced membership level (i.e., membership upgrading goal). Although tier-based LPs are widely used to motivate program members to maintain or upgrade their current membership level, research on their effectiveness is very limited (McCall and Voorhees, 2010).

A common practice that has been used to motivate members to maintain or upgrade their current membership level is to offer program feedback (e.g., Keeling et al., 2013; Koo and Fishbach, 2012). Note that some hotel LPs provide *to-date* progress feedback to their members by highlighting hotel stays *already accomplished* (e.g., Marriot Hotels prominently display on LP apps nights earned to maintain current membership level). In contrast, other hotel LPs offer *to-go* progress feedback to their members by highlighting hotel stays *yet to be accomplished* (e.g., Hilton Hotels feature on its LP apps the hotel stays “You need” to retain current

membership level). Which type of progress feedback is more effective in motivating members to either maintain or upgrade their current membership level? This is an intriguing question, especially given that the two different progress feedback have been used widely and indiscriminately in most tier-based hotel LPs.

To address this knowledge gap in LP research and practice, we proposed that to-date feedback is more effective for pursuing membership maintenance goal, whereas to-go feedback is more effective for pursuing membership upgrading goal. Drawing from the research on goal pursuit (e.g., Bandura, 1991; Carver and Scheier, 1998; Koo and Fishbach, 2010), we further argued that to-date feedback—highlighting the completed progress—enhances the perceived value of the current membership level and subsequently increases the motivation to *maintain* the current membership, whereas to-go feedback—underlining the remaining progress—enhances the expected progress towards a more advanced membership level and subsequently increases the motivation to *upgrade* the current membership.

## 2. Literature Review

Program members may wish to retain their current membership level if they believe that the current membership is valuable and important to them (e.g., Arkes and Ayton, 1999; Cialdini et al., 1995). Given that to-date feedback highlights the value and importance of the current membership tier by emphasizing accumulated points, LP members receiving a to-date feedback may increase their sense of commitment to the current membership tier and subsequently motivate them to engage in membership maintenance goal. In contrast, to-go feedback, which highlights the unaccomplished part of the goal, points out the lack of progress and deficiency in maintaining the current membership level, may underestimate the importance or value of maintaining the current membership level. Consequently, to-go feedback is less likely to motivate LP members to engage in membership maintenance goal. In summary, to-date feedback is better compared to to-go feedback in motivating LP members to maintain their current membership level.

Program members may want to upgrade rather than maintain their current membership level if they are more committed to climbing the LP ladder. To-go feedback implies that achieving more progress is required by highlighting the remaining part of the goal pursuit, making the members value the movement and producing a great level of aspiration (e.g., Kivetz et al., 2006; Kruglanski et al., 2000; Locke and Latham, 1990). Thus, we proposed that to-go feedback motivates LP members to pursue membership upgrading goals. Conversely, to-date feedback directs attention to the completed part of the goal pursuit, keeps members focused on past accomplishment, and fails to motivate LP members to move up to a more advanced membership level. By comparison, to-go feedback is better compared to to-date feedback in motivating LP members to upgrade to a higher membership level. Based on the above discussion, we put forth the following hypotheses:

*H1a.* To-date (vs. to-go) feedback is more effective in enhancing motivation to maintain the membership.

*H1b.* To-go (vs. to-date) feedback is more effective in enhancing motivation to upgrade the membership.

## 3. Methodology

A single-factor between-subjects quasi-experiment with two experimental conditions (progress feedback: to-date vs. to-go) was conducted. Relying on a professional survey platform

(www.sojump.com, a website similar to Qualtrics), we recruited 156 Chinese customers who are hotel members with accumulated points or nights in tier-based hotel LPs.

The participants were instructed to list their frequently-used LPs and their current membership level. Progress feedback was manipulated by asking them to write down either accumulated (to-date condition) or remaining (to-go condition) points/nights in their current membership level. The participants in both conditions rated their motivation to maintain the membership (e.g., “How much do you want to maintain your current level of membership?”; 3 items;  $\alpha = .87$ ; Koo and Fishbach, 2010), motivation to upgrade the membership (e.g., “How much do you want to upgrade to the next level of membership?”; 3 items;  $\alpha = .79$ ; Koo and Fishbach, 2010), hotel consumption habits (the number of hotel stays per year; the amount of spending on hotel per year), and demographic information. All measures, except for hotel consumption habits and demographics, were assessed on a 7-point scale.

#### 4. Results

*Homogeneity test.* Multivariate analysis of variance (MANOVA) was conducted to assess the homogeneity of hotel consumption habits across the independent variable (progress feedback: to-date vs. to-go). Progress feedback was used as the independent variable while the number of hotel stays per year and the amount of spending on hotel per year were used as dependent variables. The results of MANOVA (Wilks' Lambda = .98,  $F(2, 153) = 1.92, p > .10$ , partial  $\eta^2 = .02$ ) showed no significant differences between the two experimental conditions in the number of hotel stays per year ( $F(1, 154) = 3.72, p > .05$ , partial  $\eta^2 = .02$ ) and the amount of spending on hotel per year ( $F(1, 154) = 1.27, p > .20$ , partial  $\eta^2 = .01$ ). Thus, the participants across different conditions did not differ in terms of their hotel consumption habits.

*Motivation.* To test H1a and H1b, a one-way MANOVA was conducted, given that motivation to maintain membership and to upgrade the membership were repeated measures. The results of MANOVA (Wilks' Lambda = .92,  $F(2, 153) = 7.02, p < .01$ , partial  $\eta^2 = .08$ ) showed that the participants exhibited significantly higher levels of motivation to maintain the membership when they received to-date (vs. to-go) feedback ( $M_{\text{maintenance, to-date}} = 5.21, M_{\text{maintenance, to-go}} = 4.81, F(1,154) = 4.42, p < .05, \eta_p^2 = .03$ ), and the participants reported significantly higher levels of motivation to upgrade their membership when they received to-go (vs. to-date) feedback ( $M_{\text{upgrading, to-date}} = 5.59, M_{\text{upgrading, to-go}} = 6.09, F(1,154) = 8.25, p < .01, \eta_p^2 = .05$ ). Thus, both H1a and H1b are supported.

#### 5. Discussion and Conclusion

In the hotel industry, tier-based LPs are common relationship marketing instruments that encourage members to retain or upgrade their membership level (e.g., Eggert et al., 2015; McCall and Voorhees, 2010; Tanford, 2013). However, little is known about how to motivate the existing members to retain or upgrade their current membership level in tier-based LPs. To bridge this knowledge gap, we examined the interaction effect between progress feedback (to-date vs. to-go) and membership goals (maintenance vs. upgrading) on members' motivation in the context of tier-based hotel LPs. Specifically, we showed that to-date (to-go) feedback motivates LP members to maintain (upgrade) current membership level. Thus, we identified and demonstrated that tailor-made progress feedback is an effective communication strategy in tier-based LPs to achieve two basic membership goals, including maintenance and upgrading.

Many hotel companies employ a hierarchical structure in which members get assigned to different tiers or levels based on their spending and other purchase criteria (e.g., Tanford, 2013). Such structure supports a better allocation of hotel companies' resources (Chaabane and Pez, 2017). However, to date, little is known about how to encourage members of hierarchical LPs to retain and/or enhance their present membership level. This research suggest that LP managers provide to-go (to-date) feedback to members to more effectively reach membership upgrading (maintenance) goals. In this digital age, LP managers can utilize mobile and digital technology (e.g., through instant LP Apps) to set membership goals and offer progress feedback to their members. Leveraging the new communication technology with the novel insights from this research might potentially have revolutionary implications on hierarchical LPs.

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## **If you can't beat them, join them: Diversification as a means for competitive advantage in the accommodation sector**

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### **Abstract:**

This study examines the continued diversification of the business models of major players in the accommodation sector. Specifically, the study investigates the blurring of lines between the competitive strategies of hotel organizations, sharing economy organizations and online travel agencies and how this is changing the face of the accommodation sector. Where previously these industry players focused primary on their core business models, recent developments have led them to significantly change their competitive strategies. Due to the rapid pace at which this has been happening, the future of the accommodation sector is quite uncertain. In order to investigate this, the present study explores what the future may hold for the industry through semi-structured, in-depth, key informant interviews.

**Keywords:** Hotels, online travel agencies, sharing economy, accommodation

### **1. Introduction**

Since the turn of the century, technological advancements have allowed organizations in the accommodation sector to develop novel ways of reaching a wider number of potential customers (Varma, Jukic, Pestek, Shultz & Nestorov, 2016). This is particularly true in the case of online travel agencies (OTAs) acting as distribution channels for hotels (Carroll & Siguaw; 2003; O'Connor; 2008) as well as organizations in the sharing economy, allowing any individual to engage in the hospitality industry by renting out unused accommodation and profiting from this (Guttentag, 2015). As such, it is not surprising that both OTAs and sharing economy companies have grown exponentially in popularity, especially by the end user (O'Connor; 2008). However, the effect that is having on the accommodation sector as a whole, is as of yet unclear. It is in other words not apparent how the accommodation sector will evolve as a result of these unprecedented changes. In order to contribute to this nascent stream of literature and explore what the future of the accommodation sector may look like, the present study examines the perceptions of industry insiders, specifically hotel executives, hotel general managers, OTA executives and hospitality industry consultants.

### **2. Literature Review**

#### *2.1 The Rise of the Sharing Economy*

The sharing economy has experienced rapid growth over the last decade. Consequently, this has also resulted in increasing research interest in this phenomenon that is reshaping several traditional business models (Cheng, 2016). The rapid growth of the sharing economy has been linked to changing socio-economic conditions, which have resulted in better value distribution of the supply chain (Gansky, 2010), through technological advancement (Cheng, 2016), and as

the result of the changing attitudes towards product ownership and the need for social connection (Botsman & Rogers, 2010).

In the case of the hospitality and tourism industry, the sharing economy, most notably Airbnb, has proved particularly successful (Cheng, 2016). In fact, the hospitality and tourism industry has been named one of the pioneering sectors for the growth of the sharing economy, allowing tourists and residents to share their homes, cars, meals and even expert local knowledge (Sigala, 2017; Lyons and Wearing, 2015).

According to Tussyadiah and Pesonen (2015), the sharing economy has significantly changed the travel patterns of tourists by reducing accommodation costs and providing meaningful social encounters with the local population of the holiday destination. Therefore, although some hoteliers do not think that the sharing economy has had a significant impact on their performance (Choi, Jung, Ryu, Kim & Yoon, 2015; Coyle & Yeung, 2016; Neeser, Peitz & Stuhler, 2015), from a market competition perspective, several other hoteliers and government agencies do perceive the sharing economy as a threat to traditional tourism and hospitality businesses (Varma et al., 2016). Furthermore, Airbnb appears to outperform the hotel industry in the provision of all experience dimensions (Mody, Suess & Lehto, 2017). Some authors have therefore suggested that the sharing economy could completely change the future dynamics of the hospitality industry, stipulating that it would lead to a significant disruption of the traditional accommodation sector (Guttentag, 2015; Guttentag & Smith, 2017; Sigala, 2017).

## *2.2 The Impact of Online Travel Agencies*

OTAs, which emerged in the 1990s and play a crucial role as online distribution channels for hotel organisations (Morosan & Jeong, 2008). The two most notable OTA parent companies are Priceline (including brands such as Booking.com and Kayak) and Expedia (including Hotels.com and Trivago). Compared to hotel direct booking websites, OTAs have the advantage of offering consumers a one-stop-shop for booking hotel rooms and even purchasing the entire holiday (O'Connor; 2008). According to Nujic, Herak and Herak (2017), OTAs have become the preferred reservation method for guests searching for the lowest rates for hotel rooms. According to Raguseo, Neirotti, and Paolucci (2017), hotels that choose to distribute their rooms on a higher number of OTAs can bolster their sales and their profitability and thus capture more economic value from their visibility on these distribution channels. However, hoteliers are aware that OTAs have become competitive global players, with the ability to influence the facilities that want to promote themselves on their platforms (Varma et al., 2016)

## *2.3 Diversification in the accommodation sector*

Although the history of the major players in the accommodation sector outlined above is a relatively short one (i.e. the modern hotel chain, approximately 100 years, online travel agencies, approximately 25 years and the sharing economy, approximately 15 years) the rate of change in their business models has been exponentially swift especially in recent years (Stamm 2017, Varma et al. 2016). Initially these three industry players largely stayed in their own lanes, focusing on their own distinct business models. However, recent developments have seen increasing diversification their portfolios to directly compete against each other. Hotel organizations acquired home sharing platforms and increased their share of serviced apartments, sharing economy companies acquired online travel agencies and allowed hotels to list on their platforms and online travel agencies have started listing shared accommodations and have aimed to create their own branded rooms rather than solely acting as an intermediary.

Expedia for example has taken direct measures against the sharing economy, where in 2015, the company acquired Homeaway, which acts similarly to Airbnb as an intermediary of housing. Furthermore, OTAs which used to list only 'traditional' hotels have started to also promote hostels, apartments and other non-traditional accommodation providers (Varma et al., 2016; Xie & Kwok, 2017). Conversely, Airbnb acquired the OTA HotelTonight in 2019 (Airbnb, 2019). Finally, Marriott announced a cooperative agreement with the Chinese internet group Alibaba in 2017, which among other services also operates as a consumer to consumer platform (Stamm 2017) as well as launching its new brand of serviced apartments; Homes & Villas by Marriott International, in 2019 (Marriott International, 2019).

### **3. Methodology**

#### *3.1 Overview*

Due to the fact that the changes in the accommodation sector outlined above are a relatively recent and dynamic phenomenon, it was deemed appropriate to engage in an inductive analysis, drawing on the opinions of industry experts. Therefore, this study adopts a qualitative methodology with key informant interviews, to explore these dynamic changes currently observed in the industry and explore the implications for the near future of the industry.

#### *3.2 Sample*

The sample of this study consists of hotel executives, hotel general managers, OTA executives and hospitality industry consultants. As the study aims to shed light on the accommodation sector as a whole and how competitive pressures have led major players in the industry to adapt their business models, this eclectic mix of industry experts was deemed appropriate in order to gain well rounded insights and avoid the bias of any single group of respondents in examining the current industry circumstances and what the future of the industry will look like.

### **4. Results**

The findings highlight that the various industry experts all have their own opinions on what the future holds for the industry. The OTA executives believe that their bargaining power and internet readiness, as well as their technological expertise and marketing capabilities mean that they will continue to hold a dominant position in the industry moving forward. Conversely, the hospitality consultants believe that future developments will make the current OTAs obsolete due to new entrants, which offer more value to the end user and furthermore also consider the possibility that after Expedia acquires Priceline, that Amazon will acquire Expedia.

The hospitality consultants moreover believe that the sharing economy has fundamentally changed the accommodation sector and that traditional hotel organisations will have difficulties competing directly with the sharing economy, while hotel executives believe that through acquisitions of sharing platforms and increases in the use of serviced apartments under their company brands, they will be able to effectively compete against companies like Airbnb.

One thing that the hotel executives, OTA executives and hospitality consultants all agree on however is that there are major changes happening, which will result in continued diversification and acquisitions by all parties involved in order to compete. The only sample which clearly does not seem to agree with this is prognosis is the hotel general manager sample. The general managers are unanimously under the impression that no major changes will occur in the near future, that the sharing economy is fundamentally a different business, targeting a

different market and will therefore have a minimal impact on the daily operations of the traditional hotel sector moving forward.

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## **Smart service experience in smart hotels: Conceptualization and measurement**

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### **Abstract:**

Smart service experience (SSE) is a crucial part in the process of hoteliers' and customers' value co-creation in the hospitality industry, but it has not fully explored. This study provides a comprehensive understanding of this original concept compared with the traditional service experience and e-service experience. Through a mixed-method approach, six dimensions and a measuring scale of SSE were identified in the context of Chinese smart hotel industry. This study offers a valuable tool for hotels to measure and monitor customers' smart service experience, which can be helpful to manage customer relationship and service quality in the hotel industry.

**Keywords:** smart service experience; smart hotel; measurement scale

### **1. Introduction**

The customer experience is a constant theme and a crucial part of customers' relationship management and brand equity building (Roy et al., 2019). The application of smart technology and big data is changing the service provision and marketing in the hospitality and retailing industry. Technology-based smart service has been a "fashion" to attract customers' attention (Leung, 2019). However, smart service experience (SSE), distinct from traditional customer experience, has not been fully explored, developing a reliable and valid scale to measure SSE and its components overall, therefore, need to be addressed (Kabadayi et al., 2019). Although many existing studies have focused on smart services in the hotel industry (Lei, Wang, & Law, 2019; Leung, 2019) or service experience in other fields (Pareigis, Edvardsson, & Enquist, 2011; Srivastava & Kaul, 2014; Roy et al., 2017), SSE in the context of China's hotel industry still remains unclear.

Considering the essential implications of SSE on both hoteliers' and customers' value co-creation (Kabadayi et al., 2019), this study aims to explore its concept, dimensions and measurement in the context of smart hotels in China. For those hotels that intend to or are in the process of upgrading and transforming to provide smart services, this study offers a valuable tool for them to measure and monitor customers' experience. It is also believed to be beneficial for customer relationship management and service quality management in the hotel industry.

## 2. Literature Review

### 2.1 *Service experience*

From the perspective of co-creation experience, the service experience is defined as a series of dynamic, experimental, relational interactions and activities (McColl-Kennedy, Cheung, & Ferrier, 2015) or engagement in the process of stimulation, replication, synchronization and dissipation phase (Chandler & Lusch, 2015). Scholars generally agree that the service experience is a complex concept with cognitive, emotional, behavioural, sensorial and social components (Schmitt 1999, 2003; Verhoef et al., 2009; Lemon & Verhoef, 2016). McColl-Kennedy, Cheung and Ferrier (2015) emphasized the collective, collaborative, evolutionary and dynamic characteristics of service experience. Furthermore, customer involvement, physical artefacts and customer placement are considered to be the most important factors affecting service experience (Pareigis, Edvardsson, & Enquist, 2011). To sum up, service experience is viewed to be embedded in a complex and dynamic process in which customer interacts with the objects and environment.

### 2.2 *Smart service experience*

Due to service-dominant logic, value is not embedded in the product or service, but created in the process of customers using products (value-in-use) (Grönroos, 2001; Svensson & Grönroos, 2008) and experiencing services (value-in-experience) (Kukk & Leppiman, 2016). Customer experience is the core of service offerings (Fernandes & Neves, 2014, p.548) and value creation. To transform these perspectives to the context of smart service, SSE can be regarded as the core of smart services. Kabadayi et al. (2019) defined SSE as “customers’ subjective response to smart services” (p.334), which refer to “personalized and pro-active services based on the intelligent use of technology and data” (Kabadayi et al., 2019, p.330).

To take more insights of SSE, it is necessary to clarify the differences among traditional service experience, e-service experience and SSE. Traditional service experience refers to on-site service experience and emphasizes on face-to-face “touch points” (Meyer & Schwager, 2007), such as visiting a hotel, interfacing with a registration desk, etc. It underlines that employees should have empathy in the process of providing services. E-service experience is a kind of service experience based on websites, online booking, for instance. Differently, SSE is a kind of personalized and seamless customer experience driven by new technology (Kabadayi et al., 2019; Roy et al., 2017). For instance, during the outbreak of COVID-19 pandemic, the hotel robots can deliver thermometers to the guests per day. Based on customer data mining, sensor and other new technologies, a higher value-added experience would be provided (Buhalis & Law, 2008). Considering the context of this study, smart customer experience in this study is conceptualised as the personalized and seamless experience in physical and digital contact with the hotel driven by new technology or big data.

### 2.3 *The measurement of smart service experience*

Customer experience measurement plays a vital role in insight into the firm’s actions (Lemon & Verhoef, 2016, p.80), so does in hotels. Despite that SSE is part of the overall service experience, there is still no scale of SSE in hotel industry. Therefore, it is preferable to learn from the literature related to service experience measurement or SSE measurement in other fields. Given the high-tech oriented service experience in hotel, this study can theoretically sketch the cognition of the dimension and measurement of this new concept.

Previous studies mainly suggested four approaches for measuring service experience: service encounters or moments of truth, service blueprinting or journey blueprinting, journey mapping/customer experience mapping (McColl-Kennedy, Cheung, & Ferrier, 2015) and multichannel perspective analysis (Lemon & Verhoef, 2016). Furthermore, Lei, Wang and Law (2019) used cognitive mapping method and identified five smart functions in hotel's mobile apps, including room reservation, information, room access and online check-in/out, and service requests, from which customer can experience smart services at any time and any place. Based on structural equation modelling and hierarchical regression analysis, Wu & Cheng (2018) examined the relationship between technology attachment and customers' experiential quality relationship in one of smart hotels in Las Vegas.

This study summarized that SSE, to some extent, is a multi-dimensional concept and can be measured by the personalized service experience. Smart customer experience consists of relative advantage (cognitive perspective), perceived enjoyment (affective perspective), perceived control (behavioural perspective), personalization (behavioural perspective) and interactivity (cognitive perspective) (Roy et al. 2017). Klaus & Maklan (2012) verified five dimensions of SSE in electronic mediated environment, including service emotion, sensation, immersion, participation and playfulness. However, Kabadayi et al. (2019) conceptualised the SSE as a higher-order construct with empowerment, seamless experience, accurate service delivery, privacy and security and enjoyment as its dimensions. As for the aspect of SSE, hence, there is no consensus in academia (See Table 1).

Table 1. Dimensions of smart service experience

Study	Dimension	Research context	Type of Study
Roy et al. (2017)	Relative advantage Interactivity Perceived enjoyment Perceived control Personalization	Smart retailing	Empirical
Kabadayi et al. (2019)	Empowerment Seamless experience Accurate service delivery Privacy and security Enjoyment	Tourism and hospitality	Conceptual
Klaus & Maklan (2012)	Service emotion Service sensation Service immersion Service participation Service playfulness	Electronic mediated environment	Empirical

### 3. Methodology

#### 3.1 Measurement

This study will adopt a mixed-method approach and a 10-step approach from Qiu et al. (2017) to develop the measurement scale of SSE. Literature review, in-depth interviews, and user-generated online reviews will be employed for triangulation purposes. Firstly, through the literature review, this study clarifies the concept characteristics and dimensions of SSE, as well as the existing measurements and items related to SSE. Secondly, in-depth interviews about customers' experiences on smart services would be conducted in China until data saturation. Two authors will code these interview data and use the approach of content analysis to generate the dimensions and a pool of items of SSE. Thirdly, this study will also collect online comments about customers' smart experiences in hotels as a supplementary source of the items. Then, a panel of experts will be invited to purify and revise the items and support to design a questionnaire. Finally, a quantitative and rigorous procedure will be used in data collection, exploratory factor analysis and confirmatory factor analysis.

### 4. Results

#### 4.1 Profile of the respondents

To explore the definition, domain and measurement of smart service experience, in-depth interviews have been conducted with nine guests who had smart hotel service experience from different industries by using the soft laddering technique. Among them, the first interviewee responded the questions in English, while others in Chinese. Due to the impact of COVID-19, most of the interviews were completed online. Table 2 shows the profile of the respondents in detail.

Table 2. Profile of the respondents

Interviewee	Gender	Age	Frequency of Check-in	Length of interview	Industry/Position	Online/Offline
1	Male	Mid-40s	>20	25 min	Hotel/CEO	Offline
2	Female	Early-30s	1-5	40 min	Higher education/Teacher	Online
3	Male	Late 20s	6-10	37 min	Transportation/Manager	Online
4	Female	Late 20s	1-5	32 min	Higher education/Teacher	Online
5	Male	Mid-30s	10-20	22 min	Service consulting/Deputy General Manager	Online
6	Female	Early-30s	1-5	25 min	MTA student	Online
7	Female	Mid-30s	>20	25 min	Hotel/Manager	Online
8	Female	Early-30s	1-5	25 min	Full-time housewife	Online
9	Male	Early-30s	>10	28 min	Self-employed	Offline

#### 4.2. Dimensions of smart service experience

In this study, interview recordings were transcribed and encoded using NVivo 11 software. The coding follows the rooted method described by Ryan and Bernard (2003). Finally, six dimensions of smart service experience are derived through node comparison and systematic hierarchical classification methods (Corbin & Strauss, 2015). The six dimensions are technology-driven interactivity, perceived self-control, personalization, seamless experience, immersion, and relative advantage.

**Technology-driven interactivity:** It is the subjective cognition of the customers' interaction with the smart facilities.

*"There is an electronic touch screen in the room. You can also communicate with it by voice, just like the current smart speakers. If you want to listen to music, you can tell it in a voice, or you can touch the touch screen."* (2, female, teacher)

*"When I checked in in Hokkaido, Japan, there was a self-service check-in machine in the lobby without staff. Enter the information like the verification code in the email sent to you from the hotel. After you confirm your reservation and personal information on the screen, the machine will spit out the room card, and then you can enter the room with the card."* (4-female-teacher)

**Perceived self-control:** It refers to the degree of customer's perceived control over services in smart hotels (Roy et al., 2017).

*"There are many types of lighting in the room, and I can adjust various lighting according to my mood...I just input it when I need to clean the room, and then the hotel will arrange a robot to clean it."* (5, male, DGM)

**Personalization:** It refers to the provision of personalized or customized services for customers through technology-based data to meet customers' preferences (Roy et al., 2017; Kabadayi et al., 2019).

*"The hotel may know your personal preference for room air-conditioning temperature and music according to a rule of your previous stay. The hotel may have a big data collection process. When I check in again next time, he may set up a room according to my personal preference."* (9, male, self-employed)

**Seamless experience:** It means customers can choose whether to use smart services according to their needs, through which they can get an enhanced service experience and desirable outcomes through a seamless and smooth service process (Kabadayi et al., 2019).

*"Now when you check out, after face recognition, the checkout is automatically completed. There is no need for service staff to round the room. If your credit is good, just check out and you can go."* (8, female, housewife)

**Immersion:** It reflects an affective dimension of customers' SSE, which emerges from engaging or immersing customers themselves in smart services (Klaus & Maklan, 2012; Roy et al., 2017).

*"If it is daytime, the curtain will automatically open, if it is dark, it will automatically close. This is really great."* (4, female, teacher)

*"When I was on a business trip in Shanghai, the items I asked for were delivered by a small robot. It will call you at the door, and you will be pleasantly surprised when you open the door. The robot will also say hello to you, talk to you, and then give you what you want."* (7, female, hotel manager)

*Relative advantage:* The perceived relative advantage of SSE shows advantages in terms of technology, convenience, quality, and function based on smart facilities or smart service (Gao & Bai, 2014).

*“In the past, when we went to a hotel, the front desk staff needed to compare your ID card, right? Then copy the ID card, and finally get the room card for you. Now, none of these are needed. You just put your face on the front camera and everything is done.”* (8, female, housewife)

## 5. Discussion and Conclusion

Along with the popularity of personal computers, software, internet virtual technology (Van Dijk, 2006), and the commercialization of new technologies in big data era (Gretzel et al., 2015), smart technologies are transforming service provision and marketing in tourism and hotel industry. The existing studies have addressed the provision of smart hotel services (Leung, 2019; Neuhofer, Buhalis, & Ladkin, 2015), but failed to focus on SSE from the perspective of customers through an empirical study (Kabadayi et al., 2009).

According to the results of in-depth interviews, six dimensions of the SSE scale were identified: technology-driven interactivity, perceived self-control, personalization, seamless experience, immersion, and relative advantage. These dimensions are inconsistent completely with those in the study of Kabadayi et al. (2009), which could be explained that China’s smart hotel is still in the initial stage, so some dimensions mentioned in the prior research have not yet been reflected in the context of China. Theoretically, this study offers an empirical understanding of SSE and a helpful tool to evaluate customers’ experience for hotels that will undergo smart transformation and smart upgrade. This study is also conducive to the management of customer relationship and customer service experience for enhancing the competitiveness of hotels. Due to this study is in the working process, the number of interviews in this study is limited, and the follow-up needs to increase the sample size for further analysis and research.

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## **Critical impact and strategic response to manage crisis of COVID-19**

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### **Abstract:**

The tertiary industry (e.g. hotel industry) has always been acknowledged as vulnerable to crises or disasters for political, economic and environmental forces. This year, COVID-19 has enormous destructive power and influence on related industries. The direct impact is mainly concentrated on the tertiary industries such as transportation, tourism, hotel, education, and entertainment. During the outbreak, most hotels in major cities have chosen to close online booking channels or directly suspend hotel operations. The losses of these hotels in this period of time have greatly exceeded the losses in SARS in 2003. Many hotels constantly adjusted their operation and management modes during the outbreak to minimize losses. This article will discuss what can hotels correspond when they are facing such a crisis situation and protect themselves.

**Keywords:** Crisis Management, Hotel Industry, COVID-19

### **1. Introduction**

A novel virus has recently been spreading in China and the rest of the world. As of August 26, 2020, the World Health Organization (WHO) was reported 90,239 confirmed cases found in China, among which 4,719 fatality cases were confirmed. Meanwhile, in global horizon, 23,697,273 cases have confirmed with 814,438 fatality cases. It was believed that this new virus, known as COVID-19 (National Health Commission of China, 2020), caused much more severe damage to the respiratory system than any existing diseases alike. A majority of the companies have put off the dates to resume the work and encouraged their employees to work online if possible. In the first half of the year, both supply and demand in the hotel market dropped, and pressure on prices increased. Taking online hotels as an example, the online hotel market supply dropped by 13.31%, the online hotel market demand dropped by 39.1%, and the average online hotel room rate dropped by 16.1% (Joint Wisdom, 2020).

The tertiary industry (e.g. hotel industry) has always been acknowledged as vulnerable to crises or disasters for political, economic and environmental forces. According to a recent research report released by Shanghai National Accounting Institute, among 3,465 respondents from finance departments of some randomly-selected industry, 63.41% foresaw difficulties in cash flow unavoidably happen, 79.75% were worried about the revenue in the first half of the year and 81.13% believed profits of the companies will dramatically shrink (SNAI, 2020). According to Smith Travel Research (STR, 2020), the hotel occupancy rate (OCC) in mainland China reached a 70% in early January of this year. However, this figure fell off a cliff into 17% one day after the outbreak of COVID-19, meaning 80% of the rooms were vacant. Compared

with the situation of SARS occurred in 2003 when China's tourism industry lost 276.8 billion CNY revenues, it is predicted that hotel industry in this year will be seriously impacted too. Crisis management has always been a hot topic in the hotel industry. How to make a strategic response to the crisis is something that every hotel needs to think about and learn. This time, COVID-19 gave the best opportunity for hotel industry to think and react.

## **2. Literature Review**

### *2.1 Crisis Management*

The Cambridge Dictionary (2020) defines crisis as “an extremely difficult or dangerous point in a situation”. The word itself came from a Greek word “krinein”, which means decide. Beall (2007), cited in Al-Dahash, Thayaparan & Kulatunga (2006), indicate that, “In an organizational context, crises are usually new situations to the organization, often defined as unexpected, definitely unstructured and outside the typical operational framework of the organization.”

In tourism and hotel management, crisis is a harmful situation which would bring forth upon negative impact on attractions, destination, visitors and so on. (Elochukwu, 2019). Crisis management plays an important role in helping the tertiary industry (e.g. tourism or hotel industry) return to normal after crisis, such as increase visitors' confidence, comfort the impact on the industry, and enhance security. (Beirman, 2003 cited Mansour, 2013). Crisis communication and management are always crucial to marketing recovery and hotel resilience (PATA, 2003). The emergence of crisis in the hotel industry should be managed differently from other industries, because these industries mainly relies on the consumption of visitors to support its development. Of all the organizations in the tertiary industry, hotel should be a very special existence. This special existence provides a facility which opens all year around for visitors around the world. It's obvious that hotel depends on those visitors for its survival, and thence, any changes or crises happen in this world would affect hotels on their future performance. (Malhotra and Venkatesh 2009, 66). Crisis can be divided into internal crisis and external crisis. As for internal crisis, there are many possible factors could influence the chances of crises occurred in hotels: target customers, number of population, location and legal policies. (Hartmann, 2011). In external crisis, except for all the business-related crises faced by other industries, tertiary industry like hotel and tourism industry have a much wider range of possible crisis such as: natural disasters, management misdeeds, employees misdeeds, word-of-mouth (in face-to-face contact or on the Internet), technology (viruses, hackers), malevolence, external environmental reasons, food safety, bad services and etc. (Bilić, Pivčević & Čevra, 2017). Besides, health emergency is also a serious threat faced by not only tertiary industry, but all society. Hotel is a place where a large number of people gather. These people may have visited any place or come into contact with any person or object that may be have infectious disease before arriving hotel. When a large number of tourists gather in the hotel, unexpected situations are likely to occur. Therefore, health emergency management should be an aspect of the hotel industry that needs special attention.

### *2.2 COVID-19*

According to WHO, “COVID-19 is a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV).” COVID-19 are susceptible to mutation. This novel virus is a new strain that has never been found in humans before. The World Health Organization listed the COVID-19 outbreak as a public health emergency of

international concern (PHEIC) on January 31st, 2020. With the development of the epidemic situation, the hotel that was originally open 24/7 began to adopt the ‘minimum operating model’ to reduce operating costs; from the beginning of the closing of some of the venues in hotels to all of venues, the effect of coronaviruses to the hotel can be said to be fatal.

### 3. Methodology

In order to explore the strategic responses of hotelier to manage the crisis, this research conducted an experimental study by collecting primary data from hotels in Sichuan Province, China. In the meantime, the authors also verified some points by collecting secondary data. The primary data collection method chosen for this study was interview. The authors conducted different interviews with hoteliers in Sichuan during February to March 2020 to see their hotels’ performance right after health crisis like COVID-19. (Table 1)

**Table 1: Justification of Interview**

Type of Interviewees	Form of Research	No. of Interviewees	No. of Questions Asked
Department head of mid-to-high-end hotels in China	Interview	13	17

Due to the implementation of the epidemic prevention measures, the authors changed the original face-to-face interviews to online interviews. The interview focused on each hoteliers’ hotel companies as case study, and the planned questions were structured into three parts, namely:

- Knowledge about the hotel: the relevant demographic features of hotel and the interviewees, such as location, scale, and position of the interviewees.
- The impact of COVID-19: The impact and difficulties the outbreak has brought to hotels.
- Hotel's performances and prevention measures: In response to these impact and difficulties, the countermeasures taken by the hotels.

The scope of the interview was the mainland of China, mainly focused on Sichuan province, to make sure a sufficiently representative sample. During the interview, all respondents according to the actual situation of their hotels. At the same time, some hoteliers also expressed their own thoughts on the future development of hotel industry.

### 4. Results

Tracking the impact of COVID-19 on the hotel and travel industries, as news of this latest virus and its spread and toll continues to develop, its impact and implication on hotels focuses on three aspects, including hotel crisis management experiences in facing crisis, short-term and long-term influence of the industry and the next step of hotel industry.

***More than half of the hotels have experienced crisis before, they have certain experience but still not fully prepared.***

Among the hotels interviewed, more than half of the hotels stated that their hotels have experienced natural disasters or crises, such as the SARS in 2003, the Sichuan Earthquake and the financial crisis in 2008. But even they have faced crisis before, the hotel employees as well as the owners and operators, they had not all of the skills and preparation for the COVID-19 outbreak crisis, e.g. 46.15% hotel operators in Chengdu, the capital city in Sichuan had already faced to the 2003 SARS and the 2008 Sichuan Earthquake still have less experiences for it. Not to say some hotels were experiencing the crisis for the first time, they felt lost about how to deal with the sudden crisis. The hotels that have experienced the crisis said that because this is a brand-new virus, after the outbreak, they took some time to understand the situation and adapt to the environment, and then they began to take corresponding measures for their hotels. In these hotels, almost all hotels disinfected the facilities and equipment in the hotel, and reduced the number of employees at work as much as possible. The employees on duty were also trained in epidemic prevention; the guests who have already checked in the hotel were also checked by staff one by one. If there was any problem, the hotel would promptly report to the relevant departments in that area and kept themselves updated for the following steps.

Nowadays, mid-to-high-end hotels have launched relevant crisis management manuals for staff to read and learn. But from the perspective of COVID-19, reading is obviously not enough. The hotel should strengthen the learning of crisis management in the future work, improve the foresight of employees, stay sensitive to different situations at any time, and be alert to future risks.

***Short-term business will be significantly affected, and future long-term development will place more emphasis on online business.***

When asked "What are the main short-term impacts of the outbreak on your hotel?" All respondents said that their income had dropped significantly. COVID-19 outbreak could have a dramatic impact on global tourism, especially on China's tertiary industry. It could be far greater than that of SARS in 2003, for example, the massive increase hotels in China — approximately more than 480,000 hotels and 18.16 million rooms in 2008, compared to only 9751 hotels and 992,800 rooms in 2003. Yet the China's hotel industry has continued to build the new hotels, last year, about 1,000 new hotels opened, and the number of new rooms was about 138,000 (Chinese Star-grade Hotels Official Report). According to data provided by Dongcheng International group (This group owns more than 2,500 hotels, with over 200,000 rooms, in more than 200 cities around the world, about 60,000 management staff and over 30 million paid members), the average reservation cancellation rate per night per room during the Spring Festival exceeded 40% in mainland China. During the Spring Festival alone, the OCC rate fell nearly 50% and revenue fell 80% compared with last year. The result has been domestic supply glut that has not only hurt industry profits but led to huge risks during the COVID-19 outbreak crisis happened.

As the hotel management, this outbreak will have major implications for hotel owners and operators. During the research, hotel occupancy and average daily rates were suffered almost in the whole industry, as governments imposed travel restrictions and hotel guests cancelled trips. And 46.15% of owners and operators in Chengdu hotel industry showed the business temporarily suspended and the potential impact of the COVID-19 is weighing on the industry's outlook. And 23.05% negatively impact on controlling of operating expenses and facing the problems of unbudgeted operating expenses. Hotels are dynamic businesses with expenditure demands that vary from day to day and especially for stocking great in amount food and beverage ingredients ahead of the period of the Spring Festival.

At the same time, when asked about the long-term impact, most respondents said that the future hotel industry may tend to have more online business. During the outbreak, many hotels changed their operating models to online due to lack of consumer sources, allowing consumers to feel the services of mid-to-high-end hotels without leaving home. The hotel has begun to offer popular online methods such as food delivery, room pre-sale, and online live broadcast. This not only helped the hotel to solve part of the sales pressure, but also carried out efficient publicity for the hotel. This outbreak also changed the behaviour of consumers. From the data of the six dimensions of mid-to-high-end hotels in Chengdu, China released by Joint Wisdom in August 2020 showed that after the outbreak, consumers' awareness of hygiene and epidemic prevention has increased, and a safe and hygienic living environment has become a basic requirement for consumers. Facilities, locations, and catering are less concerned. Also, due to the influence of policies in some regions in China, people's travel radius has shrunk, and local travel and surrounding travel have become popular. Take Sichuan Province as an example. In the first half of this year, the proportion of travel reservations in the province increased from 33% in 2019 to 42.6%. Changes in consumer behaviour will also have an impact on the way the hotel operates in the future. Therefore, in terms of long-term development, the hotel industry seems to need to make huge adjustments.

***Innovation will become the key word of the hotel industry's resilience in the upcoming year.***

Resilience of adaptive capabilities have been addressed in organizational studies relating to sustainable transitions, which need a long-term recovery responses (Loannides and Gyimothy, 2020). Although the government has seek to push a lot of additional policies to re-strengthen the tourism and hotel industry, this cannot settle the fundamental problem. First, this outbreak has had an associative impact on the hotel's internal management and operation. As for hotel employees, staff retention and the panic psychology of hotel staff could become big issues for the owner in the current outbreak. For instance, declining occupancy could force the operator to reduce staffing levels incurring redundancy costs and the staff may feel uncomfortable to communicate and serve with guests as the people-intense nature of the hotel industry. On the other side, a part of employees has worried about when they could return to work in order to make salary and gain income. However, the returning work day has been limited by the confidence recovery for this industry. The travellers were seeing 70% a year-on-year declines in the end of January in Chinese tourism industry (Zeping Ren, 2020, Chinese Economist). Employees are one of the most important assets of the hotel, and they are also the image of the hotel when facing the guests. Therefore, the hotel should make reasonable arrangements for its employees, and conduct regular physical and psychological health checks on hotel employees.

Second, although the interviewees have successfully survived through COVID-19, they said that the crisis has actually accelerated some small and medium-sized hotels out of the game. Small and medium-sized hotels lack sufficient funds to operate, and in the environment of suspension or lack of customer sources, it was difficult to persist until the industry recovers. COVID-19 has severely hit the tourism industry, hotel consumption has also plummeted, which accelerated the market reshuffle in the industry. Consumers' concerns and consumption habits have undergone major changes due to COVID-19, so in the future, many consumers will also face a new choice of hotel brands and markets. Consumers now value the level of hygiene. If small and medium-sized hotels cannot make timely adjustments according to market changes, consumers in the future are expected to shift their consumer demand to more trustworthy mid-to-high-end or well-known chain hotels. In addition, mid-to-high-end hotels are not completely assured of future development. If the hotel itself has a lot of management problems, it is easy to be eliminated if it is not adjusted after the outbreak is restored.

## 5. Discussion and Conclusion

### 5.1 Discussion and implications

Although COVID-19 in China has now entered normalized prevention and control, as of Joint Wisdom's data in June, the demand for the hotel market in China has recovered to more than 80%. However, this does not mean that the industry can lower the guard. The impact of COVID-19 outbreak make difficulties for the tertiary industry (e.g. the hotel industry). For the strategic response, there has three ways to overcome the difficulty time.

The process of digital transformation, including learn to utilize the big data, develop the smart hotel sales strategy, emphasize effective interaction with target customers on-line, and plan a renovation or repositioning effort to utilize data mining and decision-making technology in the hotel management and operation.

In the face of such difficulties, the association of hotel industry as an industry organization should try to expand the industry self-help and co-operate with other hotels to seek opportunities to overcome the crisis. For example, to release the load reduction plan for small and medium-sized franchisees, continuously upgrade the support policies, and urgently open low interest loans to ease the financial pressure as the ways of HTHT(China multi-brand hotels group, top 10 global hotel group in 2017) did.

Making efforts to the construction of hotels culture, to public polices to protest and take care of hotel staff, to subject to increased health and safety compliance and reporting obligations for looking to curtail and spread of the virus, and create a safety accommodation for guests.

### 5.2 Conclusion

In the face of crisis, both hotels and individuals are vulnerable. In today's changing hotel business environment, crisis management helps us grasp the occurrence and handling of crisis events. Only when employees in every department and every position in the hotel know their responsibilities and importance can carry forward the hotel's sustainable development. This might be a great opportunity for hoteliers to get ready and choose a new direction and move forward by adopting a more sustainable way for the future.

In the new COVID-19 crisis, travellers and consumers turn their attention on a level to the hotel accommodation, focusing on its safety and welfare with the strict safety cleaning procedures, as well as the loss caused by the cessation of accommodation needs and their tourism activities. Residents' perception of the risks brought by tourism activities and willingness to pay for reducing public health risks are increasing quickly. From the point of view of improving safety and hygiene, the hoteliers and lodging properties' owners could redesign and upgrade the safety and hygiene standards operation procedures as a selling plan will be a great way to take recovery action after the outbreak.

Under the novel COVID-19 pneumonia epidemic situation, home epidemic prevention has become normal. The outbreak and various information disclosure has caused people's pressure and anxiety. Tourists' mentality change, virtual tourism and accommodation experiences has become a hot spot in the industry. Target markets and tourists will have more chance to choose the brands and hotels according to the virtual accommodation experience after the time of home epidemic prevention period. How to provide more attractive virtual experience in order to form the memory points of brands will be a key to recovery.

Under the strong impact of the COVID-19, the stay-at-home economy has developed based on the new generation, who are internet aborigines and have a huge interests on social media and

Internet. Background of the development of vigorously developing smart tourism and now information such as big data and artificial intelligence as well, hospitality service industry is facing unprecedented opportunities and challenges. In the era of digital economy, intelligent development is injecting new momentum into economic and social development, and new technological innovation is profoundly changing the consumption pattern and structure of consumer groups. With the change of consumption habits, intelligent development leads the hotel industry to the business model innovation of "building customer experience scene" oriented by "customer demand", making use of "intelligent +", hotel services can fully empower the hotel industry, further release the huge capacity accumulated by intelligent development and reform, promote the overall leap of hotel industry productivity and accelerate the change of business model. The development direction of "intelligent +" hotel service is to promote the new business form of the hotel industry, promote the industrial restructuring, and build an interactive, social and information-based service scene with "customer demand" as the core in-depth research will effectively make up for and guide the market application. In the context of huge market and rigid demand, the research on "intelligence" and the supply-demand relationship of modern service industry has changed to meet the growing demands. At the same time, how to promote the construction of smart hotel and carry out intelligence will also become the focus of the future development of the hotel industry.

### *5.3 Limitations of this study and suggestions for future study*

The quantitative analysis could be done more deeply to illustrate the implications from COVID-19, because of the data restriction and fewer sample data make it difficult to estimate broader scenarios.

We have conducted interviews and research on hotels in Sichuan market, but there is still a lack of research and discussion on other places in China. Because the level of economic development and the development level of accommodation industry in different regions of China are different, if we can further study the comparison of the situations between different regions before and after the epidemic, such as the occupancy rate before and after the epidemic, and the efficiency of measures taken, we can bring better analogy results.

In the process of research, we still lack of in-depth research on customers based on the qualitative and quantitative research, make us fail to learn more details to the psychological changes of our customers from the epidemic period which is also the future research should pay attention to and strengthen.

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## **Consumer behavioural intention in green hotel development: Tainan city**

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### **Abstract:**

This study assesses behavioral intention in environmental-friendly hotels in Tainan. More specifically, this study examines the relationship between behavioral intention from the perspectives of customers. Mainly related to the research on the environmental protection issues of environmental hotels in Tainan city, Taiwan. Conclude the interviews, two hotels work with government when they help market proactively, encourage consumers and provide more subsidies. Interview with management and survey from consumers were adopted to verify behavioral intention as confirmed in the result. Theoretical and practical implications are presented.

behavioral intention

**Keywords:** Green Hotel, Sustainable, Green Operation, Consumer Recognition, Consumer Behavior

### **1. Introduction**

Provide a brief background to the topic, with some statistics or data to provide a background to the environment or situation. Explain why the study is needed from the academic and practice perspectives. Research objectives should be clearly specified.

Green consumption has been originated from consumers' awareness of environmental degradation, and then companies try to influence consumer to manufacturers. On the other hand, it is required to produce products with minimal impact on the environment, it can still maintain consumer demand. Through the practice of consumer environmental behavior. In order to reduce damage to the environment. Domestic consumption originated in the 1990s in Taiwan (Wong, 2001). "Environmental awareness is rising", causing more and more consumers' attention. The significance of green consumption is not only in the product itself but also is the connection between the individual and the environmental issues behind the product. When consumers buy green products, attention in the production environment and the world economic system

Integrating personal needs with global socio-environmental issues. Into further environmental action. In today's popular tourism, choosing an environmentally friendly hotel is also a science. For example, a large amount of solid waste is an important environmental issue currently facing

hotels. The solid waste generated by hotel operations is much higher than that of ordinary households. The US Green Hotel Guide states that a hotel consumes and produces more waste in a week than a hundred American households consume a year (Chen and Tung, 2014). It can be seen that, while the number of global hotels is increasing, the above challenges represent that the hotel industry should take more corporate responsibility for global warming. (Teng, Horng, Hu, Chien, & Shen, 2012). According to the statistics of the official website of the Administrative Information System of the Tourism Bureau (2016) in the past 10 years, the number of foreign tourists visiting Taiwan has increased from 24.591 million in 2008 to 55.263 million in 2018 (Tourism Information System in Tourism, 2019). At the same time, it is also estimated that the growth of tourists from Taiwan to Taiwan is most significant. With the increase of tourists from Taiwan and the increase in the number of domestic tourists from Taiwan, Taiwan tourism has begun to fully development.

With the advancement of modern technology and medical treatment, in addition to the booming economic development and convenience of life, problems such as environmental pollution, natural resource consumption, and ecological disruption have also occurred. Economic growth and environmental protection are two things that conflict or are incompatible with each other (Rees, 2003). The impact of national economic and trade policies on the environment has caused pollution emissions, global warming, resource consumption and destruction of biodiversity, and population growth and excessive consumption are the main reasons. In addition, the Organisation for Economic Cooperation and Development (OECD, 2011) believes that in recent years global warming has led to melting glaciers, climate anomalies (including droughts, tropical cyclones, heavy rain, wind disasters), and environmental problems such as ocean acidification. In the past 50 years, the global economy has developed rapidly. Human activities (including large-scale production, excessive use of petrochemical fuels, agriculture, and land development) have greatly increased greenhouse gas emissions. Due to the increasingly serious environmental damage problem, governments of all countries have taken environmental sustainability as an important policy, coupled with the increase in global environmental awareness in recent years, and environmental attitudes have also been strongly promoted. Therefore, the implementation of environmental sustainability actions has indeed implemented green consumption and became important part of human beings.

## **2. Literature Review**

Hotels mainly provide customers with "comfortable" and "attentive" services, such as heating, ventilation systems, lighting, cleaning, etc., which are very energy- and water-consuming industries in the tourism industry, non-green hotels need to use a lot of energy, Water, and commodities to provide customer needs, so hotels will cause harm to the environment, for example: hotels consume a lot of non-recyclable products, causing unnecessary waste; and the energy and water consumed produce a lot of carbon dioxide, causing air and water pollution (Rahim and Raman, 2017).

Because of the global warming caused by the greenhouse effect, the issue of sustainable development has been valued. The German government promoted a plan for green consumption in 1977 in order to teach and improve the public's environmental awareness and change the general consumption pattern of the general public, but this was not accepted by other countries in the early days, so this can only be considered as The country's environmental protection movement did not gradually attach importance to all countries until the United Nations first introduced the concept of "sustainable development" in its 1987 report on environment and development (Brookfield, 1988).

### *2.1 Sustainable development*

Sustainable operation refers to the development process that meets contemporary needs without compromising future generations to meet their needs. Through legislation, financial and taxation tools, and economic instruments, Under the current issue of climate change, considering disaster prevention and rescue, environmental conservation, social justice and economic growth. And guide the people to take the initiative to participate actively, form a healthy competition for themselves, and ensure that the conditions for future survival and development meet the needs of the next generation (Hsiao, Chuang, Kuo, and Yu, 2014).

### *2.2 Eco-friendly*

A worldwide resource and energy crisis that has sprouted since the 1970s. Certain predatory developments in the past have depleted many resources and energy sources, seriously affecting the long-term survival of mankind. Many countries have put forward sustainable development and consumption strategies and set green environmental protection and green economy as important themes of this century.

### *2.3 Green consumption*

Green consumption, also called sustainable consumption, refers to a new type of consumption behavior and process characterized by modest consumption control, avoiding or reducing environmental damage, advocating nature, and protecting the ecology. In addition to including green products, it is also effective against materials and energy. This behavior is a kind of protection for the ecological environment. It can be said that it covers production behavior, consumption behavior, and so on. The development of green consumption can not only meet the needs of residents more progressively, but also promote the development of green industries. It can also improve the green consumption awareness of enterprises and consumers, change consumption concepts, and achieve sustainable development. Therefore, it is not only an interest. Obligation is also a conscience. It guarantees the survival of future generations and the safety and health of contemporary people. It reminds us that environmental protection is not only the responsibility of producers, but also the responsibility of each consumer. It also expresses our care for the planet.

With the improvement of environmental awareness, the concept and mechanism of environmentally friendly hotels or eco-hotels have gradually appeared in various countries, including the "Greening the Lodging industry" introduced by the "Green Seal" of the United States in 1995; The Hotel Association of Canada-Green Leaf Eco-rating Program, which began in 1998; the Green Leaf Eco-rating Program (UNESCO), which is sponsored by the United Nations Ecological Environment Program, is committed to Extend the spirit of environmental protection to the business philosophy and practice of hotels in various countries.

The Green Hotel Association (2011) defines a green hotel as: "The hotel itself has environmental protection performance. The hotel management mode should be actively committed to saving energy, water resources and reducing waste, avoiding resource consumption and waste, and maintaining the global environment. Green hotels are in their infancy in Taiwan. The Environmental Protection Agency defines green hotels as "most obvious waste reduction, including whether the hotel promotes the reduction of bed linen, the frequency of changing towels, and the provision of toothpaste, toothbrush and other disposable toiletry products." Recycling, etc. "(Green Life E-Newsletter of the Environmental Protection Agency of the Executive Yuan, 2009). A green hotel is a green hotel that implements various

green practices to protect the environment without harming the ecological environment and propose environmentally friendly plans to reduce operating costs. Generally, the green hotel's environmental protection measures include the use of durable money, donation to charities, recycling bins, and notices. Use of cards, etc. (Department of Environmental Protection, 2009; GHA, 2011)

Hsiao et al. (2014) believe that green hotels are products provided by hotels that can fully utilize resources, protect the ecological environment, and are harmless to humans. Sustainable development of green hotels must be built on the ecological environment's ability to bear, and conform to the local economic development status and ethics (Huang and Perng, 2017). Moreover, main development principles of green hotels are based on renewable materials, recyclable, low pollution and energy saving. (Chen and Chen, 2012).

The development and operation of the hotel industry in the past consumed a lot of natural resources and generated a large amount of sewage and waste, which affected the sustainable development of the natural environment. In recent years, the hotel industry in various countries has gradually attached importance to environmental protection issues and began to use environmental protection measures to reverse the current situation. And some hotels are more socially responsible, green hotels have become an international trend (Erdogan and Baris, 2007; Bohdanowicz et al., 2004; Kasim, 2004) .

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Green hotels usually implement environmental protection measures to reduce the negative impact on the environment. Environmentally responsible practices (ERPs) include sustainable environmental standards, regulations, best environmental protection measures, environmental protection labels, and environmental management systems (Environmental Management Systems, EMSs) and environmental indicators (Choi, Parsa, Sigala & Putrevu, 2009; Mensah, I. (2006).

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When a company implements environmental responsibility measures, it may have the following benefits: save costs, save resources, retain customers, increase customer loyalty, improve employee morale, and then affect corporate image. Many studies have also verified different environmental responsibility in the restaurant industry And environmental measures (Choi et al., 2009)

If a company implements environmental responsibility measures, it may have the following benefits: save costs, save resources, retain customers, increase customer loyalty, improve employee morale, and then affect corporate image. Many studies have also verified different environmental responsibility in the restaurant industry. And environmental measures (Bramwell & Alletorp, 2001; Schendler, 2001; Choi et al., 2009).

### **3. Methodology**

#### *3.1 Measurement*

Explain what research methods were used and why. Explain how they were applied. Measurement, Data collection, and Analytical methods may be included.

The study it can be divided into two research methods: "quantitative" and "qualitative" research. The two methods represent different research approaches and produce different research results. First collect relevant scientific literature and data. First interview with two green hotels in Tainan. Then after literature review and summarize and establish the questionnaire based on the documents and research objectives. The study first polite with two hotel room division managers interview, The question contents were revised with academic scholars. This study establishes research topics, analyzes and discusses related documents, collects and reads documents, and establishes a research framework for the purpose of the study. Reference documents, materials, and questionnaires are used to prepare a first draft of the questionnaire. The question contents were revised with academic scholars.

First, distribute paper copy and used GOOGLE forms were used to test the sampled objects. The collected questionnaires were screened. The invalid questionnaires were sorted out. The valid questionnaires were registered in Excel 2016. The SPSS 25.0 Chinese version was used for analysis and discussion. Results, writing conclusions and recommendations

#### I. Descriptive statistics

The number and percentage are used to describe the recovered samples, consumer opinions and basic personal information of environmental hotels.

#### II. Analysis of Pearson correlation coefficient

This study uses Pearson correlation coefficients in the two-variable correlation analysis to perform correlation analysis to verify the relevance of the opinions and behaviors of eco-hotels. After a two-tail test, when the value reaches a significant level of 0.05, it will be represented by "\*"; when the value reaches a very significant level of 0.01, it is expressed as "\*\*\*". This expression is mainly used to measure the degree of correlation between variables,

#### III. Independent sample T test

The independent sample T test is applicable to the test of the average of two samples. The purpose is to compare the difference of the average between two mother groups with the same art, or the difference of the average of two samples from the same mother group.

### **4. Results**

Both hotels believe that the current environmental protection is not so popular. I hope that the environment can be changed in the future. For example, the bath milk and shampoo will be replaced by large tanks, which can not only supplement but also reduce some garbage. If you need to replace the equipment of the long resident, you will help to replace it. This will reduce some waste water and meet the standard of serving guests.

The two hotels did not specifically publicize the concept of environmental protection to all employees of the company. They did not mandate employees. Instead, they urged employees to turn off lights, turn off air conditioning, and separate waste or use environmentally friendly tableware.

Both hotels use environmentally friendly equipment, such as: toilet, LED lights, faucet HP photocopy paper, male pens have green labels, environmentally friendly paint. The lamps are

LED. More power saving and high efficiency. The printer has been modified. The ink can be refilled. There is no need to change the ink cartridge every time. The hot water is using solar facilities. It will provide thermal energy for restaurants.

Most people do not come to stay because they know they are environmentally friendly hotels. It is suggested that the two hotels can do more publicity. In addition to these two hotels in Tainan, there are actually quite a few hotels that are environmentally friendly hotels. Most of the hotels have environmental certifications because they are promoted by the government, and the policies implemented by each restaurant are actually similar. The government should be more active in helping green hotels to promote and publicize, so that more consumers can go to spend, or give some subsidies to green hotels. Both hotels hope to add more environmental protection equipment and supplies in the future, a little more green. Both hotels believe that the government should make more active publicity and promote environmentally friendly hotels, which can be more advanced in the way of star rating. This section presents the results of the research. The data is obtained from the questionnaire survey. The research results are divided into three sections. The first section describes the research sample, the second section analyses the consumer's "environmental protection awareness and environmental behavior," and the third section is consumption. The relationship between environmental awareness and environmental behavior.

A total of 200 formal questionnaires were distributed, 200 copies of the questionnaires were returned, and 160 copies of online questionnaires were collected. Question 9 of this questionnaire is a test question, asking consumers if they have lived in an environmentally friendly hotel, and designating answer options 2 (none) and 4 (yes) that are not this answer is extremely invalid. Results After excluding 25 invalid questionnaires, a total of 335 valid questionnaires were obtained, and the effective recovery rate was 95.17%

#### 4.1 Profile of respondents

Present results of data analyses. Tables and Figures will be helpful to explain the findings.

Variable	Item	people	percentage
Sex	male	111	33.1%
	female	224	66.9%
Age (years old)	Under 12	0	0.0%
	13~20	86	25.7%
	21~30	193	57.6%
	31~40	23	6.9%
	41~50	18	5.4%
	Above	15	4.5%
Monthly income (New Taiwanese Dollars)	Under \$3,000	62	18.5%
	\$3,001 ~ \$5,000	26	7.8%
	\$5,001 ~ \$10,000	52	15.5%

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	\$10,001~ \$15,000	33	9.9%
	\$15,001~ \$23,000	42	12.5%
	Above \$23,001	120	35.8%
Education	Under junior high school	6	1.8%
	High school	35	10.4%
	College	278	83.0%
	Above Master	16	4.8%
Occupation	Farmer	1	0.3%
	Hospitality industry	111	33.1%
	Industrial	12	3.6%
	Army, police, teacher	17	5.1%
	student	167	49.9%
	others	27	8.1%
Total		335	100.0%

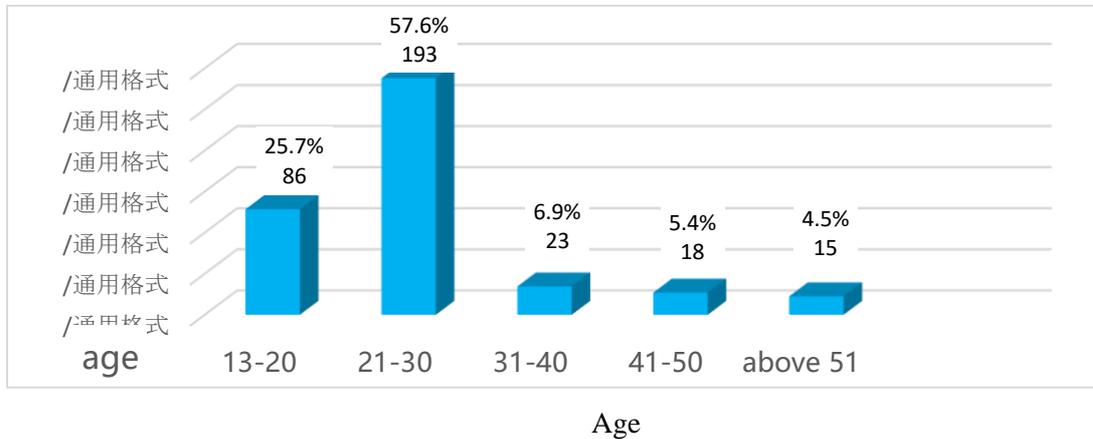
The rise of environmental protection awareness today, this study will find that survival of eco-friendly hotels by in-depth understanding of the thoughts of environmental-friendly hoteliers and the perception and consumption behavior of general consumers, and then comparing the similarities and differences between these two green hotel and promotion strategy.

The two green hotels explore the environmental management of Tainan to promote green operation, and to explore the impact of consumers' perceptions of environmental hotels in Tainan on their consumption behaviors, we finally compared whether the results of the two previous studies can verify each other and reach a consistent conclusion.

Regarding questionnaires, there were 200 hard copy and 160 online survey. Removed 2 invalids and remained 335 valid questionnaires. The results showed that consumer perceptiveness affected consumer behavior significantly. Thus, knowing environmental friendly information about hotels was inadequate.

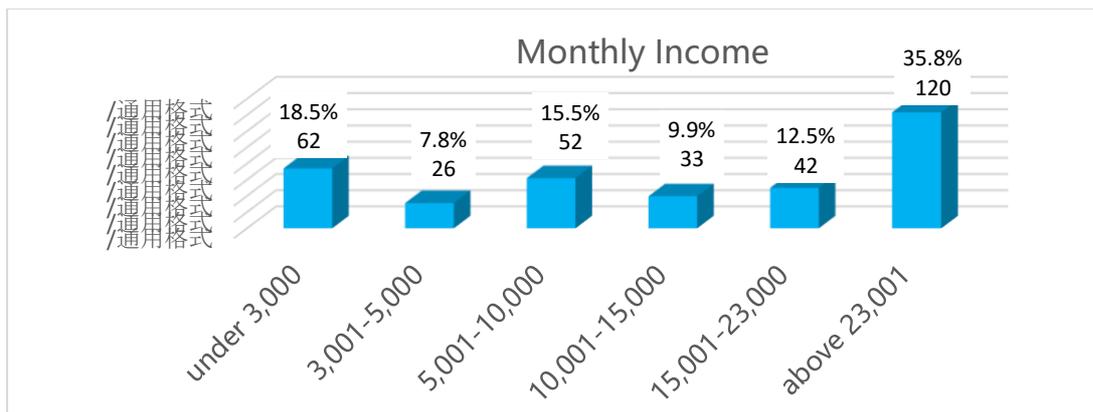
### 1. Age

There were 86 (25.7%) between 13 and 20 years old, 193 (57.6%) between 21 and 30 years old, and 23 (6.9%) between 31 and 40 years old. 18 persons (5.4%) between the ages of 41 and 50, and 15 persons (4.5%) between the ages of 51 and 51. The age distribution of this test is the largest proportion of 21 to 30 years old.



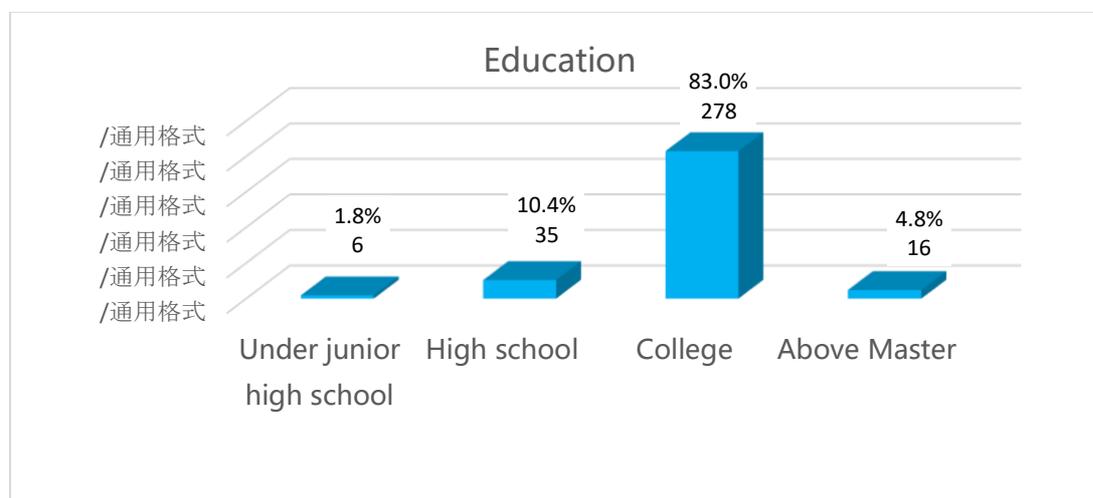
### 2. Monthly income

Among the research subjects, 62 people (18.5%) earn less than 3,000 yuan per month, 26 (7.8%) earn 3,001 to 5,000 yuan per month, and 52 (15.5%) earn 5,100 to 10,000 yuan per month. 33 people (9.9%) with a monthly income of 10,001 to 15,000 yuan, 42 people (12.5%) with a monthly income of 15,001 to 23,000 yuan, and 120 people (35.8%) with a monthly income of more than 23,000 yuan, obtained from the test results It is known that consumers' monthly income is more than 23,000.



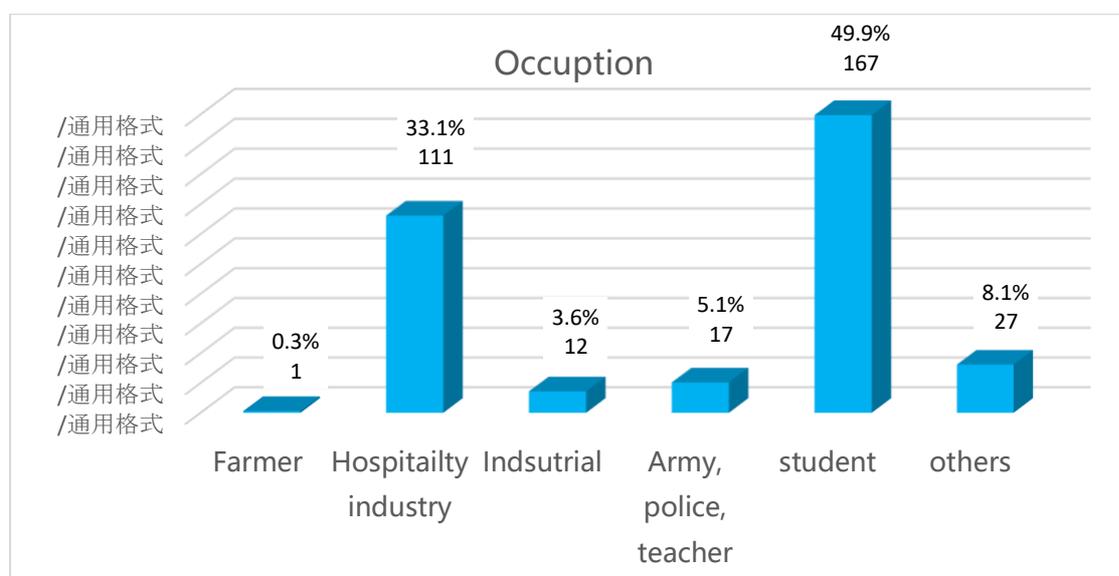
### 3. Education level

Among the subjects studied, there were 6 people (1.8%) below the middle school (inclusive), 35 (10.4%) in the high school (vocational), 272 (83.0%) in the university (junior college), and 16 (above) in the master's degree (including) 4.8%), the other education level is 0 (0.0%), the number of test is the university (college) is the largest.



### 4. Occupation

Among the subjects studied, there were 1 person (0.3%) in agriculture, forestry, fishery, animal husbandry, 111 (33.1%) in the service industry, 12 (3.6%) in the manufacturing industry, 17 (5.1%) in military police training, and 167 students (49.9%) and 27 occupations (8.1%) in other occupations. The test results show that the consumer occupation category has the most students.



## Consumer recognition eco-friendly analysis in green hotel

This result shows that most consumers agree with the concept of environmentally friendly hotels but are not familiar with environmentally friendly hotels in Tainan City, and remain skeptical about whether environmentally friendly hotels implement environmental protection.

## Consumer recognition eco-friendly sex influences in green hotel

male		female		total		
item	Mean $\pm$ SD	item	Mean $\pm$ SD	item	Mean $\pm$ SD	ranking
2	4.21 $\pm$ 0.75	4	4.29 $\pm$ 0.61	4	4.26 $\pm$ 0.66	4
3	2.62 $\pm$ 1.11	6	2.55 $\pm$ 0.87	6	2.58 $\pm$ 0.96	6
4	4.30 $\pm$ 0.85	2	4.49 $\pm$ 0.60	1	4.42 $\pm$ 0.70	1
5	4.32 $\pm$ 0.74	1	4.42 $\pm$ 0.71	2	4.39 $\pm$ 0.72	2
6	4.28 $\pm$ 0.75	3	4.34 $\pm$ 0.67	3	4.32 $\pm$ 0.70	3
7	3.92 $\pm$ 0.81	5	3.76 $\pm$ 0.76	5	3.81 $\pm$ 0.78	5

Note: SD = Standard Deviation

According to Table 4-5, the highest and lowest average topics for boys and girls are the same, indicating that there is no difference in the cognitive aspect of Tainan Environmental Hotel and gender.

## Consumer behavior factor analysis in green hotel

This result shows that environmentally friendly hotels are attractive to consumers, but the occupancy rate is still relatively low, which may be affected by other factors, such as the amount. However, for consumers who have already stayed, the return rate and willingness to recommend are still high. It can be seen that the overall service brought by environmental hotels to consumers is to satisfy consumers.

	1	8	9	10	11
1	1	0.394**	0.167**	0.438**	0.541**
8	0.394**	1	0.112*	0.415**	0.530**
9	0.167**	0.112*	1	0.400**	0.212**
10	0.438**	0.415**	0.400**	1	0.668**
11	0.541**	0.530**	0.212**	0.668**	1

The analysis results show that consumers do not know whether Tainan environmental hotel will affect their consumption behavior, because consumers do not know about Tainan

environmental hotel, so they do not want to stay. If consumers understand environmental hotel and help to improve the environment today, when choosing a hotel, priority is given to staying at an environmentally friend

	3.	9.	10.	11.
3.	1	0.272**	0.255**	0.247**
9.	0.272**	1	0.400**	0.212**
10.	0.255**	0.400**	1	0.668**
11.	0.247**	0.212**	0.668**	1

The analysis results show that consumers' willingness to visit the environmentally friendly hotel in Tainan will affect their willingness to return to the environmentally friendly hotel and recommend others to stay in the environmentally friendly hotel.

	9.	10.	11.
9.	1	0.400**	0.212**
10.	0.400**	1	0.668**
11.	0.212**	0.668**	1

Analysis of Correlation Overall Aspects of Environmental Consumer recognition and behavior

	2	3	4	5	6	7	1	8	9	10	11	
Consumer recognition	2	1	0.251**	0.446**	0.369**	0.277**	0.336**	0.481**	0.419**	0.124*	0.447**	0.496**
	3	0.251**	1	0.158**	0.165**	0.109*	0.331**	0.423**	0.173**	0.272**	0.255**	0.247**
	4	0.446**	0.158**	1	0.310**	0.374**	0.133*	0.367**	0.438**	0.042	0.281**	0.450**
	5	0.369**	0.165**	0.310**	1	0.366**	0.175**	0.383**	0.429**	0.120*	0.347**	0.419**
	6	0.277**	0.109*	0.374**	0.366**	1	0.339**	0.265**	0.415**	0.069	0.269**	0.299**
	7	0.336**	0.331**	0.133*	0.175**	0.339**	1	0.298**	0.360**	0.106	0.266**	0.321**
	1	0.481**	0.423**	0.367**	0.383**	0.265**	0.298**	1	0.394**	0.167**	0.438**	0.541**
Consumer behavior	8	0.419**	0.173**	0.438**	0.429**	0.415**	0.306**	0.394**	1	0.112*	0.415**	0.530**
	9	0.124*	0.272**	0.042	0.120*	0.069	0.106	0.167**	0.112*	1	0.400*	0.212**
	10	0.447**	0.255**	0.281**	0.347**	0.269**	0.266**	0.438**	0.415**	0.400**	1	0.668
	11	0.496**	0.247**	0.450**	0.419**	0.299**	0.321**	0.541**	0.530**	0.212**	0.668	1

## 5. Discussion and Conclusion

Discuss your findings by comparing those of previous studies. Address academic and practical implications. Conclude with some directions for future research or practice, and any limitations of this study.

### 5.1 Discussion

The finding that two green hotels have their own eco-friendly strategic, for examples, did not provide disposable toothpaste, toothbrush, and shower gel. The result showed that price discount and support eco-friendly consumers would prefer to choose green hotel (Kang, Stein, Heo, and Lee, 2012). In addition, although green hotel may not increase occupancy or profit, it rise up reputation of the hotelier (Rahman and Reynolds, 2016). This study found that if a hotel becomes a green hotel, it must first complete a set of plans before it can be effectively implemented, and it will also help the hotel to implement environmental protection-related development in the future.

Nowadays, Taiwan's accommodation industry has also participated in the star rating system. Even in recent years, the "environmental protection system" has been included in the star rating project, but Taiwan's star rating, The hotel must meet the evaluation requirements to pass the review. For example, if hotels provide toothpaste, toothbrush, towels, etc., but the evaluation system of environmentally friendly hotels is not required, this is a contradiction problem encountered by hoteliers. Therefore, most hoteliers face staring for star ratings. Under the pressure, if hotels implement environmental protection policies, and consumers feel dissatisfied or inconvenience. Hoteliers will keep the same, make green strategy by voluntary selection for customers. Therefore, the hotels offer room discount or free meal for customers. All in all, service quality affect the hotel industry's promotion of green policies or projects(Chan, 2013; Millar and Baloglu,2011).

The evaluation of green hotels has been established in Taiwan for many years, however, there are only 1,232 green hotels. It seems government or environmental protection-related public departments lack the incentives and other factors.

Although hotels provide environmental protection schemes for customers, they will not inform consumers verbally. Only market on social media. As the conflicts between star hotel reviews, gree hotel reviews, customer complaints. The strict specifications of green hotel evaluation with investors' consideration of expenditures. With the fact that there is no compulsory requirement for relevant government agencies to require hoteliers to participate in environmental hotel evaluations, hoteliers are temporarily classified as follow-up feasibility assessments (Diduck and Sinclair, 2016; Chan, 2014).

Therefore, the government or relevant public relations units must effectively convene experts and relevant to improve and evaluate. In order for hotel reviews better eco-friendly and to evaluate the incentives given to water, electricity and tax discounts to attract more hotels. The industry's transformation of environmentally friendly hotels (Chou and Chen, 2014; ). The study had interviewed two green hotels, these are over 10 and 30 years old. The hotel's public safety poses a threat, so it is not possible to add equipment that causes damage to the building structure.

## 5.2 Conclusion

This research suggests that environmentally friendly hotels are the trend of the times, and hoteliers also feel the importance of being promoted. "Green hotels have been regarded as a long-term trend." Departments and units must effectively convene competent public departments, experts from all walks of life, and related personnel to carry out improvements and assessments, provide improvements in procurement and installation of environmentally-friendly hardware facilities, and provide information and technology for hoteliers and the general public to help Taiwan's environmentally friendly hotels. Taiwan is more mature, and evaluates discounts on water, electricity, and taxes as incentives. In addition, the Taiwan government should promote environmental protection from time to time and try to integrate environmental protection into the lives of the people. First, the government's Ministry of Education can first provide environmental education to students and pass this education to future generations in a sustainable manner. For the masses, working people, or silver-haired people, environmental protection-related units can first implement strict garbage classification for education, or bring environmental protection into life, and purchase environmentally friendly products, which will give discounts or give away small prizes as marketing methods. On the one hand, you can really do a good job of garbage classification, on the other hand, you can establish environmental protection-related concepts, so that people can jointly promote green environmental protection, protect the earth, and operate sustainably.

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## **How consumers react to personalized recommendation? The effect of activated awareness of information blindness**

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### **Abstract:**

Online travel agency (OTA) (e.g. Ctrip, Fliggy) have adopted a variety of recommender systems to collect consumers' information and to personalize recommended products, helping their users to find products and increase purchase intention. Consumers can easily find favorable products as the algorithm of the online travel agency will provide customized and appealing options based on their preference, purchase records and other personal information.

Although personalized recommendations are believed to be more efficient and more user-engaging, generic recommendations are adopted by many online shopping platforms. Dangdang.com, known as the most successful online book retailer in China, always provides best sellers information to their consumers. Other platforms, though target consumers with algorithms, also provide generic recommendations (e.g. sorted by price, sales et al.) that can be selected by consumers. Some firms go even further by getting rid of algorithms from recommender system. For example, Apple News replaced algorithm-picked top stories with human-picked one from 2016 while other news platforms sparing no effort to optimize recommender algorithms (Nicas, 2018). These practices of different firms in real business world demonstrate that whether personalized recommendations are favorable by consumers remains equivocal and requires more investigation from a consumer's perspective. To be more specific, consumers would be more likely to prefer one type of recommendation (generic vs. personalized) in some particular circumstances and how consumers process the recommendation information are well-worth discussed. Therefore, the objective of the present research is to explore the following questions: Will consumers prefer personalized or generic recommendation in online context? What is the boundary condition of consumers' preference while processing recommendation information and how we can deal with it?

The current study will draw on two lines of research, which are personalized advertisement research in advertising and consumers' awareness research in information processing.

The literature describes personalized advertisement as an innovation approach whereby companies improve ad attractiveness through targeting to consumers' wants and needs (Tam & Ho, 2006; Aguirre et al., 2015). However, whether the beneficial effect of personalized ads will carry over to recommendation is still ambiguous because consumers take the initiative to search for products when encountering online shopping recommendation, whereas they passively receive ads information when surfing the Internet.

Previous studies about advertisement show many evidences of consumers' preference to personalized ones (Lambrecht & Tucker, 2013). This preference can be attributed to the better fitness of personalized ads to consumers' needs and interests (Tam & Ho, 2006; Aguirre et al., 2015). Thus, a better personalized ad should by definition be more relevant and have better effectiveness. We predict that this positive effect of personalization can be carried over to recommender systems, such that recommendation effectiveness will be enhanced by

personalized (vs. generic) recommendations (H1).

However, personalization will backfire. Consumers may regard personalized ads as off-putting (Stone, 2010; Tucker, 2012; Kim et al., 2018) and result in reactance (White et al. 2008). The issue of filter bubble was brought into the public discourse and made people aware that the information we view online can be filtered based on our personal information (Pariser, 2011). In fact, firms have adopted personalized recommendations for quite a long time as improved targeting techniques have been beneficial for them (Kim et al., 2018). Consumers gradually become more sensible and cautious to the tailored information they received. In practice, to overcome the negative effect, many firms like Facebook voluntarily reveal to their users the ways they use to collect user information and to generate relevant targeted recommendations. The rationale of these transparency practices is that by making consumers aware of the degree to which information are tailored, consumers will have better knowledge about the fitness of the targeted recommendation and further increase the effectiveness (Summers, Smith, & Reczed, 2016; Kim et al., 2018). However, making salient how information is used is not necessarily perfect as something that is not currently top of mind will also be made prominent: the fact that the recommendations are tailored, which would raise their concern about information blindness and subsequently reduce effectiveness. Information blindness refers to phenomenon that information, which is presumably to be of no interests to the consumers, will be precluded by the algorithms (Haim, Arendt, & Scherr, 2017). Yet, the majority of online shopping platforms have not informed consumers what have been hidden from them. Once consumers realize it, which is defined as awareness of information blindness, the favorable impact of personalization might attenuate. The information processing research shows that individuals are frequently unaware of the reason why they employ a certain procedure when making a judgement (Bargh, 1997). However, if they are aware of the unwarranted context effects, they will try to correct prior judgment (Kardes & Wyer, 2013). In this case, we can predict that awareness of information blindness will moderate the relationship between personalized recommendation and the relevant effectiveness. To be specific, the favorable effect of personalized (vs generic) recommendation on recommendation effectiveness will be attenuated when a consumer has activated a high (vs. low) awareness of information blindness (H2).

Hypothesis 2 is actually describing a decision bias defined as “algorithm aversion” (Dietvorst, Simmons & Massey, 2015). Schmitt (2019) suggested that to overcome this aversion, we should understand consumers’ reluctance to technology and employ interventions. Anthropomorphism is a possible approach, which means giving human-like traits in nonhuman agents (Epley, 2018). Consumers prefer technology with element of humanness and this has been proved in digital assistance context (Longoni, Bonezzi, & Morewedge, 2019). Thus, we predict that the moderation effect of awareness of information blindness can be further moderated by anthropomorphism. Specifically, the negative impact of consumers’ awareness of information blindness on recommendation effectiveness will be attenuated when the recommender system is anthropomorphic (H3). Different ways of priming anthropomorphism such as physical appearance and wording will be explored to find a good way of priming.

**Keywords:** Online recommendation, Personalization, Effectiveness, Awareness of information blindness

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## **Does hotel class matter? The research of online complaints in low- and high-class hotels**

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### **Abstract :**

This study investigates at online complaining behavior targeting six different hotel attributes to determine whether there are distinct patterns of behavior exhibited by guests visiting different classes of hotels. The hotel attributes given focus include: (a) *Service*, (b) *Cleanliness*, (c) *Room*, (d) *Sleep Quality*, (e) *Location*, and (f) *Value*. In total, 353 hotels with 2,020 usable individual complaining reviews were collected for the analysis, which was conducted using a manual coding approach. Results indicate that online complaining behavior varies between different classes of hotel. Guests of high-class hotels are more likely to complain about *Service* and *Value*, while guests of low-class hotels are more likely to complain about *Cleanliness*, *Room*, *Sleep Quality*, and *Location*. This study contributes to the realm of hotel management by providing a better understanding of how customers from different classes of hotels are likely to perceive different hotel attributes.

**Keywords:** Online Complaining Behavior, Service Quality, Negative Online Review, Hotel Class, Hotel Attribute

## **Bounded rationality, decision-making inertia and revisit choice: A proposed conceptual framework**

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### **Abstract:**

Tourist decision-making process has been a popular research topic in past decades, tourism researchers highlight motivation and intention factors are related to tourist revisit choice behavior. In this paper, however, we argue under the contextual of tourists' revisit, decision making inertia play a significant role. According to the new assumption, we build up theoretical conceptual framework to explore the factors trigger the decision-making inertia. We use two latent variables to represent bounded rationality: product related factors and switching cost. The result shows that Tourist knowledge, sunk cost and evaluation cost were positively correlated to decision-Making However, satisfaction and economic risk cost were negatively correlated with decision-Making. Similarity of component were not related to decision-Making. This result has some inspirations for us. If tourists want to make repeated trips, they need to attract their attention to a greater extent and pay more attention to the destination products. At the same time, some tourists with decision inertia do not care about the satisfaction of product experience and economic risk, and what is important is to make them become dependent on the product. Under the role of limited rationality of tourists, even if the differentiated competition of tourism products is highlighted, it has little effect. These new critical thinking not only make contribution to tourists' decision research, but also implies that tourism business operators should rethink of the tourists' revisit phenomena and add switching cost of their choices, reinforce attachment between destination and tourists.

**Keywords:** decision-making inertia; bounded rationality; switching cost

### **1. Introduction**

Due to the great benefits of revisit choice behaviour to destination, it has attracted the attention of researchers from tourism and hospitality. (Dolnicar, Coltman, & Sharma, 2015; Park & Nicolau, 2019) Compared with the repurchase behaviour in general consume activities, the frequency of tourists' revisit to destinations is not so high, nevertheless, the repeated visit rate of tourists has always been a key indicator index to reflect the maturing of a destination.(Oppermann, 1998)

Decision-making is a complex process, especially the decision maker repeat their initial decision in sequence time, it has attracted many researcher try to model the process and build

up the theories to accurate forecast and predict people's decision in next time (Walanchalee and Dolchai, 2019). Traditional theories especially economic and management assumption the decision maker is entirely rational people (Von Neumann and Morgenstern, 1953; Gretzel, 2011), however, we argue tourist is an emotional person especially when facing multiple destination and product choices. The successful initial choices of destination and tourism products will generate memorable experience and the experience will influence tourists' perception, cognitive to destination eventually affect subsequent choice. In the decision science, some researchers abandoned rationality concept and developing a new paradigm called entry Behaviour Science (Erramilli, 1991). But Simon (Simon, 1972) preserve the rationality concept to research the individual behaviour rule call bounded rationality, it refers to people has limited cognitive resource. Bounded rationality is more useful to explain the human's behaviour particularly to a complex external environment or overload information support for the decision maker.

Tourist is part of consumer, the decision of revisit choice sometimes may equal to repurchase behaviour, even the revisit not always happen. Many researchers studied the revisit, repurchase under framework of satisfaction and loyalty (Brown, Smith, & Assaker, 2016). However, in recent year, inertia has been an ad hoc topic to explain the phenomena, and researchers founded that inertia may play a significant role to the repurchase decision-making (Von Nagengast, Liane, et al., 2014). Until now, we have limited knowledge of tourists' decision-making inertia, especially it is significant to bounded rationality research because of the dissatisfaction experience still will trigger to repeat choice, and the result cannot be explained by status quo theories (Dolnicar, 2015).

In this paper, we propose the conceptual framework and related some hypothesis in the context of revisit choice, the bounded rationality may the main cause of decision-making inertia, and it will lead to tourists' revisit choice to a stable destination.

## **2. Literature Review**

### *2.1 Concept of bounded rationality*

The process of decision is difficult. Many researchers focus on the relationship between rationality and the decision process, and different authors have different sights in rationality. Totally, there are four kinds of rationality (Ivan Bolis et al., 2016): 1. Instrumental rationality: which emphasizes rationality in cognitive psychology, and in this way people can take the available knowledge into account to make a reasonable decision in procedure (Simon, 1986). 2. Bounded rationality: which is associated with decision-maker's satisfactory decision instead of the optimal decision with uncertainty and lack of information (Simon, 1957; Simon, 1972). 3. Communicative rationality: which is related to the individual action seeking to reach a common understanding (Habermas, 1984). 4. Substantive rationality: which aligns well with the concepts of "perfect rationality," "global rationality," "the rationality of neoclassical theory," and "objective rationality" (Barros, 2010).

Among the concepts above, bounded rationality is a concept opposed to 'rationality as optimization'. Due to the lack of accurate information and complexity of the situations, decision-makers tend to show bounded rationality and seek a satisfactory solution instead. The mode of decision under bounded rationality requires less computational burdens, and people can terminate their process of decision as soon as a satisfactory alternative is found (Simon, 1957).

Bounded rationality plays a key role in tourists' emotional and experience consumption, to some lazy tourists, whose perception to the journey satisfaction shows time delayed character

and bias to the new tourism agenda. If the new tourism schedule occurred in tourists' decision process, too much competition information of tourism destination exposures to tourists may enforcement bias. The bias, which also performance like keep status quo in next time, and it related to their knowledge about future plan. Even though bounded rationality is the subjective feeling of tourist, we argue that the tourism products related factors are simulations which represent bounded rationality status and it may induce tourists' inertia.

## 2.2 *Decision-making inertia*

### 2.2.1 *The definition of decision-making inertia in tourism*

"Inertia effect" researched by Pitzf (Gordon F. Pitzf, 1969), it refers to people who are resistant to reduce their confidence in a decision under disconfirming information. After the author's experiment measure show that inertia effect was maybe the results of people's commitment to their initial judgement. It sounds like maybe no matter or whatever the result of substantial decision, decision-maker will repeat their initial decision to fulfil their commitment. However, in recent years, "Inertia effect" has been used to research the repeat purchase phenomena, it also shows the same effect mentioned by Pitzf. As we all known, the term "inertia" conceptualized related to repeat purchase by Jeuland (Jeuland, 1979), it is refers to repeat buying in the short run perhaps to learn more about the brand. Inertia is also regarded as a facilitator or sustainer of behavioural loyalty (Oliver, 1997, 1999).

Huang and Yu insist that inertia should be distinguished from loyalty because of inertia is associated with the non-conscious and can lead to customer repeat purchases without any thought. (Huang and Yu, 1999). Since then, many researchers regarding inertia as a causal factor to repeat purchases with no attitude component. For example, researcher regard inertia as a special condition which attachment to the consumers' daily life habit (Bozzo, 2002; Solomon, 1994). Inertia also has been seen as a behaviour that absence of goal-directed (Zeelenberg and Pieters, 2004). Meanwhile, many inertia largely is unemotional, indifferent and convenience-driven (Gounaris and Stathakopoulos, 2004; Lee and Cunningham, 2001). In their model, researchers describe the consumers character as lazy, indifferent, passiveness and be passionate for the status quo. (Yanamandram and White, 2006; Ye, 2005). Customers always show low impetus or even lack of conscious to change their previous choice (Huang and Yu, 1999), because of changing a decision process is not worth the time and effort and consider alternative (Assael, 1998; Colgate and Lang, 2001). It is a very risky strategy for service provider to rely on customers' inertia purchase behaviour due to inertia are so unstable (Solomon et al., 2002)

Above the listed researches, part of researchers believe the inertia plays negative role to the consumers' experience or has a negative to decision maker's new consume experience. However, researcher define the inertia neglect the decision making process. Thus, Alos-ferrer (Alós-Ferrer, Hügelschäfer, & Li, 2016) summaries the characters and introduce a new term as "decision inertia", it refers to the tendency or repeat a previous choice, regardless of its outcome in subsequent decision. We borrowed the term of decision inertia from psychology science and add the "making" word to stress for the tendency and process. In our model, we want to endow the "inertia" more positive attitude, we define the term "decision-making inertia" as a tendency or a process during the contextual of revisit situation.

Thus, based on the above elaboration, the following hypotheses are proposed in this paper

H1 Product related factors affect tourists' decision - making inertia

- H1a Satisfaction influence decision - making inertia
- H1b Similarity of competition influence decision - making inertia
- H1c Tourists knowledge influence decision - making inertia

- H2 Switching cost influence decision - making inertia
  - H2a Economic-risk cost influence decision - making inertia
  - H2b Sunk cost influence decision - making inertia
  - H2c Evaluation cost influence decision - making inertia

### 2.3 Conceptualization

As shown in the Fig.1, the conceptual model expresses all the antecedent variables that influence decision-making inertia and clearly expresses the relationship between the assumptions and variables mentioned above.

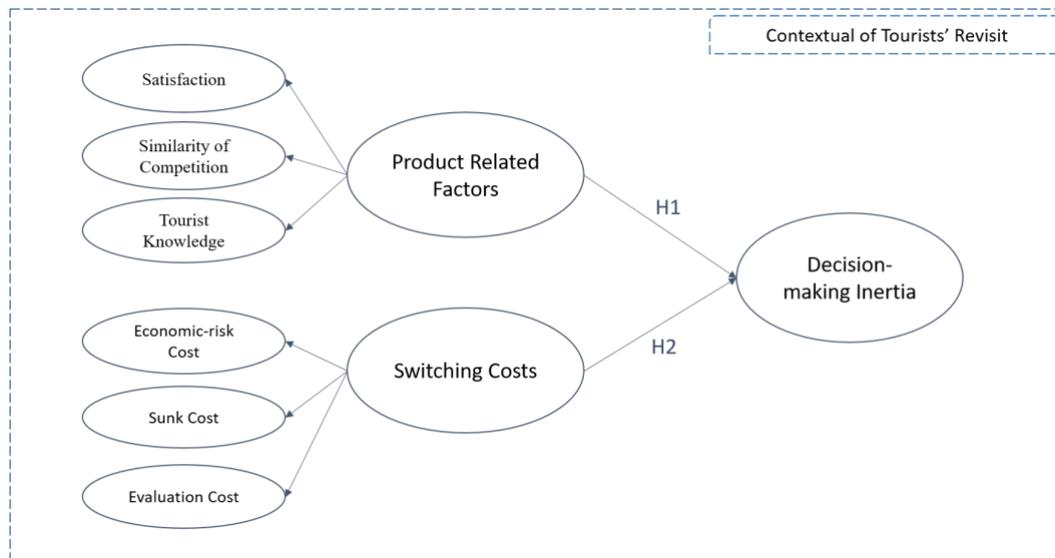
Satisfaction (PF1) is one dimension of product related factors , the author set three item to measure it. PF1-1="I am satisfied with my frequent tourist destinations"; PF1-2="When I travel to the destination, I feel very happy"; PF1-3="I think it is a wise choice for me to travel to this destination"; Similarity of competition (PF2), it refers to ----- PF2-1="Travel destinations are very similar, and it doesn't make much difference if I choose to travel to another destination." PF2-2=" I have experienced similar things in different travel destinations"; Tourist knowledge (PF3), it means ----- .PF3-1="I know my chosen destination very well";PF3-2=" I'm very clear about my travel schedule."

Enconomic-risk cost ( SC1 ) .SC1-1=Choosing to travel to a new destination can be an unexpected hassle; SC1-2=I can't guarantee the level of service at the new destination; SC1-3=I would worry that the quality of service in other destinations would not be as good as expected

Sunk cost ( SC2 ) .SC2-1="I've been spending a lot of time on familiar destinations"; SC1-2="I spent a lot of energy on the destinations I was familiar with and used to";

Evaluation cost ( SC2 ) .SC2-1="I don't have time to get information to evaluate other travel destinations";SC2-2="Even if I had enough information, comparing between different destinations was laborious"; SC2-3="Processing information about a new destination can be time-consuming";SC-4="It takes time to learn the customs and customs of a new destination."

Inertia (In1) means the same meaning as decision-making inertia, the author use four items to measure it. In1-1="I'm used to traveling to the same destination"; In1-2="I think choosing to travel to a new place is a kind of trouble"; In1-3="I think it is difficult to make a comparison between tourist destinations and it takes a lot of time and energy"; In1-4="It's hard for me to adjust to a new surroundings".



**Fig. 1. Conceptual Model**

### 3. Methodology

#### 3.1 Measurement

The consumption of tourism product is the best situation to test hypothesizes of tourists' decision making inertia, especially in the contextual of revisit behavior. Because tourist's inertia behavior was still a new topic in tourism research, and there were still few research materials on this area.

Therefore, we drew on the research results in marketing, developed a new five point Likert scale, and collected data through the form of online questionnaire.

During the period from August 30 to September 3, 2020, 150 questionnaires were distributed within a limited time, and a total of 141 questionnaires were collected.

The response time was not more than 120 seconds, samples without revisit travel experience were excluded, and questionnaires with missing items were excluded. Finally, 106 valid questionnaires were obtained, and the recovery rate reached 70.6%.

The reliability and validity of the questionnaire was tested successively by exploratory factor analysis(EFA) and confirmatory factor analysis(CFA) and SEM model to test the hypothesis.

### 4. Results

#### 4.1 Profile of the respondents

Analysis of the data reveals that 29.2% of 106 respondents were male and 70.8% were female. The main age groups were 18-25(24.5%), 26-35(44.5%),36-45were 21.7% and 46-60 were 9.4%. A majority of respondents had a college or university degree (74.5%). The majority group were low/high income(RMB) respondents,0-2000(19.8%) and >8000 per month is 44.3%.

**Table1 Respondents Profile of Sample**

Characteristics		Frequency	Percentage
Gender	Male	31	29.2%
	Female	75	70.8%
Age	18~25	26	24.5%
	26~35	47	44.5%
	36-45	23	21.7%
	46-60	10	9.4%
Education	High school	1	0.9%
	University	26	24.5%
	Graduate school	79	74.5%
Income (RMB) Per month	0~2000	21	19.8%
	2000~3000	10	9.4%
	3001~4000	5	4.7%
	4001~6000	14	13.2%
	6001~8000	9	8.5%
	>8000	47	44.3%
Total		106	100%

#### 4.2 Results of EFA and CFA test

Seventeen items were used for an exploratory factor analysis (EFA) to identify the dimensional structure of the variables. In the process of EFA, principal components analysis with varimax rotation was applied to specify the relationships of the observed indicators to their posited underlying factors(see Table2 for result).The six dimensions were labelled as 1)Economic-risk Cost(SC1); 2) Evaluation Cost(SC2);3) Sunk Cost(SC3);4) Satisfaction(PF1); 5) Similarity of Competition(PF2); 6) Tourist Knowledge(PF3).The Bartlett's test(  $c^2= 702.435$ ;  $df = 36$ ;  $sig. = 0.000$ ), KMO = 0.821 and Cronbach's alpha values for the six dimension ranged from 0.702 to 0.928. The items comprising the six dimension were internally consistent and stable and together formed a reliable scale; they were passed to the next step of construct validation.

**Table 2 EFA results**

	Component					
	F1	F2	F3	F4	F5	F6
Factor 1: Economic-risk Cost(SC1)						
SC1-1	0.671					
SC1-2	0.898					
SC1-3	0.809					
Factor2: Evaluation Cost(SC2)						

SC2-1						0.608
SC2-2						0.741
SC2-3						0.789
SC2-4						0.400
Factor3: Sunk Cost(SC3)						
SC3-1						0.836
SC3-2						0.944
Factor4: Satisfaction(PF1)						
PF1-1						0.881
PF1-2						0.839
PF1-3						0.827
Factor5: Similarity of Competition(PF2)						
PF2-1						0.672
PF2-2						0.847
PF2-3						0.698
Factor6: Tourist Knowledge(PF3)						
PF3-1						0.527
PF3-2						0.991
Eigenvalue	5.265	1.223	0.872	3.000	1.977	1.199
Percent of variance explained	58.497	13.591	9.686	37.494	24.716	14.983
Cronbach's alpha	0.908	0.847	0.928	0.900	0.784	0.702

Confirmation factor analysis(CFA) using the maximum likelihood method was conducted in IBM SPSS AMOS 21.0 to purify the measurements by assessing the factor structures and the construct validity and reliability of each factor. The overall fit of the model to the data was first tested. The Model Fit Indices(  $\chi^2= 277.975$ ;  $df = 169$ ;  $sig. = .000$ ;  $CFI =0.919$ ;  $IFI = 0.921$ ) indicated that the proposed measurement model had acceptable fit.

**Table 3 Performance of measurement scale from CFA**

Factor	AVE	CR	Factor loading
Economic-risk Cost(SC1)	0.7751	0.9114	
SC1-1			0.901
SC1-2			0.938
SC1-3			0.796
Evaluation Cost(SC2)	0.5903	0.8519	
SC2-1			0.777
SC2-2			0.773

SC2-3			0.810
SC2-4			0.712
Sunk Cost(SC3)	0.8677	0.9291	
SC3-1			0.962
SC3-2			0.900
Satisfaction(PF1)	0.7558	0.9027	
PF1-1			0.905
PF1-2			0.848
PF1-3			0.854
Similarity of Competition (PF2)	0.5532	0.7869	
PF2-1			0.690
PF2-2			0.819
PF2-3			0.716
Tourist Knowledge(PF3)	0.6165	0.7527	
PF3-1			0.945
PF3-2			0.583
Inertia(In1)	0.5602	0.8356	
In1-1			0.735
In1-2			0.784
In1-3			0.691
In1-4			0.780

Note: Model Fit Indices,  $c^2= 277.975$ ;  $df = 169$ ;  $sig. = .000$ ;  $CFI = 0.919$ ;  $IFI = 0.921$ ;  $RMSEA = 0.078$ .  $CR$ =composite reliability;  $AVE$ =average variance extracted; all items= $p < 0.001$ .

Finally the author to test discriminant validity test to make sure correlations of measurement scales from CFA. The square root of each constructs' AVE are higher than the construct's correlations with any other constructs (Table 4), which confirm discriminant validity. Overall, the measurement model seems reliable and valid.

**Table 4 Correlations of measurement scale from CFA**

	1	2	3	4	5	6	7
1.Enconomic-risk Cost(SC1)	<b>0.880</b>						
2.Evaluation Cost(SC2)	0.105	<b>0.768</b>					
3.Sunk Cost(SC3)	0.193	0.041	<b>0.932</b>				
4.Satisfaction (PF1)	0.042	0.229	0.02	<b>0.869</b>			
5.Similarity of Competition (PF2)	0.213	0.229	0.149	0.028	<b>0.744</b>		
6.Tourist Knowledge(PF3)	0.167	-0.014	0.193	0.014	-0.02	<b>0.785</b>	
7.Inertia(In1)	0.307	0.33	0.563	0.034	0.313	0.096	<b>0.784</b>

4.3 Hypothesis testing

The author estimated the structural mode in Fig.1 using the maximum likelihood method and AMOS21.0. Fig2 and Table 5 shows the estimation results. During dimensions of product related factors, only tourist knowledge show positive effect to decision-making inertia (0.135\*). Satisfaction (-0.234\*) and Similarity of competition (0.266) reject positive effect to decision-making inertia. Sunk cost (0.448\*) and Evaluation Cost(0.345) shows positive effect to decision-making inertia, however, economic-risk cost(-0.030\*) reject author’s H2a.

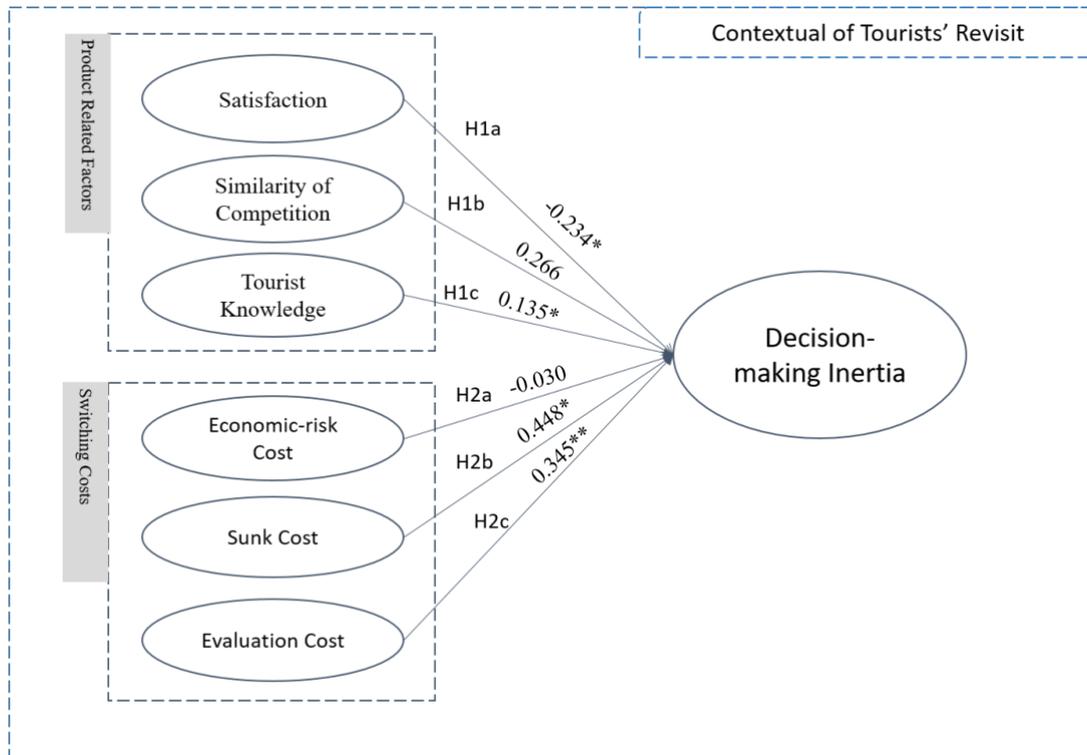


Figure 2 Structural model result

Table 5 Hypothesis test results

Factor	Standardized coefficient	S.E.	p-value	H Test
Hypothesis 1				
H1a: PF1→I1	-0.234	0.108	0.031*	Rejected
H1b: PF2→I1	0.266	0.160	0.129	Rejected
H1c: PF3→I1	0.135	0.089	0.013*	Supported
Hypothesis 2				
H2a: SC1→I1	-0.030	0.131	0.908	Rejected
H2b: SC2→I1	0.448	0.189	0.021*	Supported
H2c: SC3→I1	0.345	0.108	0.001**	Supported

Note: \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

## **5. Discussion and Conclusion**

### *5.1 Discussion and implications*

The decision-making inertia of tourists is an insufficiently studied field in the field of tourism research. Although this paper draws on relatively mature scales from marketing research and follows scientific and rigorous operating procedures, it can be seen from the data results that there are still many unsatisfactory aspects. For example, in the influence of product-related factors on tourists' decision-making inertia, only one latent variable meets the expected hypothesis, which may be caused by the insufficient number of questionnaires. It also logically reflects that tourists with decision-making inertia may have a different pursuit of satisfaction from ordinary tourists, and their satisfaction may lie in the realization of their unwillingness to choose other destinations.

In addition, similar tourism products may have no impact on tourists with decision-making inertia due to their differentiation or labeling characteristics. On the contrary, their expectations for future stability, stubborn ideas and early investment experience were more likely to influence the factors where they appeared decision-making

### *5.2 Conclusion*

The result shows that Tourist knowledge, sunk cost and evaluation cost were positively correlated to decision-Making. However, satisfaction and economic risk cost were negatively correlated with decision-Making. Similarity of component were not related to decision-Making. This result has some inspirations for us. If tourists want to make repeated trips, they need to attract their attention to a greater extent and pay more attention to the destination products. At the same time, some tourists with decision inertia do not care about the satisfaction of product experience and economic risk, and what is important is to make them become dependent on the product. Under the role of limited rationality of tourists, even if the differentiated competition of tourism products is highlighted, it has little effect. These new critical thinking not only make contribution to tourists' decision research, but also implies that tourism business operators should rethink of the tourists' revisit phenomena and add switching cost of their choices, reinforce attachment between destination and tourists.

### *5.3 Limitation and future agenda*

Although the operation in this paper follows strict operating procedures, the data results are not ideal, perhaps because the number of questionnaires of receipts in this paper is not large, and the exploration of the behavior rules of tourists is still insufficient. In the future, it may continue to expand the number of samples, and combine with the mature theories in behavioral science to further study the decision-making inertia and revisiting phenomenon of tourists.

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## **Influence factors of customer satisfaction in coffee industry in Klang Valley**

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### **Abstract:**

In recent years, the coffee industry is booming in Malaysia, it is imperative for local premium coffee shop entrepreneurs to understand the important attributes that motivate consumers to patronise coffee shops and have a competitive advantage to sustain their businesses. The research study was to examine the service and product quality (food & coffee) in relation to customer satisfaction with local premium coffee shop in Klang Valley. A quantitative study is conducting and a set of survey questionnaire was developed. The collection of data is through surveyed and completed by the respondents who had dining experiences at the local premium coffee shop in Klang Valley, Malaysia in aid to examine the survival factors of local premium coffee shop in Klang Valley.

**Keywords:** Customer Satisfaction, Service Quality and Product Quality, Local Premium Coffee Shop, Klang Valley

### **1. Introduction**

Coffee shops have certainly never been out-of-style as the culture of coffee drinking is increasing from year to year and became focus to the world of coffee industry. According to the International Coffee Organization (2014), the consumption has increased over the last 50 years, the global coffee exports are amounting to 11.6 million bags in May 2019, as compared with 9.71 million bags in May 2018. Urbanisation and busy lifestyles is one of the reason that caused the rising of coffee consumption in Malaysia. In Malaysia, coffee-drinking culture has been deeply deep-rooted among Malaysians for generations i.e. Old-style Hainanese coffee shops “kopitiam”, and Malay Indian restaurants, known as “mamaks”, reflect the strong Malaysian coffee drinking culture. The culture of consuming foreign coffee happen due to the influence of foreign residents that who reside and work in Malaysia in 2012 (Goi, 2013). Foreign café culture has notably changed and moulded the coffee shop culture in Malaysia.

### **Problem Statement**

This study is crucial to help the local premium coffee shop to accomplish its objectives in term of satisfaction, profitability and loyalty. Loyalty derives from customer satisfaction as customers become loyal when they feel satisfied from the quality of the service or products provided by the companies. Furthermore, this study also helps the owner to increase the coffee shop patronage thru accomplishing customer satisfaction and used as guideline for the owner and researchers to enhance customer satisfaction in the future. The threat to an organization success is when dissatisfied customer withdraw for a substitute products or services (Mandina & Karisambudzi, 2016). Once they are able to meet the expectation of the customers, forming a loyal customer relationships and able to achieve customer satisfaction, they will

easily gain a greater marketing share (Faraj Aldaihani and Ali, 2018). The formation of customer satisfaction is important as it can generate plenty benefits which includes providing a good basis for the repurchase intention and the creation of customer loyalty.

In addition, the main drivers of a firm success are customer loyalty, profitability and with consumer's great loyalty to the services provide by a firm will cause further spending from repurchase (Sandada & Matibiri, 2016). Krom (2015) mentioned that those loyal consumers are constantly purchase the same products or services because they will think that rival products or services will not able to provide them same satisfactions. Practically, this research can offer various insights into the important role of local premium coffee shop service quality, beverage quality and image on customer satisfaction in academia.

## **Research Objectives**

RO1 - To determine whether the service quality has a significant relationship with customer satisfaction with Malaysian coffee shop in Klang Valley.

RO2 - To determine whether the coffee bean quality has a significant relationship with customer satisfaction with Malaysian coffee shop in Klang Valley.

## **2. Literature Review**

### *2.1 Social network*

#### **Coffee Culture Existence in Malaysia**

In Malaysia, a traditionally tea-drinking country, coffee drinking culture has turn out to be popular, especially among the young and the professionals (Lee, 2014a, 2014b). In Malaysia, coffee drinking culture has adopted from the entrances of branded retails outlet such as Coffee Bean and Starbucks since 1997. Thereon, local coffee culture has started to grow, starts by commercializing "kopitiam" and branding of local coffee shops to progression services by not only selling product but also started to look into implementation of technology as part of the marketing plans to attract younger generations.

In America, coffee shops has started to appear since 1950s-1960s and it's brought by the Italian-American immigrant community and with the appearance of Starbucks, it has make the concept popular by impending their own way of retailing standardized café. After Starbucks enter United States of America, they have expand their concept globally. Malaysia has been one of the locations starting in the year 1998 and Starbucks has brought in the social changes in local scene. Malaysian coffee culture is unlike European coffee culture as which Malaysian are more open to tea as main beverage rather than coffee. Through British colonization that bring in their social culture into the colonial country. In Malaysia, local coffee shops have started since 1900's and it has become the gathering points for the local to share thoughts and having conversation elsewhere than home. This new lifestyle has caused unexpected changes in the food and beverage industry resulting in branded "Kopitiam" growing and people becoming more demanding for greater service.

As seen, currently Malaysian coffee culture is not only open up as small stalls but it has also started to develop into café concept, by carrying their own brand name. Coffee Bean and Starbucks has inspired those local "kopitiam" in Malaysia, which they started re-branding their concept by changing their corporate design and interior design, upgrading their services and created a "third place" feeling. According to Euromonitor International, urban and young consumers, specifically millennials, middle- and high-income professionals are more willing

to patronise specialist coffee shops to enjoy freshly brewed coffee (Friend, 2016). Specialty coffee refers to “gourmet coffee made from exceptional beans grown in ideal coffee-producing climates. They tend to feature distinctive flavours, shaped by the unique characteristics of the soil that produces them” (Merwe & Maree, 2016).

## *2.2 Conceptualization*

### **Attributes in Customer Satisfaction**

A more extensive and comprehensive research is more reliable in accessing customer’s coffee shop experience than just focus on only product or service level approach. According to practical viewpoint, the results obtained from the attribute – level assessment would be more obliging for the coffee shop business owner to understand their customers’ needs. Besides, attribute levels can be measure in both tangible and intangible characteristics of the purchase experience. The key attributes that been assessed in these researches can be divided into three main groups which included product – related attributes (e.g. coffee quality, coffee selection, coffee presentation and pricing), service –related attributes (e.g. speed of servicing, employee’s friendliness and etc.).

### **Service Quality**

Services can be understand as the actions or welfares that the business owner offered promotion period is intangibles (Gupta, McDaniel, and Kanthi, 2016). There are few previous researcher had studies about the relationship between customer satisfaction and service quality (Valarie, Zeithml, and Leonard, 2016). According to Saulina and Syah (2018), food and beverage companies in service industry must not only focus on the product quality but also must considered the service quality presented to customer.

According to Fitzgerald and Chapman (2015), service quality can be measure thru the service performance that able to satisfy customer needs and expectations. According to Saneva and Chortoseva (2018), able to provide superb service quality in the hospitality industry and achieving a high level of customer satisfaction is a significant matter to maintain the existing facilities and the opportunity to improve the service quality. In the field of coffee shop, service quality is one of the attributes that often used by customers to access the quality of the coffee shop (Saulina and Syah, 2018). Moreover, customers may seek for other suitable options when the service provided doesn’t meet their expectations therefore having a good service quality is important for a restaurant’s overall performance, and restaurant owner must put effort to identify what determines it (Mhlanga, 2018).

According to Saulina and Syah (2018), a good service quality will be able to increase customer satisfaction. Vinit Dani (2014) has stated that in this competitive environment, able to deliver great quality service is the main objective to withstand in the mind of the customer or else customer will change his preferences. Besides, Yarahmadi, Mollahosseini and Forghani (2014) also agreed that providing a decent service quality is the key factor to satisfy the customers and increase the customer repurchase intention. According to SERVQUAL scale as suggested by Parasuraman et al. (1988), service quality includes 5 dimensions which are responsiveness, tangibles, reliability, empathy and assurance. The SERVQUAL model can be utilize to examine the service process and provide basic facts to the organization owner to improvise the service quality (Johnson and Mathews, 2016). Njite et al. (2015) have also confirmed that there is a positive effect of service quality on customer intentions in premium dining among all dimensions.

## **SERVQUAL MODEL**

SERVQUAL is emerging from Total Quality Management (TQM) theory and was created in 1988 by Parasuraman et al. (1985). According to Mill (2002), this model is one of the best mechanism to explain customer satisfaction in hospitality and tourism. In the service literature, service quality is well-defined as a consequences of customer's personal judgement from their comparison between perceived performance and expectations from the service provider and it is the most widely used by researchers to measure customer expectations and perceptions on service quality (Parasuraman et al., 1988). It include of five major dimensions of service quality such as reliability, tangible, assurance, empathy and responsiveness. According to Carman (2012), the level of service quality hinge on the different between customer perception and their expectation. Hence, customer expectation is important and the key to fit customer satisfaction is to exceed their expectation (LeBlanc, 2012). Later, Stevens et al., (1995) modified the SERVQUAL model to become more appropriate for restaurant industry, by altered some items and introduced DINESERV to measure service quality in restaurants. According to Stevens et al., (1995), restaurateurs who fail to meet customer satisfaction will soon face a decline on the customer patronising their coffee shop as they will switch to opposing restaurants. DINESERV suggested as a reliable, comparatively simple tool to determine how consumers view on a restaurant's quality.

## **DIMENSIONS OF SERVICE QUALITY**

When Parasuraman (1985) developed the model there were only five service qualities, namely, Tangibility, Reliability, Responsiveness, Empathy and Assurance. Later there were several attributes added to this service dimension to satisfy the customer. Primarily they involve credibility, communication, competence, courtesy, security, access and understanding the customer. These are now added to the original dimensions such as tangibles and responsiveness. The empathy and the assurance are now gone to the background and the communication and understanding the customer are discussed in the forefront. In addition, to satisfy the customer, good quality products are served to the taste of the customer. To provide the taste, the coffee beans are procured by the Malaysian Coffee shops directly and to care of these service dimensions.

### **Product Quality (Coffee)**

Nowadays, customer will give emphasis to on food quality as an important element to satisfy customers (Rozekhi, Hussin and Siddiqe et.al, 2016). Customer will willing to pay for a good product, therefore product is very important to be detect by a company, (Setya and Soni, 2018). According to Sulek and Hensley (2004), instead of looking into the service quality and ambience, food quality is the one of the important predictors of customer satisfaction. According to Delwiche, 2004; Namkung et.al. (2007), food or coffee bean attributes such as presentation and freshness are the important sensory components that related with the factors such as taste, sight and smell in food quality. According to Haverila and Fehr (2016), if the product quality go beyond their standards, customers will be satisfied and customers will be dissatisfied when the product quality is below their standards. According to Grinshpun (2013), coffee is a product that has allied with foreign culture. Coffee quality is link to coffee product features, which particularly coffee freshness, taste, smoothness, temperature and the coffee aroma (Lee, Rajaratnam, and Konar, 2018).

Coffee quality is an important attribute in customer satisfaction (Tan and Lo, 2008; Chen and Hu, 2010). Coffee is the main product served in coffee house just like food is regard as the

main product in restaurants (Lee, et.al. 2018). According to Shahzadi, Malik, and Ahmad, et.al. (2018), food quality is one of the most significant attribute that customers' considered in a restaurant perspective. Therefore, according to Lee, et.al. (2018), it is vital that coffee house operators constantly retain a high standard of coffee-related products through sourcing for high-quality coffee beans with reasonable pricing, hiring and training baristas with the right people and technical skills, as well as able to provide customised coffee beverages based on customers' preferences as this can help to retain their loyalty and patronage. Besides, Ko and Su (2015) had categorized the key factors of the food service quality into two classes of dimensions as associated with customers and products. The consumer category contained service quality, promotion, marketing and environment while the goods category contained of hygiene, safety, culinary arts and attractiveness of products.

To maintain quality the coffee shops in Malaysia buy coffee beans directly from shops, roast them at the temperature and powder them. The instant coffees, filter coffees provided in the other countries contain an ingredient called chicory which is mixed with the coffee powder in different proportions to change the taste. This chicory powder is not good for health. Hence to make sure that chicory is not mixed and to maintain quality pure coffee beans are used in coffee powder. This ensures quality.

### 3. Methodology

#### 3.1 Measurement

The research methodology has been included in this part. The research design plays an important role in the research process. Hence, firstly summary of research designed, then follow by the sampling method and analysis methodology in order to make sure that the analysis tools, questions designed and methodical theory are connected with one another and relevant to this research. Besides, in this chapter, the target population and unit analysis to test validity and reliability are included.

### 4. Results

#### 4.1 Profile of respondents

##### Demographic Analysis

In this section, a descriptive analysis on the respondent's demographic background is conducting on the 180 respondents, and presented as below:

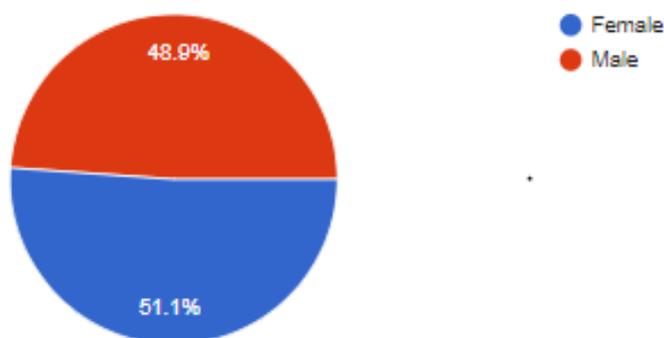


Figure 4.1: Gender

Based on Figure 4.1, it is stating that 51.1% is 92 out of 180 respondents are females who being participated in this survey session. Meanwhile, there is 48.9% which is 88 out of 180 respondents are male. The respondents are from the adolescent staying at Klang Valley by distributing the online survey via Google form and analyzes the date.

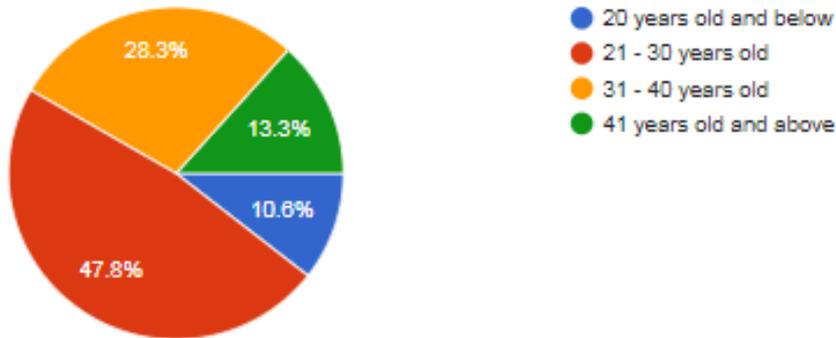


Figure 4.2: Age

Among 180 respondents being gathered, it is stating that 47.8% of which is 86 out of 180 respondents are aged between 21-30 years old and it is stating as the highest quantity as most of the respondents are from that particular age range. The following age range is 31-40 years old with the percentage of 28.3% is 51 out of 180 respondents. There are 24 out of 180 respondents are from 41 years old and above with the percentage of 13.3%. Lastly, there also 10.6% of the respondents aged below 20years old have participated the survey as well.

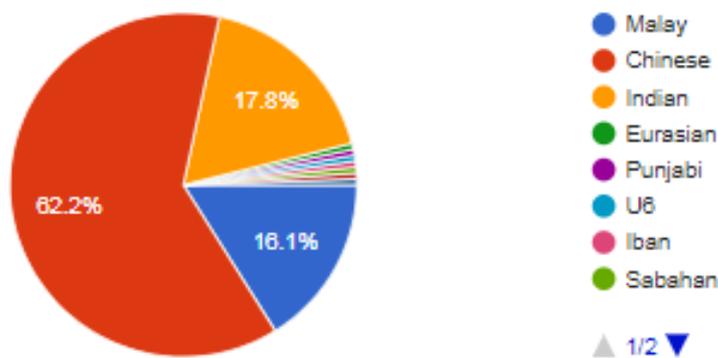


Figure 4.3: Race

According to the Figure 4.3 above, the three main races that participate in this research surveys are Malay, Chinese and Indian. The highest are 62.2% which 112 out of 180 respondents are Chinese. Then follow 17.8% is 32 out of 180 respondents are Indian. Next, the total of 29 out of 180 which 16.1% of respondents are Malay. Then, the remaining are other races such as Eurasian, Punjabi, Sabahan, Iban, Indonesian, Chindian and etc.

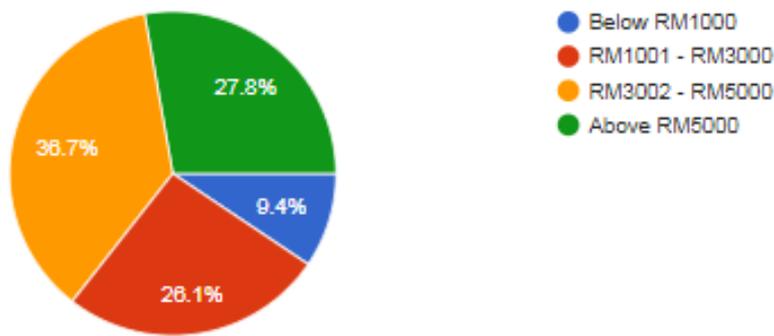


Figure 4.4: Income Level

According to the Figure 4.4 above, the respondents are categorizing into different income level. There is highest of 36.7% 66 out of 180 respondents who participated in this survey are earning between RM3001 – RM5000 income level. Then follow by 27.8% is 50 out of 180 respondents are earning above RM5000 income level. The 47 respondents out of 180 is 26.1% of respondents are earning between RM1001 – RM3000 income level. Then, the remaining respondent are earning below RM1000 income level.

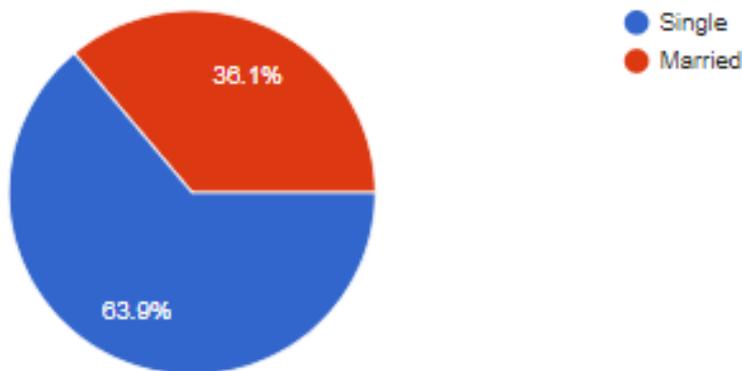


Figure 4.5: Marital Status

Based on Figure 4.5, it is stated that 63.9% is 115 out of 180 respondents are single who being participated in this survey session. Meanwhile, there is 36.1% is 65 out of 180 respondents are married. The sample for this survey approaching the adolescent staying at Klang Valley by distributing the online survey via Google form and analyzes the date.

#### **Descriptive Statistics of the Variables**

Descriptive statistics of the variables consist of customer satisfaction, service quality and product quality (coffee bean quality).

Table 4.1: Descriptive Statistics

	Mean	Std. Deviation	N
Customer Satisfaction	18.3389	2.33066	180
Service Quality	13.5556	1.99223	180
Product Quality	13.6333	1.73334	180

The above Table 4.1 shows the descriptive statistics of dependent and independent variables in this study. Descriptive statistics summarize a given set of data that represents the entire population or a sample of it. Therefore, descriptive statistics are broken down into measures of central tendencies that include mean, standard deviation, minimum and maximum of dependent and independent variables. In short, it helps to describe variability and provide an understanding into the features of a specific data set by giving short summaries about the sample and measures of the data. The descriptive statistics in mean, standard deviation and the number of respondents (n) are show in the combined data. The lowest mean was under service quality dimension with 13.5. It showed that this independent dimension considered important among the customers in local premium coffee shop in Klang Valley. The lowest standard deviation was under satisfied in product quality variable with a score of 1.73.

Mean implies average and the sum of a set of data divided by the number of data. Mean can prove to be an effective tool when comparing different sets of data but the measurement might not accurate by the impact of extreme values. Ordinal data are rate according to a category where a higher score indicates a higher or better rank than a lower score. Ordinal data are frequently use in questionnaires that ask respondents to indicate preference. The final information is relative and the difference between the ranks is not equal. For example, in response to a question regarding the flavor of a new blend of coffee a score of ten implies a better taste than a score of one but it does not mean that the flavor is ten times as good. In this study, lowest mean is 13.5 for service quality.

Standard deviation is a measure of the dispersion of a set of data from its mean, calculated as the square root of variance to determine the differences between each data to the mean. If the data points are of huge difference from the mean, then there is higher deviation within the data set. Therefore, standard deviation is a “standard” way of knowing what is normal, extra large or small. As an example, standard deviation in finance applied to the annual rate of return for investment. The greater of standard deviation indicates a larger price range. The lowest standard deviation is with satisfied with product quality with scaling of 1.7.

Table 4.2: Hypothesis Status

Item	Hypothesis	Status
H <sub>1</sub>	Service quality has a significant relationship with customer satisfaction with Malaysian coffee shop in Klang Valley.	Accepted
H <sub>2</sub>	Product quality has a significant relationship with customer satisfaction with Malaysian coffee shop in Klang Valley.	Accepted

## 5. Discussion and Conclusion

### 5.1 Discussion of Findings

The main objective of this study is to identify whether the two attributes (product quality and services quality of the coffee shop) has a significant relationship with customer satisfaction in Malaysia coffee shop in Klang Valley. The two independent variables that were included in this research study were product (coffee) quality and service quality of the coffee shop. As mentioned earlier, two hypotheses are creating to answer the research questions and to generate the research objectives. Total numbers of 180 respondents to online questionnaire were obtaining from patron in café Klang Valley.

#### **Hypothesis 1: Service quality has a significant relationship with customer satisfaction with Malaysian coffee shop in Klang Valley.**

Hypothesis 1 focuses on examining the relationship between customer satisfactions towards the service quality provided by Malaysian coffee shop in Klang Valley.

In order to determine the acceptance of this hypothesis, a multiple regression analysis was conducting and the results were analyzing.

Hypothesis testing indicated that there was a significant relationship between customer satisfactions towards the service quality provided by Malaysian coffee shop in Klang Valley.

Therefore, the hypothesis was accepted. The hypothesis is prove by Saulina and Syah (2018) whereby a good service quality will able to increase customer satisfaction. Vinit Dani (2014) also mentioned that in this competitive environment, able to deliver great quality service is the main objective to withstand in the mind of the customer or else they will easily change his preferences.

#### **Hypothesis 2: – Food (coffee bean) quality has a significant relationship with customer satisfaction with Malaysian coffee shop in Klang Valley.**

Hypothesis 2 focuses on examining the relationship between customer satisfactions towards the food quality provided by Malaysian coffee shop in Klang Valley.

In order to determine the acceptance of this hypothesis, a multiple regression analysis is conducting and the results are analyze. Hypothesis testing indicated that there was a significant relationship between customer satisfactions towards the food quality provided by Malaysian coffee shop in Klang Valley. Hence, the hypothesis was accepted.

Lee, et.al. (2018) supported the research results by stating that it is important for a coffee house operators' to constantly retain a high standard of coffee-related products through sourcing for high-quality coffee beans with reasonable pricing, hiring and training baristas with the right people and technical skills. This to provide customized coffee beverages based on customers' preferences as this can help to retain their loyalty and patronage.

#### **Contribution to the Industry**

This study can provide a better understanding on customer satisfaction on local coffee players in the coffee shop sector. The findings of this research will enhance the coffee shop sector business owner to have an understanding on what are the attributes that could influences customer satisfaction' as currently there is a rapid growth of food service industry, particularly

in coffee shop market. The coffee shop operators are facing challenges in detecting the factors that might jeopardize consumer satisfaction towards their coffee shop. Thus, it is important for business owners to have better understanding and knowledge on elements that actually influence customer satisfaction. For example, this study found that the three independent variables has a significant relationship towards customer satisfaction on coffee shop sector, therefore, a more precise area they can focus in order to increase their profit through customer satisfaction had been identified. Through understanding the factors that will affects customer satisfaction, they can having a better planning and come out with sensible business strategies to meet and satisfy the customer expectation. Besides, after obtaining valuable data in understanding their target customers, they can gain competitive advantage to fight with their competitors. Although some of the coffee shop are being stable, they still have to maintain their position and retain their customers and gain loyalty by making them as satisfied as possible. If customers are satisfied with the coffee shop, they will loyal to it and willing to visit again and refer the coffee shop to other people with positive word of mouth.

### *5.2 Contributions*

#### **Contribution to the Industry**

This study can provide a better understanding on customer satisfaction on local coffee players in the coffee shop sector. The findings of this research will enhance the coffee shop sector business owner to have an understanding on what are the attributes that could influences customer satisfaction' as currently there is a rapid growth of food service industry, particularly in coffee shop market. The coffee shop operators are facing challenges in detecting the factors that might jeopardize consumer satisfaction towards their coffee shop. Thus, it is important for business owners to have better understanding and knowledge on elements that actually influence customer satisfaction. For example, this study found that the three independent variables has a significant relationship towards customer satisfaction on coffee shop sector, therefore, a more precise area they can focus in order to increase their profit through customer satisfaction had been identified. Through understanding the factors that will affects customer satisfaction, they can having a better planning and come out with sensible business strategies to meet and satisfy the customer expectation.

### *5.3 Conclusion*

To conclude, this chapter ended with a short personal reflection, implications of this study and to share the researcher's experience.

### *5.4 Limitations of this study*

Future researchers could explore the relationship between factors that might affect customer satisfaction such as pricing and halal issues or deep dive in this construct to give better understanding regarding customer satisfaction with local premium coffee shop in Klang Valley, Malaysia.

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## **The influence of social media on tourist' decisions to purchase sightseeing and tour: The Heckman sample selection approach**

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### **Abstract:**

Social media currently has a major impact on tourism markets. This paper aims to investigate whether the social media could statistically influence tourist decision to purchase sightseeing and tour in Thailand's major coastal tourist destinations. Through an application of Heckman selection model, this study is enabled to explore both respondents' decision to purchase and their spending intensity on sightseeing and tour expenditure. Facebook and Instagram are found to have significant impact on tourist's purchasing decision, while no relationship between tourist's spending intensity and their social media usage.

**Keywords:** social media, sightseeing and tours, Heckman

### **1. Introduction**

As one of the major leisure tourist destinations in Asia, the tourism sector in the Andaman coast of Thailand contributes nearly half of the region's GDP<sup>8</sup>. This region has a wide variety of sightseeing and tour products which range from island experience to cultural experience. With the fast-growing social media usage as information seeking tools, Xiang, Magnimi & Fesenmaier (2015) had remarked that the arrival of online access through mobile devices substantially changes tourist behaviours when deciding to purchase. Among the various social media sites, each of them possibly influences the purchasing decision of their users in varied ways and differently from non-users. This paper mainly explored whether tourist's sightseeing and tour purchase decision is affected by the usage of social media sites. Through the Heckman selection model, the linkage between tourist's usage of social media sites and their spending on sightseeing and tours was further examined. Furthermore, the social media sites that could potentially influence tourist buying decision and their spending amount were analyzed to enhance the implication of the study. The usage of social media in this study is measured by the status of users and non-user. The findings from this paper could suggest important marketing implications for both destination promoters and tourism entrepreneurs.

### **2. Literature Review**

Tourists purchase tourism products in advance prior and away from the point of consumption (Királ'ová & Pavlíčka, 2015). To reduce risk in an unfamiliar environment, tourists usually

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<sup>8</sup> Office of the National Economic and Social Development Council. (2010). Input-Output Tables (I-O Tables)

spend an extended amount of time to gather information before choosing tourism products (Jeng & Fesenmaier, 2002; Mattila & Wirtz, 2002). The recent study by Alonso-Almeida & Ribeiro de Almeida (2018) found that social media is one of the reliable tools which provide key input for travelers to choose their destination. Since the information available online is visible to tourists from their pre-arrival to post-departure, Dwityas & Briandana (2017) revealed that tourist's travel decisions could be directly or indirectly encouraged by destination-related advertisements even when the decision had already been made. For instance, tourists who had already made their travel plans partially changed their plan after they had viewed the related posts on social media (Kiráľová & Pavlíček, 2015). To be specific, 33% of them changed their hotel, 7% modified their choices of destinations, and 5% changed their selected airlines. Moreover, Sproutsocial (2017) discovered that the instant response, attractive promotion, useful content, and interesting visuals are social characteristics of providers which could influence buying decision.

### 3. Methodology

The study used secondary data from the PTEI, in which 2,000 sets of questionnaires were translated into English, Chinese, Russian and Thai. They were distributed during the 2<sup>nd</sup> half of 2017 at a major international airport of the Andaman coastal region. The usage of social media was defined by the information sources that the respondent obtained to plan the trip whether they are from online or offline channels. Regression analysis was employed to control numerous factors that could potentially influence their spending amount on sightseeing and tours. However, not all respondents had experienced sightseeing and tours while they were traveling in the Andaman coast. An analysis, which included only the positive spending value on sightseeing and tours, could potentially raise the issue of selection bias (Francis, 1998; Greene, 2006) could limit the projection of the findings. To prevent this bias, the econometric method of the Heckman two-step correction model (Heckman, 2010) was adopted in the analysis. This testing technique would allow us to treat tourist's decision to purchase sightseeing and tours, and the question of their spending amount.

$$P_i^* = \sum_{r=1}^r \delta_r Z_{ir} + \epsilon_i \quad (1)$$

$$A_i^* = \sum_{k=1}^k \beta_k X_{ik} + \mu_i \quad (2)$$

{  $A_i^* = A_i$  if  $A_i^* > 0$  and  $A_i^* = 0$  if  $A_i^* \leq 0$  }

Where  $P_i^*$  is the decision to purchase sightseeing and tours of individual  $i$ , which indicated 1 if a respondent had purchased sightseeing and tour; 0 otherwise.  $Z_{ir}$  is a group of variable  $r$  which could potentially influence purchase decision of tourists. Meanwhile,  $k$  and  $X_{ik}$  are coefficients and their vector  $k$  of variables which could affect individual  $i$  spending amount on sightseeing and tours, which is the dependent variable  $A_i^*$ . Equation (1) is regarded as selection equation while equation (2) is response equation of the model. Both the purchase decision and spending intensity were regressed against key social media sites variable, dummy variable. Another control variable list was presented in short in the result table. Once the sample has been cleaned for anomalies and observation with extreme value of spending, the number of individual  $i$ 's response was 418 for the analysis.

### 4. Results

Facebook, Instagram and Twitter were classified as mainstream social media sites due to the numbers of their active users, while Weibo, Taobao, and Wechat are the available sites in China. Interestingly, both purchasing decision and spending amount on sightseeing and tours

by Chinese tourists were not statistically affected by any of their accessible social media sites. While the positive linkage was found between the usage of mainstream sites and tourist's decision to purchase sightseeing and tour activities in the region. However, this linkage did not extend to their decision on spending amount for sightseeing and tours. The main regression for each major social media site was separately regressed and summarized in Table 1. All key social media sites were analyzed; however, Table 1 only depicts the results from mainstream sites. Facebook and Instagram were found to have a strong positive linkage to the sightseeing and tour purchase decision. Interestingly, Instagram has a stronger magnitude of influence than Facebook, as the marginal effect (3rd column in each site result) of Instagram is 14.7% while tourists who seek their travel information through Facebook have 11.9% higher chance to purchase sightseeing and tours than non-users. Similarly, the findings by Shuqair & Cragg (2017) found that the posts on image social media sites like Instagram were relatively effective tools to change tourists' intentions during their pre-arrival. Astuti and Putri (2018) also suggested the positive relationship between Instagram usage and purchase intention. For Twitter and Youtube, neither evidence on the relationship between them and purchase decision nor spending amount and these social media sites were found. For other control variables, an extra day stay of tourists could lead to 11% increase in sightseeing and tour expenditure. Being a first-time visitor to destination, income level, and their satisfaction level on previous sightseeing and tours in Phuket were the factors that have a positive linkage with visitors' spending on sightseeing and tours. In general, foreign tourists have a higher possibility to purchase sightseeing and tours but their spending on sightseeing and tours was less than domestic tourists.

**Table 1.** Brief results from selected social media sites regression

Variable	Facebook			Instagram		
	Selection	Response	Marginal Effect	Selection	Response	Marginal Effect
Cons	-0.577 (0.180)	9.629*** (0.000)	- -	-0.557 (0.194)	9.478*** (0.000)	- -
Day stay	0.069** (0.034)	0.075* (0.051)	0.024** (0.034)	0.071** (0.027)	0.072* (0.055)	0.025** (0.027)
Number of Tourist	-0.004 (0.190)	0.004 (0.299)	-0.001 (0.190)	-0.004 (0.212)	0.004 (0.306)	-0.001 (0.212)
Family	-0.285** (0.044)	0.043 (0.811)	-0.100** (0.044)	-0.316** (0.027)	0.064 (0.727)	0.111** (0.027)
Age (35–44)	-0.392** (0.020)	0.630 (0.012)	-0.144** (0.020)	-0.367** (0.031)	0.632*** (0.007)	-0.135** (0.031)
Age (45-64)	-0.080 (0.742)	0.259 (0.190)	-0.029 (0.742)	-0.052 (0.832)	0.252 (0.198)	-0.018 (0.832)
Income (Dummy)	-0.052 (0.748)	0.132 (0.288)	-0.018 (0.748)	-0.040 (0.802)	0.132 (0.288)	-0.014 (0.802)
First time in Phuket (dummy)	0.167	0.062	0.059	0.175	0.051	0.062

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	(0.308)	(0.709)	(0.308)	(0.286)	(0.759)	(0.286)
Arrange trip (dummy)	0.299	-0.448**	0.099	0.305	-0.440**	0.100
	(0.202)	(0.031)	(0.202)	(0.195)	(0.029)	(0.195)
Nationality (Foreigner)	0.960***	-1.878***	0.336***	0.869***	-1.723***	0.305***
	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Imp_Tour service	0.080	-	0.028	0.083	-	0.029
	(0.258)	-	(0.258)	(0.245)	-	(0.245)
Imp_Value for money	-0.010	-	-0.003	0.000	-	0.000
	(0.917)	-	(0.917)	(0.997)	-	(0.997)
Accommodation (Ratio)	-	-1.140***	-	-	-1.161***	-
	-	(0.001)	-	-	(0.001)	-
F&B (Ratio)	-	-1.696***	-	-	-1.657***	-
	-	(0.000)	-	-	(0.000)	-
Sat_Tour service	-	0.109**	-	-	0.112**	-
	-	(0.039)	-	-	(0.034)	-
Sat_Value for money	-	0.050	-	-	0.046	-
	-	(0.370)	-	-	(0.404)	-
Facebook	0.357**	-0.454	0.119**	-	-	-
	(0.043)	(0.102)	(0.043)	-	-	-
Instagram	-	-	-	0.469**	-0.325	0.147**
	-	-	-	(0.038)	(0.285)	(0.038)
Lambda	-	-1.442	-	-	-1.466	-
	-	(0.157)	-	-	(0.125)	-
Number of obs	418	-	-	418	-	-
Selected	277	-	-	277	-	-
Non-selected	141	-	-	141	-	-
<b>Pseudo R2</b>	0.173	-	0.173	0.173	-	0.173
<b>R-squared</b>	-	<b>0.278</b>	-	-	<b>0.277</b>	-

**Note:** Number in parenthesis is the p value of coefficient, coefficients, figure reported with \* are significant with 0.1 significance level, figure reported with \*\* are significant with 0.05 significance level, figures reported with \*\*\* are significant at 0.01 significance level.

## 5. Discussion and Conclusion

Applying the econometric methodology to account for plausible selection bias which could cause myopia in the findings' projection. This study found that only information on Facebook and Instagram could significantly influence tourists' sightseeing and tour purchase decision. However, this relationship did not extend to the aspect of tourist's spending amount decision.

The results reinforced the recent findings which remarked the influence of image-oriented social media site, Instagram, toward the tourist's purchase decision. Therefore, destination promoters and business entrepreneurs should primarily use the image-based social media sites, specifically Instagram and Facebook, for marketing purposes in order to stimulate tourists to purchase sightseeing and tour programs of Thailand's coastal tourist destinations. This would allow them to allocate the monetary resources more efficiently. The further study areas should be extended to the other fields of tourist experience, for example, cultural tourist destination, accommodation, and shopping decisions. Additionally, due to an increasing role of social media sites in shaping consumer behavior, the integration of big data analysis and additional factors should be included in the future studies particularly the time spent and types of social media content.

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## How does culture of origin determine online complaining behavior?

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### **Abstract:**

This study investigates at online complaining behavior targeting six different hotel attributes to determine whether there are distinct patterns of behavior exhibited by guests of different cultural backgrounds. The hotel attributes given focus include: (a) *Service*, (b) *Cleanliness*, (c) *Room*, (d) *Sleep Quality*, (e) *Location*, and (f) *Value*. In total, 353 hotels with 2,020 usable individual complaining reviews representing five different continents and 63 nationalities were collected for the analysis, which was conducted using a manual coding approach. Results indicate that online complaining behavior is influenced by cultural background. Asian and non-Asian travelers appear to place a similar emphasis on *Value* for money. However, Asian guests are more likely to complain about *Service*, while non-Asian guests are more likely to complaint about *Cleanliness*, *Room*, *Sleep Quality*, and *Location*. This study contributes to the realm of hotel management by providing a better understanding of how customers from different cultural backgrounds are likely to perceive different hotel attributes.

**Keywords:** Online Complaining Behavior, Cultural Background, Service Quality, Negative Online Review, Hotel Attribute

## **Strategies to increase Generation Y's customer awareness of using sustainable materials in the coffee retail industry**

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### **Abstract:**

With limited resources and a growing consumer demand, hotel, restaurants and coffee shops are increasing the use of sustainable concepts. Applying a sustainable program to the management process helps preserve natural resources and create a profitability. The coffee business in Thailand is expanding rapidly at a rate of about 15% per year, with trend of coffee consumers preferring eco-friendly products. The purpose of this study is to investigate strategies to attract coffee drinkers through the employment a sustainable concept.

**Keywords:** Sustainability, Generation Y, Coffee Retail, Purchasing Intention, Strategies, Awareness

### **1. Introduction**

For the past few decades, people have been paying more attention to environmental issues by changing their behaviors including recycling materials, saving energy and water, and consuming green products (Tan & Yeap, 2012). In 2015, to tackle the growing environmental problem, the members of United Nations committed to the plan of 17 Sustainable Development Goals (SDGs) for the 2030 Agenda for Sustainable Development to generate economic growth, respond to social needs, and protect the environment and the planet (United Nations Development Programme, 2019). Many businesses have been successful using sustainability as a core concept in guiding their business models. Entrepreneurs take a chance on consumers' environmental conscious to improve their products and services in order to meet the need of the new market (Tan & Yeap, 2012). The concept of sustainability can be a productive marketing strategy leading toward an increase in revenue for a business while also benefiting society and the environment.

Consumers are more aware of environmental issues than ever, and are more likely to purchase sustainable products. Jang, Kim, and Bonn (2011) stated that "new environmental rules and regulations have increased individuals' environmental awareness, and thus, consumers have become increasingly more desirous of eco-friendly products" (p.803). Nielson (2018) reported that millennials have a stronger intention going towards sustainability compared to baby boomers. This includes the willingness to change their consumption habits to have less impact on the environment (75% vs. 34%), pay more for sustainable ingredients (90% vs. 61%), put more effort acquiring organic ingredients (86% vs. 59%), and buy products which are responsible to society (86% vs. 59%). Both millennials and baby boomers consider purchasing products from companies that have an environmental improvement program. Teng and Wu (2019) found that over 60% of people who had never visited a restaurant engaging sustainable program said they would prefer to pay more for consuming products and services at eco-

friendly restaurants. This behavioral trend therefore also affects the food and beverage industry's use of sustainable design and products.

## **2. Literature Review**

### *2.1 The Importance of Sustainability in Hospitality Industry*

The hospitality industry contributes to the negative effects on the environment such as natural resource consumption, materials used, and waste generation. As a result, the industry is gaining an interest in developing sustainable practices (Jauncey, 2019). For example, the hotel business model has changed by adopting environmentally friendly concepts into their operations such as training employees and providing hotel guests with the knowledge of 'green education', having a policy of energy saving and water cleaning, using bioproducts, and installing technologies leading to green practices (Next Tourism Generation Alliance, 2019). Also, several hotels have committed to achieve the 17 SDGs. For example, Hilton has generated their plan 'Cut Environmental Impact in Half to Help Protect the Planet' to meet its 2030 goals (Mest, 2018). A survey conducted by Booking.com in 2018 shows that 87% of hotel guests around the world appreciate and are provided a better experience with sustainable accommodations (Jauncey, 2019).

In addition to attracting business and helping the environment, applying sustainable practices to restaurant operations also reduces operating costs. Hollis (2018) mentioned that restaurants implementing environmentally friendly programs would help improve patrons' health. Restaurants could use a sustainable program to improve operations in several ways by using bioproducts, composting, buying local ingredients, creating seasonal menus, growing produce, donating food, and recycling (Hollis, 2018).

### *2.2 Applying Substantiality Concept in Coffee Shops*

Coffee shops are also adopting sustainable practices into their business model. As the coffee industry is growing significantly due to the increase of millennials' coffee consumption globally (Menke, 2018), environmental issues from these operations have gained attention such as waste, cups, grounds, and single-use straws (Ferreira, 2018). However, many coffee shops are trying to incorporate a green concept into their business strategies. For example, Starbucks made an announcement that single-use plastic straws are eliminated and are substituted by 'the adult sippy cup lid' and compostable plastic or paper, while the recycling of materials from drinks will increase (Nace, 2018).

Since coffee chains were introduced in Thailand including Black Canyon and Starbucks in 1998, Thai coffee drinkers' behavior has changed to a western style of drinking coffee (Bangkok Post, 2014). Plus, Bangkok Post (2019) reported an increase of 15% of coffee consumption per year in Thailand with coffee shops rapidly popping up throughout the country. Thai coffee shop entrepreneurs pay close attention and are developing sustainable plans for their operation so as to respond to the green market. For example, Amazon was the coffee chain in Thailand who started using bio cups responding to 'reduce' which is one of the 3Rs (Royal Thai Embassy, Washington D.C., 2015). Coffee shop owners in Thailand have been trying to develop strategies to raise coffee drinkers' awareness of using sustainable practices. Since sustainability is a growing trend, marketers take an advantage of this concept to generate sales. Some coffee chains offer a discount when customers bring their own cup. Other strategies may include posting of using green ingredients/materials on the shop's website, displaying environmental impact pictures, and organizing activities which benefit society. Therefore, this

study aims to investigate marketing strategies that can increase consumers' environmental awareness and influence consumers' purchasing intentions at coffee shops. Thus, the following hypotheses are proposed (see figure 1).

With limited studies around strategies enhancing consumers' green awareness at coffee shops, this study aims to explore strategies which encourage consumers to be aware of green concept and purchase products at coffee shops with sustainable practices. Therefore, the proposed model will be tested (see figure 1).

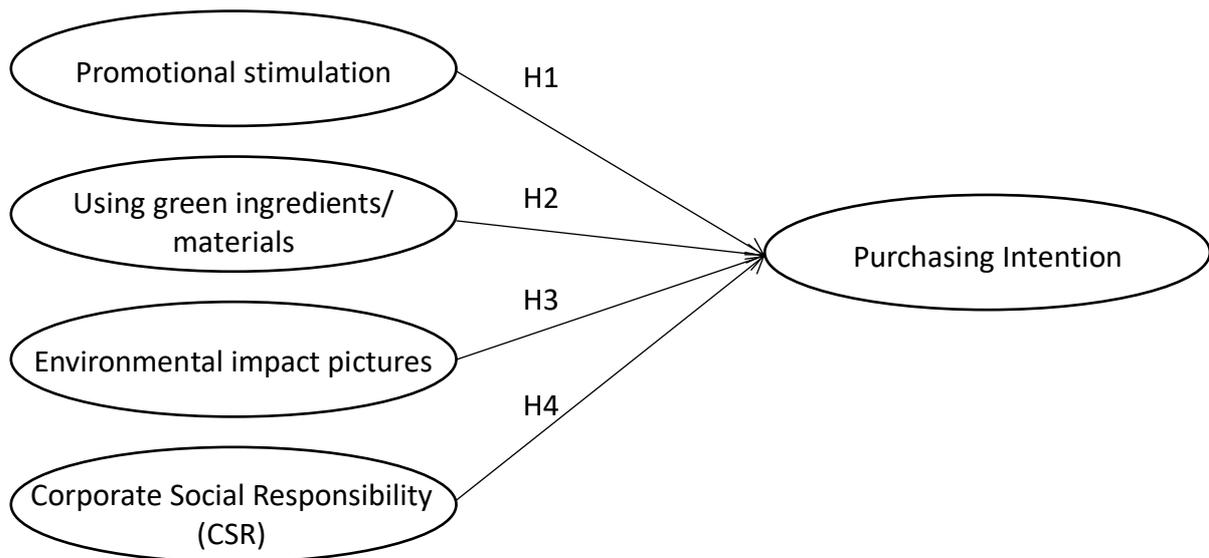


Figure 1 Research Proposed Model

### 3. Methodology

For this study, a quantitative method will be employed through a survey questionnaire to collect the data. A convenience sampling method will be adopted to recruit 400 customers who visit a coffee shop in Thailand. To recruit participants, people will be asked their age to ensure that they are between 19 and 34 years old. The targeted population of this study are millennials (aged between 19-34 years old) who visit a coffee shop in Thailand. Analysis of the proposed model will use the Structural Equation Modeling (SEM) technique.

### 4. Discussion and Conclusion

The results of this research would allow coffee shop owners to gain a better grasp young consumers' perceptions of green marketing strategies to encourage purchasing behaviors at coffee shops. The owners can improve their food and beverage products based on customers' desire. Additionally, developing ads which respond to customers' emotions in relation to environmental concerns might increase the volume of customers at coffee shops.

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## **Sustainable strategies enhancing consumers' willingness to pay at coffee shops based on green practices**

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### **Abstract:**

Creating sustainable campaigns are likely to generate loyal customers who are willing to pay at coffee shops. Understanding consumers' attitudes towards sustainable practices would allow entrepreneurs to more effectively attract people to visit their coffee shops. The purpose of this study is to explore if personal and social norms affect consumers' purchasing decisions at coffee shops. Additionally, this research will investigate green strategies encouraging consumers to visit coffee shops and which may promote feelings of attachment to coffee shops.

**Keywords:** Sustainable strategies, Personal Norms, Social Norms, Perceptions, Attachment to store, Willingness to pay

### **1. Introduction**

With the growing awareness of environmental concerns, many businesses are looking into how they can both contribute to sustainable practices while attracting customers through the use of those practices. This trend has been taken up notably by the hospitality and tourism industries as well as the food and beverage industries. Hotels, for example, offer a wide range of practices which decrease their environmental impact. These in general fall into the categories of saving energy, water conservation, and waste reduction. Restaurants have reduced the use of plastics and Styrofoam by offering biodegradable packaging (Helmer, 2019) and have switched to more organically sourced food products and recycled packaging (Hollis, 2018).

In Thailand, the coffee industry has seen a dramatic rise in popularity over the last decade (Bangkok Post, 2019; Ferris, 2020). In fact, projections suggest that coffee revenue will increase by 14% annually in the next five years (Statista, 2020). This development has coincided with a rise in general awareness and concern for environmental issues. These may include air and water pollution as well as the broader issue of climate change (Arttatacharity, 2012). As a result, many consumers have become increasingly motivated to purchase goods and services from companies which not only share their environmental concerns but who also make measurable efforts to employ more environmentally sustainable practices (Ting, Hsieh, Chang, & Chen, 2019). This motivation to purchase sustainable goods and services comes from consumers' identification with their actions as contributing to the health of the environment. They feel responsible for what they buy and the types of businesses they support (Natural Marketing Institution, 2017).

## 2. Literature Review

### 2.1 Green Consumers and Willingness to Pay

Green consumers come in a variety of forms. Personality traits often determine their degree of passion (Ribeiro, Veiga, & Higuhi, 2017). The types range from activists who build their identity around their passion and influence for environmentalism to those who tend toward practical decisions with eco-benefits being secondary (Natural Marketing Institution, 2017). The varying degrees of green consumerism have an effect on what purchase choices are made as well as willingness to pay (Yan & Yazdanifard, 2014). Therefore, the study examines whether there is a relationship between attachment to a business and willingness to pay based on the degree of consumers' attitudes towards green practices. Also, the aims of this research are to investigate the relationships between social and personal norms and attachment to certain businesses. Thus, the following hypotheses are proposed:

*H1: Green strategies significantly influence customers' attachment to coffee shops.*

*H2: Consumers' personal norms significantly influence customers' attachment to coffee shops.*

*H3: Consumers' social norms significantly influence customers' attachment to coffee shops.*

*H4: Consumers' attachment to coffee shops significantly influences their willingness to purchase products to coffee shops.*

*H5a: The level of consumers' perceptions of green practices in coffee shops moderates the effect of green strategies on customers' attachment to coffee shops.*

*H5b: The level of consumers' perceptions of green practices in coffee shops moderates the effect of consumers' personal norms on customers' attachment to coffee shops.*

*H5c: The level of consumers' perceptions of green practices in coffee shops moderates the effect of consumers' social norms on customers' attachment to coffee shops.*

In addition, this study seeks to close a gap in the existing literature in relation to the varying levels of green consumers' attachment to businesses and willingness to pay for products which contribute to environmental health. Therefore, the proposed model will be tested (see figure 1).

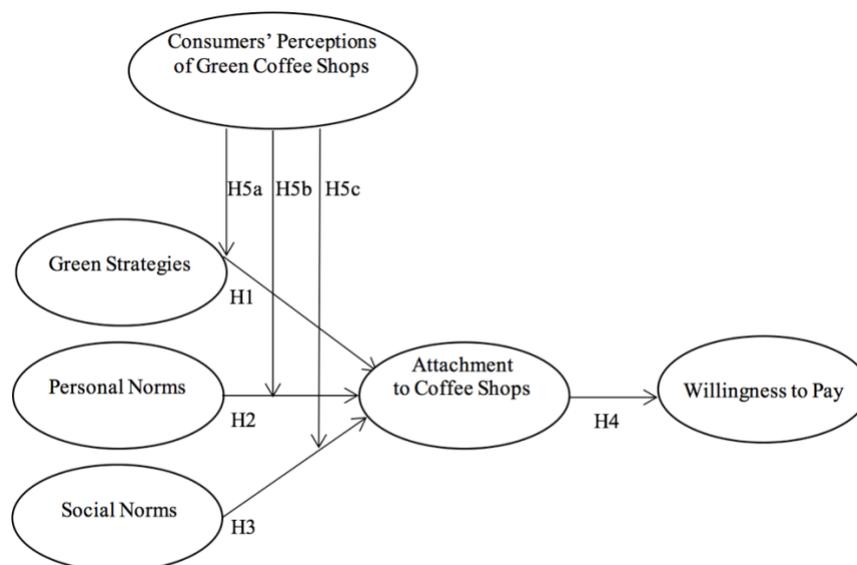


Figure 1. Research Proposal Model

### 3. Methodology

This study will employ quantitative methods for analyzing the data. This research aims to have a better understanding of consumers' perceptions towards green practices at coffee shops. The researchers are interested in exploring factors that may have an effect on consumers' willingness to pay at coffee shops in Thailand. The factors may consist of green strategies, personal norms, social norms, customers' perceptions of green coffee shops, and attachment to store. These elements may lead consumers to become loyal customers at coffee shops, and also increase their willingness to pay at coffee shops. In addition, the researchers aim to develop a model explaining factors that encourage consumers' willingness to pay at coffee shops. Consumers' perceptions of green practices will be used as a moderator in order to distinguish if light and heavy customer groups of green practices tend to have different motivations to buy food and beverages at coffee shops. Therefore, structural equation modeling (SEM) will be used to develop a study model.

A survey questionnaire will be designed to collect the data from participants. The questionnaire will be developed from the literature relevant to this study. The questionnaire will be divided into seven sections including green strategies, personal norms (Hynes & Wilson, 2016), social norms (Tommasetti, Singer, Troisi, & Maione, 2018), customers' perceptions of green coffee shops (Jang, Kim, & Lee, 2015), attachment to store (Jang et al., 2015), willingness to pay (Shin et al., 2017), consumers' purchasing behavior, and demographic information. A pilot study will be conducted for testing errors within the questionnaire such as misspelling and unclear wording etc. Plus, the questionnaire will be checked for reliability before collecting the data from 400 participants. Criteria for participation includes customers who have visited a coffee shop using green practices within six months. After collecting the data from 400 participants, the researchers will use SPSS and Mplus programs to analyze the data and develop a research model. SPSS program will be used to analyze demographic information and consumers' purchasing behavior. A confirmatory factor model (CFA) will be employed to test a measurement model. A structural equation modeling (SEM) and chi-square difference test for modeling comparison will be examined by Mplus Program.

### 4. Discussion and Conclusion

The potential contributions of this research are wide ranging. With the rapid growth of the coffee shop industry in Thailand, and the rise of environmental awareness, the researchers propose that this study will have both economic and environmental implications. The Entrepreneurs could use the findings to improve their green strategies to encourage people to visit and spend money on food and beverages at their shops. Not only would it help the entrepreneurs to apply effective sustainable campaigns to their shop, but also create long-term customers and sustainable profit for their business.

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## **Impact of digitalization on development of tourism: Developing economies perspective**

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### **Abstract:**

Developing economies like India are marching ahead for digitalizing its most of the activities, travel and tourism industry. It generates 8.10% employment and contributes 9.20% of total Indian GDP. Travel and tourism industry manage to create digital solutions to increase their sales, branding and awareness. We contribute by developing an outline that links and sets the direction for future study by concerning digitalization, developing economy and tourism, cashless tourism & hospitality practice, cost saving and productivity in tourism industry. This research paper is a conceptual in nature that proposes the importance of digitalization in tourism sector in order to significantly improve its competitive advantage.

**Keywords:** Digitalization, Developing Economies and Tourism, Cashless tourism & Hospitality Practice, Cost Saving, Productivity.

### **1. Introduction**

Digitalization is opening new doors for new opportunities to the tourists and it's also creating more awareness and building more interest for wanderlust among people. Without any doubt, "digitalization can be viewed as the motor of transportation for the tourism industry in the age of the internet economy". Technology is growing its wings to diverse socio-economic, education, political spheres so far its application is concerned. Digital innovation is transforming the way we live, work and route businesses, it has worldwide impact on every sectors and industries. Digitalization influences digital skills and data to transform businesses and business environment (Ghobakhloo, 2019). It transforms marketplaces and production developments, and has important consequences for economic and social organization, improvement, and competitiveness. Digital India is one of the utmost determined projects undertaken by the government with a vision to transform India into a digitally empowered economy (Sheokand & Gupta, 2017). The focus areas of this program encompass three areas; Formation of the countrywide digital arrangement, Ensuring governance on request and Digital empowerment of people. Digitalization offerings opportunities for SMEs to magnify their market influence, upsurge development, expand operational competences, and improve their competitive edge.

### **2. Literature Review**

In developing country, in the field of travel and tour consumers gradually decide to travel using technology and prefer communication through the mail or messages (Belias et al., 2018). The

requirements of consumers within the travel and hospitality industry have improved significantly. Customers progressively demand the pushing of information and the digital communication, facility of information is already a central element today (Flew et al., 2019). Buhalis and law argued that tourists became more selective, sensitive to price, and more sophisticated and reducing the energy in tourism activities like tour planning due to the dissemination of it in tourism still people can plan tours in much easier way with the help of apps, and can trace the route with GPS, book hotels, tickets and get information in a single tap (Shobha & Rakshitha, 2018). Hence, customer relationship is one of the essential assets of a organization within the travel industry with the intention of fulfill consumer needs (Casais et al., 2020), as consumer requirements have changed dramatically through digitization from the last two or three decades. subsequently, digitization is seen as a opportunity to access data regardless of time and place shaped by the internet (Janssen & Merk, 2019). From cost-effective point of view, technology leads to improved business processes and changed business models (Rachinger et al., 2019), and the context is the ease of use of new information and communication skills, particularly big data, , Internet of things, cloud computing and social software. Consumers wouldn't expression it this way, but they are demanding from organization and in many businesses a radical renovation of commercial processes (Pino & Gatica, 2018). Instinctive boundaries, real-time fulfillment, around-the-clock availability, custom-made treatment, worldwide constancy, and zero errors this is the globe to which customers have become progressively habituated (Sadriwala & Younes, 2018). It's superior user experience, however; when organization get it right, they can also offer more economical rates because of lesser costs, better functioning controls, and lower risk. organization that digitize developments can develop their bottom lines and delight consumers (Geogre & Merrill, 2020). The significance at stake depends on the commercial model and preliminary point but can be projected by assigning costs to endwise processes and benchmarking in contradiction of peers.

### **Objectives of the study**

To understand the new technology and its potential towards tourism industry.

To study the impact of digitalization on cost effectiveness and productivity of tourism product.

### **3. Methodology**

Research methodology is based on secondary data which is collected from previous literature. The study is conceptual in nature, Data mining has been done on the basis of its construct digitalization, cashless tourism & hospitality practice, branding and awareness, cost saving, productivity and its prospect has been extracted from various journals, articles magazines and websites and other online sources for the purpose of the research.

### **Scope of the study:**

Technology based tourism is likely to develop into something better in the near future because travel and tourism industry has always been a big business in various developing countries. Tourism contributes to a nation's economy and provides employments to thousands or lakhs of people.

## Implications

- The biggest impact of digitalization or use of internet made life more simpler on people by finding a place and to stay connected with others and learning more about the globe.
- Shopping and service industry like tourism or other sector became a click away and you don't need to leave and go out anywhere a parcel or service comes to your house.
- Digitalization comprises the application of technology to wider social and institutional contexts, and thereby contributes to the servitization of establishments, and affects how they compete and interact.
- Digitalization convenience to customers and helps in saving time.
- Digitalization reduces human error and thus builds customer loyalty.
- people have round-the-clock access to banks due to online banking. Managing large amounts of cash has also become easier.
- opportunities to decrease costs, enhance processes, speedy and proximity of communications with consumers and stakeholders, development of new services and products.

## 4. Conclusion

Digitalization is the new game changer and has great potential to promote inclusive growth by creating a healthy socio-economic environment. It has helped in connecting, communicating and empowering people by bringing them on a social platform. The excellence expansion of the advanced technology grips a huge opportunity for the hospitality and tourism organization. Technology and the digital revolution can bring benefits to the common people in various ways, for example, by providing that a platform which connects sellers and buyers across the world and brings up-to-date the status of transactions as they occur digitally. With more and more developing countries progressively reaping the benefits of digitalization, it is hoped that the digital revolution will also spread to the other nations and people who need it the most. The expansion of digitalization has huge potential to reach a level where that could actually support Digitalization, Developing Economies and Tourism, Cashless tourism & Hospitality Practice, Cost Saving, Productivity of related sector, flagging the way to the future of travel and hospitality businesses.

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## **Service quality measurement of spa services: A case of Indian Himalayan Spa Resorts**

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### **Abstract:**

The main aim of the current study is to measure the gap between guest expectations and guest perception of the guests visiting Indian Himalayan Spa resorts. The study has been conducted in the various spa resorts situated in Indian Himalayan regions. The data of 217 samples were collected from 3 spa resorts offering spa services situated in Himalayan destinations of India. A self structured scale was used to find the significant difference between customer expectation and perception. Z-test was performed to measure the satisfaction level. The result showed that there is a significant difference between the guest expectation and guest perception regarding the spa services.

**Keywords:** Spa Tourism, Spa Resorts, Gap Analysis, Customer Satisfaction

### **1. Introduction**

Travel & Tourism sector has been an integral part of India's growth story, accounting for 9.2% of India's GDP and 42.7 million jobs in 2018. Spa tourism will continue to drive the growth of the country in the near future (FICCI, 2019). India is a land of Ayurveda; yoga and spirituality, enormous amount of spiritual retreats are situated in different parts of country, and be it Rishikesh, Dharamsala, Kerala and so many other places which from time immemorial are famous for spiritual and Wellness retreats which also includes the concept of spa and spa resorts (Global Wellness Institute, 2018). The concept of spa resorts is also very popular in India. The present study has been conducted on various destinations of Indian Himalayan region to identify the customer satisfaction level which could make India as a major brand in Spa tourism. According to the wellness tourism report, 2017, India is ranked among top 20 leading spa destinations both in terms of revenue as well as the ITR (International Tourists Receipts), among others have been a key attraction for domestic and foreign tourists.

Table 1

<b>Top Twenty Spa Markets, 2017</b>				
	Number of Spas	Spa Facility Employment	Spa Facility Revenues (US\$ billions)	Rank In 2017
United States	26,317	395,707	\$20.83	1
China	15,664	376,576	\$8.24	2
Germany	7,060	153,660	\$6.66	3
Japan	7,359	121,781	\$5.72	4
France	4,653	88,709	\$3.59	5
Italy	3,954	83,139	\$3.24	6
United Kingdom	3,547	62,849	\$2.70	7
Spain	3,304	58,532	\$2.46	8
Russia	3,446	114,261	\$2.29	9
India	5,990	74,977	\$2.13	10
Canada	4,077	47,712	\$2.05	11
Austria	2,229	48,674	\$2.05	12
Mexico	3,837	61,718	\$1.77	13

India's Standing as per Global wellness Spa Market

Global Wellness Economy Monitor, 2018

For centuries, spas have attracted people for rejuvenation and healing purposes, but in the wake of the current wellness trend, spa services and facilities are being developed to better meet people's holistic wellness interests (Smith & Puczkó, 2014). The current research has been performed with the background that no such kind of study has been conducted in the Indian Himalayan spa resorts to measure the guest satisfaction level by performing the gap analysis. In the academic perspective, the current study will be beneficial to measure the impact of spa services on the overall guest satisfaction level and the future intentions. The main objective of the study is to identify the gap exists between guests expectation and guests perception of the spa services offered in the Indian Himalayan spa resorts. The current study will be beneficial to the spa practitioners to improve the overall spa services.

## 2. Literature Review

### 2.1 Spa and spa tourism

The notion of 'spa' is strongly linked to wellness, i.e. all the facilities serving health tourism, denoting not merely traditional baths, but those facilities of which services relax, refresh, heal the guests, making them healthier and more balanced. Their key feature is the effort to ensure the state of wellness by satisfying physical, intellectual and emotional needs (Rátz T. 2004). Spa visitors' wellness attitudes have not been previously studied as in this paper. The previous research has mainly explored spa visitors' attitudes and behaviour in connection to specific spa destinations has been rapidly developed in many Asian regions such as Thailand, India, Singapore, Malaysia, and Hong Kong. In particular, Thailand is regarded as one of the greatest wellness spa markets (Kucukusta & Guillet, 2014; Sritama, 2015), and its potential for further

growth is considered to be even greater than that of other competing countries in Asia (Kiattipoom & Han, 2017; Kucukusta & Guillet, 2014; Tanyatanaboon & Brennan, 2016; Thongpan & Yu, 2015). Travel News Asia (2007) claimed that the spa, an established industry already in US and Europe now is going further east with great growing potential in Asia region and especially in China and India which are defined as the fastest growing countries over 2007 and the decade to come according to the World Travel and Tourism Council numbers. Spa tourism represents a rather significant category of economic development. However, despite exceptional natural potentials, this product is still oriented exclusively towards domestic demand which is the result of the fact that spa tourism in Himalayan destination of India primarily overlaps with the concept of health tourism, since the majority of guests in spa centres come there for therapeutic reasons (Ćutović, 2006).

### *2.2 Service Quality and Customer Satisfaction:*

Spa centres are basically service organizations. The concept of quality plays a critical role in the successor service organizations. Definition and meaning of quality is complicated, due to different meanings to goods and services by individuals (Hoyer & Hoyer, 2001). Some definitions of quality in services have to do with accessibility. However, the most widely used and accepted definition of service quality is that provided by Parasuraman, Zeithaml & Berry (1988). According to them, service quality theory includes five dimensions: tangibility, reliability, responsiveness, assurance and empathy. Customer's satisfaction is one of the most important outcomes of marketing activity. High quality of service can result in high customer's satisfaction and increases customer's loyalty (Kumar, Kee, & Manshor, 2009). Therefore, customer's satisfaction is the outcome of service quality (Parasuraman, Zeithaml, & Berry, 1988). Based on this element, many organizations are paying increasing attention to improve service quality (Gupta, McDaniel, & Herath, 2005). Spa market's service must adapt to the criteria, demands, needs, interests and customer's expectations in order to assure their loyalty and create a feeling of satisfaction. According to Zeithaml & Bitner (2003), satisfaction is the customer's evaluation of a product or service inters of whether the product or service meet customer's needs and expectations. A customer will be satisfied if the product or service will meet his other expectations. Spa centers' service quality can enhance customers' positive emotions and behavioural intentions (Gonzalez & Brea, 2008; Lo, Wu, & Tsai, 2015).

### *2.3 Conceptualization*

Sriyam (2010), Borodulin (2013), BELSIC et al., 2010, Chairit (2010), Bhardwaj and Kumar (2013), Boonyarit and Phetvaroon (2011), Markovic and Raspor (2007), Holijevec et al., 2009, Hadjiphanis and Christa (2005), Enome and Tooman in 2013 and many others have already conducted different studies concerning this topic. In nutshell, the review of the existing literature reveals that the majority of the studies are focused on developed countries and only few like Bhardwaj and Kumar (2013) is conducted in developing country like India. Therefore, in order to overcome the existing gap, the present study is conducted in the Indian Himalayan Spa resorts.

H<sub>0</sub>: There is no significant difference between the guests expectation and guests perception of the services offered in the Indian Himalayan spa resorts.

## **3. Methodology**

### *3.1 Measurement*

217 questionnaires are distributed to the respondents who have been visiting the spa resorts (Khyber Himalayan Resort, Spa and Chumbi Mountain Retreat, Ananda Spa Resort, and Spa) located in the Himalayan regions in India. A self-structured questionnaire was developed and used to collect primary data in this research all questions were closed-ended. The survey questionnaire was comprised of various items related to spa services within study variables as guest perception, guest satisfaction (Rope & Pöllänen 1994; Ramesar, 2013; Cannae, 2011) aligned to the attributes of perceptions of wellness tourism derived from the scale developed by Liu & Chang (2013). Respondents were asked to give their responses on five-point Likert scale with "1" being "strongly disagree" and "5" being "strongly agree". The current study adopted a non-probability quota sampling technique to collect the data (Aaker, Kumar & Day, 1995). Z test (two sample for means) was performed with the help of MS-Excel 2007 to calculate the significance level between guests expectation and guests perception as the sample was above 30 ( $n > 30$ ) (Casella, G., Berger, R. L. 2002).

## 4. Results

### 4.1 Demographic Breakdown of the Sample

Results show that out of the total 217 respondents; 153 respondents were males and 64 were females. The majority of the respondents fall under the age group of 45-55 (40.38%). which represents a mature range of the respondents in age. In terms of respondents' education level, the majority of them were Postgraduate (57.69). Respondents have been classified based on their occupation into 5 categories viz. out of 217 respondents 19.23% were Scientific and technical work, 32.69% were Trade and sales worker, 35.58% were Students and 12% were Pensioners.

### 4.2 Data Analysis and Interpretation

A gap analysis was performed to understand what the customer expects according to accessible resources at a spa resort which can also be influenced by various factors such as cultural background, family lifestyle, demographics, experience etc. Further Ms Excel 2007 was used for the statistical analysis. Z test was performed to measure the significance level and testing the hypothesis.

### 4.3 Gap Analysis for measuring the Satisfaction Level

The customer gap (Quadri, U.A, 2015) is very important for understanding the demand of the customer which would also be beneficial to improve the overall facilities and services at a spa resort. From the table 1 below, values such -0.08, 0.03, -0.09, and -0.19, for the statements V3, V6, V7, and V14 are in negative which clearly indicates that it is below the guests expectations, Ideally, the customer's expectation should be almost identical to the customer's perception for satisfied customer service. Hence the below table reflects that there exist a gap among perception and expectation and furthermore, There exist a scope of improvement in terms of overall spa services.

Table 2: Gap Analysis

Items	Sample Size	Guest Expectation Mean	Guest Perception/Perceived Services Mean	Gap Means(Guest Perception-Guest Expectation)
The physical facilities and the design of this spa should be sensibly appealing. (V1)	217	<b>4.05</b>	4.16	0.11
The appearance of the physical facilities should be in keeping with the design and theme of this spa.(V2)	217	4.08	4	-0.08
The spa employees should be professionally dressed and appearance neat.(V3)	217	3.86	3.83	-0.03
The spa employees should be knowledgeable about the resort/hotel spa services, treatments and products.(V4)	217	3.98	4.03	0.05
The spa employees should provide adequate, clear and fair information about the spa.(V5)	217	3.7	4.1	0.40
The spa employees should be professional and skillful.(V6)	217	3.99	3.91	-0.08
The spa employees should provide prompt service.(V7)	217	4.25	4.06	-0.19
The spa employees should tell me exactly when and what treatment(s) and service(s) should be performed.(V8)	217	4.03	4.15	0.12
The spa employees should demonstrate their willingness to help me.(V9)	217	4.05	4.16	0.11
I could trust the spa employees.(V10)	217	4.11	4.18	0.07
Measures should be taken by this spa to ensure personal physical safety and security of my valuables.(V11)	217	3.85	4.16	0.31
I should feel safe in my financial transactions with this spa.(V12)	217	4.04	4.17	0.13
The spa employees should recognize my needs.(V13)	217	3.82	4.24	0.42
The employees should be committed to fulfilling my comfort needs.(V14)	217	4.25	4.16	-0.09
The spa employees should give me personal attention.(V15)	217	4.03	4.6	0.57

**Table 3: Sample Variance and Mean**

Sample Variance	
Guest Expectation	0.022
Guest Perception/Perceived Services	0.029

Sample Mean	
Guest Expectation	4.01
Guest Perception/Perceived Services	4.12

**Table 4: Significance level**

	<i>Guest Expectation Mean</i>	<i>Guest Perception/Perceived Services Mean</i>
Mean	4.006	4.127333333
Known Variance	0.022	0.029
Observations	15	15
Hypothesized Mean Difference	0	
z	-2.0808495	
P(Z<=z) one-tail	0.018723842	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.037447684	
z Critical two-tail	1.959963985	

Table 3 reflects the overall z value which has come as -2.0808495 and the P value is 0.03 which is less than the P value of 0.05, which shows that there is a significant difference between guests expectation and guests perception of the spa services, hence the proposed null hypothesis has been rejected in the current study.

## 5. Discussion and Conclusion

Service quality has been characterized as an important determinant in successfully attracting repeat business, consistently delivering high quality services must be considered as an essential and crucial strategic element for surviving in today's highly competitive environment. During the last few decades, customer satisfaction and service quality have become a major area of attention to practitioners and academic researchers. Both concepts have strong impact on business performance and customer behavior. In addition, gap analysis test between service experience and service perception indicates that various different services were not up to the expectations of the guest and there exist a gap between service experience mean and service perception mean. Finally Z test reveals that the variables were found to be significant at 0.05 level which reflect that overall services needs to be improved.

### *5.1 Implications*

This study would further help in analyzing the role of spa resorts in providing mental and physical relaxation of a tourist and it may also help to give a prospect to the industry to understand the scope of spa institutes in India. Study analysis provides an overview for Indian Himalayan spa resorts serving world class facilities but still lacks the specificity for level of expectations and satisfaction from customers' point of view. This study would further help academicians defining the perspective of spa tourism and also to analyze the futuristic approaches required for successful service implementation. As Industry planners and practitioners, this study would provide an overview of service quality model and its usage for customer satisfaction analysis which further may help the industry practitioners to improve their service and helps in inducing revisit intentions among guests.

### *5.2 Limitations of this study and suggestions for future study*

The major limitation of the current study was, the research was conducted only in few Indian Himalayan spa resorts offering spa services, future research can be conducted by taking into account the spa resorts situated in other parts of the region and country. Furthermore, future study can also involve the future intention variable as well the impact of spa services on the guests future intention.

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