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SENSORY PERCEPTIONS OF ASIAN DESTINATIONS: AN EXPLORATORY STUDY

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ABSTRACT

In today's experience-oriented environment, tourist destinations are expected to engage and provide total experience to their visitors. Whilst experience is a multi-faceted construct based on motivation, process and satisfaction, this paper focuses on the affective emotions and feelings of travelers towards different Asian destinations through perceived sensory stimuli of sight, sound, touch, smell and taste. A Structural Equation Modeling (SEM) technique is utilized in attempt to establish a relationship model between the five senses of experience and the destination image of the travelers, as well as their behavioral intention to visit the destination. Results of the data analysis show that, while sight, touch and taste have significant positive influence on destination image, only touch and taste have significant positive influence on behavioral intention. In addition, destination image has a significant positive influence on behavioral intention. Finally, managerial implications are outlined for marketers in regard to the promotion of their destination image through the five senses.

Keywords: *Five Senses, Sensory Marketing, Destination Image, Asian Destinations, Sensoryscape*

SENSORY PERCEPTIONS OF ASIAN DESTINATIONS

INTRODUCTION

Back twenty years ago, Pine and Gilmore (1999) envisaged the advent of experience economy and that unique customer experiences will overtake attributes of product and service as core to customer choice and behaviors. They foretell the future that companies should “intentionally use services as the stage, and goods as props, to engage individual customers in a way that creates a memorable event”. The prophecy is realizing and experiential marketing has been receiving tremendous attention in last decades. More and more, customers are asking for experimental and uniquely memorable experiences that keep them engaged in a personal way.

In academia, Holbrook and Hirschman (1982) first advocate to understand customer behavior from the experiential dimension as customers are constantly seeking for “fantasy, feelings and fun” experience through consumption. Their work laid the foundation for experiential marketing followed by key contributions from other researchers (Carbone & Haeckel, 1994; Hirschman, 1984; Hultén, 2011; Pine & Gilmore, 1998; Schmitt, 1999). Experience is a multi-faceted concept rooted from the interactive encounters of stimuli and responses with customers to constitute a vital aspect of consumption prototype. The stimuli include sensory interactions involving visual, auditory, olfactory, gustatory and tactile exchanges which will provoke an overall perception on the experience and ultimate customer preference and behavior (Dițoiu & Căruntu, 2014a).

Extant studies have confirmed positive effects on customer purchasing behavior through various sensorial stimuli in retail settings, such as visual stimulus in lighting/color (Bellizzi, Crowley, & Hasty, 1983; Summers & Hebert, 2001), audio stimulus in music (Morrison & Beverland, 2003), olfactory stimulus in scent (Spangenberg, Crowley, & Henderson, 1996; Ward, Davies, & Kooijman, 2003) and even tactile stimulus in interactions (Turley & Milliman, 2000). Each sensory stimulus is responsible to send messages to the neural network to form perception of the object and the stimuli collectively create the customers’ perceived holistic experience.

Tourism is one of the arenas where experience has played an imperative role to provide travelers the satisfaction that they envision before they embark on their journey. The customer's total experience directly affects perceptions of value, word-of-mouth endorsement, and re-patronage intentions (Haeckel et al., 2003). Tourism operators strive to improve facility color tone, soothing background music, food authenticity and serviceman quality, all in an attempt to make the customer’s experience a memorable one, in order to boost the destination image.

This paper employs quantitative techniques to assess the associations between sensory stimuli to the travelers’ perceived destination image and eventually their behavioral intention to visit. It is hopeful that through this investigation, a more dynamic linkage between the variables can be quantified so that marketers are able to explore more effective measures according to the outcomes of this examination. Priorities can be assigned to factors with more significance and resources can be set aside to tackle more specifically the need of the more substantial areas.

LITERATURE REVIEW

We are moving towards an experience-oriented generation, where quality products and services are considered peripheral to complement the delivery of memorable experience to customers (Pine & Gilmore, 1998). In other words, customers are becoming more sophisticated and are anticipating high standards of product or service offerings that embraced experience beyond basic functionality to satisfy their unique emotional and aesthetic values.

The splashing out of experience economy is evidenced by major credit card spending reports in UK indicating a trend of customers' spending behavior on "more experiences, less stuffs" (Barclaycard, 2017). Consumer psychologists join the party and advocate the importance of experientialism over materialism in the constituents of happiness in the consumption process (Gilovich, Kumar, & Jampol, 2015; Schmitt, Brakus, & Zarantonello, 2015). Experiences bring life to brands and make personal connections with customers. Pleasant experiences are personal, relevant and memorable to customers and able to provoke the inner emotions and fantasy associated with the brand that is irreplaceable.

Tourism is one of the arenas where experience has played an imperative role to provide travelers the satisfaction that they envision before they embark on their journey. The customer's total experience directly affects perceptions of value, word-of-mouth endorsement, and re-patronage intentions (Haeckel et al., 2003). It is not uncommon for destination marketing organizations (DMOs) to capitalize on the sensuality of a destination experience to stimulate potential tourist' desire to visit and even re-visit. Therefore, understanding the formation of sensory perceptions among tourists offers insights on how sensory stimuli helps to create pleasurable feelings which then solidify into positive images of the destinations through imagination and nostalgia.

The hedonic and experiential nature of tourism has long been recognized by academia (Hirschman & Holbrook, 1982; Vogt & Fesenmaier, 1998). However, early researches on destination images have been quite fragmented and limited to the tangible attributes of destinations whereas the essence of affective quality largely ignored (Baloglu & Brinberg, 1997; Son & Pearce, 2005). Echtner and Ritchie (1991) tried to fill the gap by proposing a holistic conceptual framework to incorporate the holistic, psychological and uniqueness aspects of destination imagery in the model to call for a more valid and reliable measurement. On top of the cognitive and affective components of destination images, it is crucial to consider multi-sensory components which embrace senses of sight, sound, smell, taste and touch in the shaping emotional travel experiences and destination imagery (Son & Pearce, 2005).

Following this path, numerous scholars endeavor to study the impacts of sensory clues perceived by tourists for destinations in Portugal, Romania, United States, Australia and China (Agapito, Pinto, & Mendes, 2017; Agapito, Valle, & Mendes, 2014; Dițoiu & Căruntu, 2014b; Gretzel & Fesenmaier, 2003; Huang & Gross, 2010; Xiong, Hashim, & Murphy, 2015). Most of these studies are qualitative in nature which attempt to elicit the perceptions of tourists on the destination after their visit through coding and theming related keywords linked to the visited sites. This approach provides a richness and depth of information to understand the static sensory images of specific destinations, but offer little insights on the causation impacts of sensory clues contributing to the formation process of destination images and its generalization.

By adapting the “sensoryscape” scale from sports tourism research (Chung et al., 2016; Chung, Ryu, Green, & Kang, 2015; Lee, Heere, & Chung, 2013; Lee, Lee, Seo, & Green, 2012), this paper attempts to address this gap by focusing on a structural approach to understand how sensory stimuli, individually and holistically, affect the tourist perceptions and behavior through the construction of destination image. For this purpose, quantitative sensory perceptions on the leading Asian destinations including Thailand, Japan, Korea, Malaysia and Taiwan are studied (Enright & Newton, 2004).

METHODOLOGY AND DATA COLLECTION

Our study attempts to understand the destination images of five popular Asian destinations through sensory perceptions and how they lead to the subsequent behavioral intentions. A Structural Equation Modeling (SEM) technique is utilized to explore the relationships between the sensory constructs and the image and intention constructs. The design of the questionnaire is adapted from the Sensoryscape scale developed for sport tourism (Lee et al., 2012). Before conducting the survey, we invited researchers to review the questionnaire and performed a pilot test for face-validity check. Accordingly, we modified some questions to ensure clarity and applicability of the research constructs. The questionnaire is based on 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

The questionnaires consist of 3 sections. The first section collects tourists’ perceptions of the designated destinations based on their travel experience reflected through the sensory stimuli of sight, sound, touch, smell and taste. The next section seeks for the attitudes towards the affective destination images as well as the future intention to visits and recommendations. Demographic information was sought in the final section. The questionnaire was available both in English and Chinese whereas both versions were proofread by bilingual academic staff before distribution.

For the purpose of this study, we mainly surveyed college students from two major institutes in Macau. College students are appropriate for our study since they are active travelers to nearby Asian destinations, and their consumptions on tourist products will continue to grow with their increasing purchasing power and carefree lifestyle. We selected respondents by convenience sampling and only those respondents who had visited one of the five destinations in our study within past year were invited to proceed with the survey. A total of 523 questionnaires were collected, of which 22 had incomplete information, leading to a final data sample of 501.

FINDINGS AND DISCUSSIONS

Demographic profile and destination distribution

Since our respondents were all college students, they shared similarity in education background, with 90% between the age of 18-24 and 10% between age 24-34. The respondents were 25 % male and 75% female, this distribution agrees with the gender distribution of students in the surveyed universities and programs. Out of the 501 questionnaires, 17% pertained to Japan, 14% for Malaysia, 22% for Korea and Taiwan and

25% for Thailand. This destination distribution in certain degree represents the relative popularity of the travel destinations in Asian region (Table 1).

Table 1: Demographic and Destinations Distributions

No. of Respondent:	501
Gender:	
Male	25%
Female	75%
Age:	
18-24	90%
25-34	10%
Destinations:	
Japan	17%
Malaysia	14%
Korea	22%
Taiwan	22%
Thailand	25%

Measurement Model

Our model includes seven latent constructs. Exogenous constructs include sight, sound, touch, smell and taste. Endogenous constructs include destination image and behavioral intention to visit and promote the destination. The measurement validity and reliability are being tested through a Confirmatory Factor Analysis (CFA) using SPSS 21.0 and AMOS 18.0 application.

The CFA results demonstrate overall good fit to the model ($\chi^2/df = 2.73$, CFI = .97, NFI = .96, RMSEA = .04, SRMR = .035). The goodness of fit indicators are satisfied following the criteria set for Chi-square test less than 3, CFI greater than .95, NFI greater than 0.90, RMSEA less than 0.06 and SRMR less than 0.08 and (Byrne, 1994; MacKenzie, Podsakoff, & Podsakoff, 2011; Ullman & Bentler, 2003)

The reliability of the model was assessed through the internal consistency reliability of Cronbach's alpha. The calculated alpha values for all constructs in this research ranged from 0.72 to 0.90, well above the minimum requirements of 0.7 for Cronbach's alpha. In addition, Construct composite reliability (CR) ranged from 0.72 to 0.90, are also the recommended threshold of 0.7, hence fulfilling the reliability requirement.

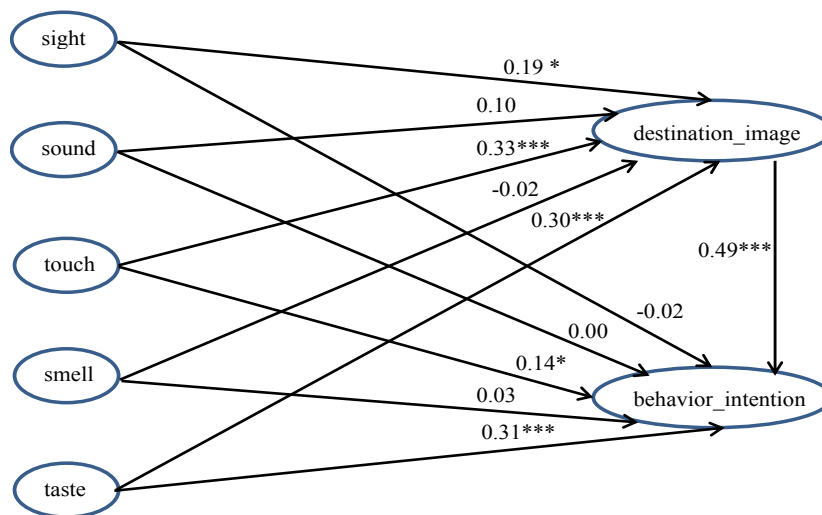
Convergent validity of the model is reflected in the standard factor loadings and Average Variance Extracted (AVE). The standardized coefficients of the construct ranged from 0.70 to 0.88, all significant at 0.01 level. AVE values for all factors are greater than 0.5, ranged from 0.56 to 0.65.

Finally, discriminant validity is examined through comparing the squared root of the AVE with the correlation between constructs. The discriminant validity is satisfied since the squared root of the AVE of the construct is higher than the correlation with other pair of constructs (Table 2).

	1	2	3	4	5	6	7
1. Sight	0.77						
2. Sound	0.74	0.75					
3. Touch	0.61	0.73	0.78				
4. Smell	0.59	0.66	0.64	0.75			
5. Taste	0.54	0.58	0.58	0.65	0.81		
6. Destination Image	0.54	0.60	0.62	0.57	0.68	0.80	
7. Behavior Intentions	0.60	0.68	0.69	0.61	0.70	0.78	0.80

Note: Diagonal elements are the squared root of AVE for each construct.

After the measurement model confirms the necessary validity and reliability, the structural model is generated to produce the relationship between the constructs. Figure 1 shows the results in the structural model. The coefficients with asterisks are significant and indicate influence with various degrees. As shown in the figure, sight, touch and taste sensory constructs have influence on the destination image, while touch and taste constructs have influence on behavioral intention. Finally, destination image also significantly influence on behavioral intention.



Note: *p<0.05; **p<0.01; ***p<0.001

Figure 1. Structural Model results of the sensory constructs to image and intention

The results of the structural model reveal that while the five sensory stimuli are all part of the travel experience, there are still priorities among travelers when they explore the

destination. Sound and smell seem to be of less importance when it comes to image and intention. Sight is only significant on image but has less to do on intention. The two senses that have the most significance are touch and taste. These two senses are related to the food selection from the destination and the interaction with the environment within the local culture. Both stimuli are distinguished from the others in terms of their variability and multi-layer characteristics.

Taste can be fulfilled in many different ways if the local food variety is abundant. It leaves a lingering impression in the travelers and lures them back for more. The taste satisfaction from each visit to the destination varies when travelers sample different combinations of local cuisines. This variety is quite difficult to duplicate in the other senses. For example, it would be hard to create many distinguishable scents in the destination and change them frequently. It would also be difficult to offer different combinations of sceneries as they are mostly nature-built. Food, on the other hand, is relatively easy to proliferate. Ranging from high end delicacies to everyday popular items, food can always entice travelers to develop a special attachment to the destination.

Touch refers to the general sensual feelings travelers experience on their trips. Whether it is the tangible encounters with the local people or the intangible comfort provided by the spacing of the environment, the pleasure from the touch stimulus never stays the same from each visit. Interacting with different people and different environment generate a different sensory emotion from the touch stimulus every time the travelers visit the destination. This multi-layer characteristic of the touch stimulus is the reason why patrons come back again and again.

Finally, the structural model also confirms that the image construct is also a major contributor to the intention construct. As long as the travelers have a deep destination image in their mind, they are very likely to revisit and promote the destination. A complete experience from the relevant sensory stimuli can leave a vivid image in the travelers and that image serves as the source and motivation to attract them back in the future.

CONCLUSIONS

This paper establishes a quantitative model linking the five sensory stimuli to the critical factors of destination image and behavioral intention in various tourist hot spots Asia. The leading senses that influence both factors are the taste and touch stimuli. The findings should serve as basis for DMOs of current and potential destination regions to allocate resources to cultivate, foster and promote businesses related to these two senses. Government subsidies should encourage local entrepreneurs to develop food selections that are unique to the regions, yet appealing to the population. Industries in harvesting and transporting the food sources should be supported both locally and regionally to increase the diversity and freshness of the food options. The touch stimulus demands a comfortable and spacious environment for the travelers to enjoy. Visitor control schemes should be developed to balance out the number of visitors throughout the year. Seasonal attractions and events can be initiated to spread out the appeal evenly. Special offerings and exclusive deals can target different tourist sectors to visit during low seasons. All these procedures aim for a common goal, for which the push for excellence in tourist development can be effectively realized.

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