

This is a repository copy of What are the triggers of Asian visitor satisfaction and loyalty in the Korean heritage site?.

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/139839/

Version: Accepted Version

Article:

Olya, H. orcid.org/0000-0002-0360-0744, Lee, C.-K., Lee, Y.-K. et al. (1 more author) (2019) What are the triggers of Asian visitor satisfaction and loyalty in the Korean heritage site? Journal of Retailing and Consumer Services, 47. pp. 195-205. ISSN 0969-6989

https://doi.org/10.1016/j.jretconser.2018.11.002

Article available under the terms of the CC-BY-NC-ND licence (https://creativecommons.org/licenses/by-nc-nd/4.0/).

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



What are the triggers of Asian visitor satisfaction and loyalty in the Korean heritage site?

Based on complexity theory, this study examines a configurational model that uses motivation antecedents and demographic configurations to explore the causal recipes that lead to high and low levels of Asian visitor satisfaction and loyalty. Data were collected from 183 Chinese and Japanese visitors to the Hanok heritage site in Seoul, South Korea. Asymmetrical modeling using a fuzzy-set qualitative comparative analysis was applied and a combination of desired behavioral outcomes identified. Hanok experience from the motivation configuration and gender from the demographic configuration appeared as necessary conditions to make visitors satisfied and loyal. Key tenets of complexity theory are supported by the study's findings.

1. Introduction

Market targeting and positioning are the key steps in tourism marketing (Dibb and Simkin, 2016). Many countries target the Asian tourist market, which contributes to global outbound travel and international tourism expenditures. Specifically, China has been recognized as the world's largest tourist generating market. International tourism expenditure of China reached US\$ 261 billion in 2016 (UNWTO, 2017). China and Japan are the major sources of international tourists to South Korea. About 6 million Chinese and 2 million Japanese tourists visited South Korea in 2015 (Korea Tourism Organization, 2016). Unfortunately, recent political debates with China and Japan negatively influenced the Korea's tourism industry. Due to international political disputes the number of Chinese and Japanese tourist arrivals to South Korea in 2016 dropped by 19.4% and 2.3%, respectively (Han and Griffiths, 2017; O'Connor, 2016).

The influence of external factors with uncertain consequences and their interactions with demographic and psychological characteristics of travelers increase the complexities of tourism destination management (Mendola and Volo, 2017). Policy makers can solve these complexities by applying strategies that stimulate intrinsic motivations of tourists to visit a place, which may surpass the impact of external factors (Antón et al., 2017; Downes and Marchant, 2016). Although empirical studies highlight the key role of motivation in influencing the desired responses of tourists (e.g., Leong et al., 2015; Yoon and Uysal, 2005), the issue of how various types of motivation must be attuned to lead to tourist satisfaction and loyalty is under-explored. Demographic characteristics strongly influence tourist satisfaction and loyalty, as moderators or independent variables, however past tourism studies are limited in explaining demographic profiles by various motivations (see Table 1). Most tourism researchers analyzed the effects of motivation on satisfaction and loyalty, and differences in satisfaction and loyalty among distinct motivation groups. As a result, motivation and demographics were used in linear relationships when trying to explain satisfaction and loyalty. As the number of tourists seeking cultural and heritage experiences is growing (Hughes and Allen, 2005) understanding visitor motivation is an important theme in heritage tourism research (Prentice, Witt and Hammer, 1998; Richards, 2002). Analyzing motivations of heritage tourists is important because such analysis can not only help to identify and distinguish among their subgroups (Lang and O'Leary, 1997; Moscardo, 1996; Wight, 1996) but, most importantly, accurately design and match products to satisfy needs of heritage tourists leading to their higher satisfaction, loyalty, and retention (Crompton and McKay, 1997). Also, heritage sites create significant interest of international tourists, increase their arrivals and expenditures and, ultimately, provide economic benefits to the country (Yang,

Lin, and Han, 2010). Thus, motivational factors determining tourist visitation to heritage sites should be studied.

Since the process of identifying behavioral intentions of heritage tourists based on their motivation is complex, dynamic, and non-linear (Antón et al., 2017; Ramkissoon and Uysal, 2011), an asymmetrical approach must be applied to examine the interactions of tourists' motivations and demographics with their satisfaction and loyalty. Complexity theory can explain the non-linear interactions between components of a complex system, which cannot be understood by examining the individual system components (Byrne and Callaghan, 2013). Presently, there is little knowledge of the complex combinations of heritage visitors' demographics and motivations that can predict their satisfaction and loyalty.

Drawing on both motivation and complexity theory this empirical study attempts to addresses two research questions. First, can complexity theory be used in tourism to support the occurrences of contrarian cases and heterogeneity in explanations of heritage tourists' behavior? Specifically, does complexity theory support complex interactions of motivations and demographics with heritage visitor satisfaction and loyalty? Complexity theory appears to accommodate complex causal relationships, outcomes of these relationships often result from many causal factors; there are combinations of causal factors that lead to a specific outcome; and, the same causal factor may have different, even opposing, effects depending on the context (Ordanini, Parasuraman and Rubera, 2014) so the same 'cause' can produce different effects (non-linear relationships between variables) (Urry, 2005). This study argues that complexity theory can offer theoretical support for configurations of demographics and motivations in formulating the satisfaction and loyalty levels of heritage visitors. Demographics and motivation are important variables explaining tourist behavior (Baloglu and Uysal, 1996) and differences among consumers (Cova and Cova, 2002). By combining

motivation with demographics it is possible to gain a more detailed view of the motives of tourists, factors that affect destination choices, and characteristics of the different segments (Kiang, Hu, and Fisher, 2006; Konu and Kajala, 2012). This study assesses the key tenets of complexity theory by examining the results of a configurational modeling of motivation and demographics in formulating visitor satisfaction and loyalty. Second, in the light of the political debates with China and Japan mentioned earlier it is important to identify how various motivations and demographics must be combined to predict conditions under which Asian visitors to heritage sites are satisfied and loyal. To date, most tourism researchers used demographics to explain differences in satisfaction and loyalty among distinct motivation groups (e.g., Kim, Lee, and Klenosky, 2003; Lee, Lee, and Wicks, 2004; Rid, Ezueuduji, and Probstl-Haider, 2014). Up to now there are no empirical studies that explored sufficient and consistent configurations of motivations and demographics for determining satisfaction and loyalty of Asian heritage visitors.

Thus, the objective of the current study is to bridge the gap in research by confirming the applicability of complexity theory to examining a complex and non-linear process of developing visitor satisfaction and loyalty. The study develops a configurational model to analyze conditions that lead to both high and low satisfaction and loyalty levels of Asian visitors to a heritage site in South Korea. The demographics and motivations of Chinese and Japanese visitors are used as two causal configurations for predicting visitor satisfaction and loyalty. Using fsQCA, an innovative and pragmatic analytical method, the study investigates a combination of the antecedents as both predictor and outcome configuration (Ragin, 2008). Di Fatta, Patton, and Viglia (2018) applied this technique in the retail context. This study may be the first to formally explore causal recipes (i.e. sufficient combination of the indicators) from heritage visitor motivations showing a configuration outcome with a combination of

satisfaction and loyalty. To confirm the applicability of complexity theory the fsQCA results are evaluated in relation to the key tenets of this theory.

The study contributes to tourism literature by exploring the complex configurations of motivations and demographics in explaining desired behavioral responses of heritage visitors. Revealing varied and complex recipes that account for high and low levels of satisfaction may help researchers to a) understand that different combinations of antecedents drive satisfaction and loyalty; b) describe the complex alternatives that take place; and c) build models that account for satisfaction and loyalty. From a practical perspective, the approach and the results may help tourism policy makers, tourism organizations, and even tourists to rationalize why they are satisfied and loyal.

2. Theoretical framework and configurational model

2.1. Motivation

Motivation constitutes the driving force behind human behavior (Fodness, 1994). Motivation is composed of biological and psychological needs that direct and integrate human behavior (Dann, 1981). In travel and tourism motivation acts as an important factor for an individual to consider when deciding whether or not to visit a specific destination (Richards, 2002). Motivation is a multidimensional phenomenon (Correia and Pimpao, 2008). Different categories and approaches to motivation have been proposed in the pursuit of understanding motivation in travel and tourism. For example, Gray (1970) identified 'seeking' and 'escaping' motivations. Dann (1977) proposed the 'anomie' (i.e., the desire to 'escape from it all') and 'ego-enhancement' (i.e., the desire for recognition) motivations. Crompton (1979) classified tourist motivations into 'push' and 'pull' factors and explained that tourists decide to travel because they are pushed by internal factors and pulled by external factors

(destination attributes) that instigate their desires to visit a certain place (Correia and Pimpao, 2008).

The main push factors that affect pleasure travelers' decisions to visit a destination/attraction are socio-psychological motivations (e.g., exploration and evaluation of self, relaxation), whereas the main pull factors are cultural motivations (e.g., novelty, education) (Crompton, 1979). Krippendorf (1987) suggested relaxation and escape as two most important psychological motivations that drive individuals to take a vacation. Pearce and Lee (2005) reported that core travel motivations include escape, relaxation, relationships enhancement, and self-development. Jang and Wu (2006) identified two types of tourism motivation such as push (internal) (e.g., knowledge seeking, relaxation) and pull (external) (e.g., natural and historic environment, accessibility).

2.2. Motivation for visiting heritage sites

Richards (2002) suggested that understanding various motivations for visiting heritage sites is an important research area in tourism. There has been a growing interest in studying motivations for visiting heritage sites (Poria, Butler, and Airley, 2004). For example, it was found that visitors to heritage sites are motivated by excellent artwork, architectural style, attractive setting, and atmosphere (Shackley, 2001), feeling part of the nation's past and belonging to the nation (Palmer, 2005), being connected to ancestors (McCain and Ray, 2003), paying home homage and remembrance (Uzzell, 1996), and memories (Voase, 2003). It was argued that differences in motivations to visit heritage sites depend upon the visitor's definition of 'heritage': for some heritage may mean important cultural and historic buildings and artifacts, whereas for others heritage may have nothing to do with heritage (Poria, Reichel and Biran, 2006b). For example, tourists interested in cultural and historical

buildings are motivated by the need to experience authenticity and history, interest in heritage, culture or ethnicity (Kerstetter et al., 2001). The need for experiencing history and heritage reflects a need for an emotional experience (Poria, Butler, and Airely (2003). On the other hand, tourists for whom heritage may have nothing to do with heritage may be motivated by pleasure of viewing, information, relaxation, and exercise (Prentice, 1993), education, entertainment, and social involvement (Moscardo, 1996), learning (Jansen-Verbeke and Rekom, 1996), and understanding of oneself (Uzzell, 1998).

Also, it was argued that tourists who are interested in cultural and historical buildings and artifacts have different motivations for the consumption of different kinds of heritage (Prentice, 1993). For example, visitors to three Natural Heritage Sites on the Jeju Volcanic Island, South Korea were motivated by tourism resources and natural heritage (Oh, Lee, and Yang, 2009). Similarly, visitors to Melaka World Heritage City, Malaysia sought environmental and memorable cultural heritage experiences (Teo et al., 2014). On the other hand, visitors to Anne Frank House, a heritage site in Amsterdam, Belgium sought leisure time, connection with own heritage, learning, and emotional involvement (Poria et al., 2006a). Travelers to Macau were motivated by nostalgia (Leong et al., 2015) and visitors to sacred sites in Romania were motivated by self-actualization and their desire to become better persons (Drule et al., 2012).

Next, studies identified different groups of tourists depending on their motivations (e.g. Lang and O'Leary, 1997; Moscardo, 1996; Wight, 1996) and used these motivations as a segmentation base (e.g., Lee et al., 2006a,b; Park and Yoon, 2009; Rid, Ezeuduji and Probstl-Haider, 2014). Further, studies identified different groups of tourists based on their distinct demographic characteristics and satisfaction. In the heritage setting, for example, Yan et al. (2007) found that three groups of international heritage tourists to Taiwan not only differed in

their motivations to visit heritage relics but also in their demographic profiles. Ko, Ko, and Yang (2011) reported that visitors to Jeju Geomunoreum, South Korea differed in their travel behaviors and socio-demographics. Nyaupane et al. (2006) found that visitors to cultural heritage sites in Arizona, USA differed in their experiences and satisfaction.

2.3. Associations between motivation, satisfaction and loyalty

Studies found significant associations between tourist motivation, satisfaction, and loyalty (e.g., Leong et al., 2015; Yoon and Uysal, 2005). Motivation is a factor in satisfaction formation (Gnoth, 1997). For example, Oh (2012) noted that motivation of visitors to Andong Hahoe Folk Village, South Korea was related to their satisfaction. Similar observation was made by Wang, Zhong, and Luo (2009) who examined behavior of visitors to a Wulingyan World Natural Heritage Site, China. Scholars reported that satisfaction results from a fulfillment of needs and expectations (Pearce, 1988) and a positive assessment of experience (Babin and Griffin, 1998). Satisfaction was found to influence behavioral intentions, as shown in both tourism and marketing literature (Bigne, Sanchez, and Sanchez, 2001; Cronin and Taylor, 1992; Lee, Lee, and Lee, 2005; Oliver and Swan, 1989). Pearce (1988) reported that tourists who were satisfied with a destination might come back, recommend it, or favorably speak to other tourists. Satisfied tourists can become repeat loval visitors who are characterized by low switching behavior to competitors and are less costly to retain (Reichheld, 1993), willing to pay a price premium (Zeithaml, Berry, and Parasuraman, 1996) and spread positive word-of-mouth advertising (Boulding et al., 1993). Intentions to visit and recommend a destination to others have been identified as the major desired responses of visitors to cultural heritage sites in Mauritius (Ramkissoon and Uysal, 2011) and Taiwan (Chen and Chen, 2010). The relationship between motivation and satisfaction has been

studied in tourism research from different perspectives and methodologies (e.g., Ibrahim and Gill, 2005; Severt, Wang, Chen, and Breiter, 2007) and different sectors of the market (e.g., Lee, Lee, and Wicks, 2004). A summary of the relevant studies is presented in Table 1.

Insert TABLE 1 here

Scholars noted that tourist motivation, satisfaction, and loyalty have non-linear, heterogonous, and dynamic relationships (e.g., Agustin and Singh, 2005; Antón et al., 2017; Pearce, 1993). The complex nature of various motivations and expected responses of tourists (satisfaction, loyalty) are caused by different backgrounds, preferences, and experiences of people (Antón et al., 2017; Pearce, 1993; Prentice, 2004; Ramkissoon and Uysal, 2011), which can be explained and modeled by complexity theory and fsQCA. Developing and testing causal models to identify a combination of satisfaction and loyalty, as a single outcome condition, can represent a methodological advance in modeling the behavior of heritage visitors. Therefore, in this study complexity theory with fsQCA is employed, as a novel and powerful approach, for solving complex tourism phenomena (Olya and Altinay, 2016; Olya and Gavilyan, 2016; Olya and Mehran, 2017; Olya, Shahmirzdi, and Alipour, 2017; Wu et al., 2014). Again, this is the first empirical study that crafts and tests motivation and demographic factors as causal configurations of the model to explore the complex solutions for achieving both satisfaction and loyalty of (Asian heritage) visitors. This empirical study contributes to the current knowledge of Asian visitor behavior by identifying necessary conditions for achieving satisfaction and loyalty.

2.4. Complexity theory and configurational modeling

Various theories exist to understand tourist motivation, such as expectancy-value theory (Lewin, 1938), goal-directed behaviour (Bettman, 1979), hierarchy of needs (Maslow, 1954), push and pull framework (Crompton, 1979; Dann, 1977; Klenosky, 2002), escaping-seeking dichotomy (Iso-Ahola, 1982), allocentric-psychocentric typology (Plog, 1972, 1974, 1991), travel career ladder (Pearce and Lee, 2005), and dependables-venturers and authenticsventurers models (Plog, 2001). There are also several theories supporting the links between tourists' motivations and their desired responses. For example, self-determination theory explains the impacts of motivation on tourist behavior (e.g., Crompton, 1979; Krippendorf, 1987). The authors acknowledge that past theories are necessary, but insufficient, to explain the complex and heterogeneous nature of motivations and their effects, along with demographics factors, on tourist satisfaction and loyalty. For example, social, interaction motivation may act as a positive indicator of satisfaction and loyalty, while escape and novelty motivations may serves as contributors to given outcomes. Antón et al. (2017) applied the prospect theory (Kahneman and Tversky 1979) to justify the non-linear interactions of motivation with satisfaction and loyalty among visitors to the UNESCO World Heritage Site in Spain. They noted that while none of push motivations were related to loyalty of heritage visitors, its combination with other antecedents (e.g., visit intensity, time, and money spent) positively affected visitor behavioral response. This study argues that complexity theory offers sufficient and consistent theoretical support for the configurations of demographics and motivations in formulating visitor satisfaction and lovalty.

Complexity theory is applicable in the case of heritage tourist motivation in which some cases (tourists) are satisfied and loyal due to fulfilling the escape motivation (Krippendorf, 1987), while others are motivated by receiving memorable cultural heritage experiences (Teo et al., 2014). Alternatively, some satisfied and loyal tourists may be stimulated by a set of

motivations such as social interaction, escape, and novelty (Crompton, 1979). When applying complexity theory, a combination of two or more motivations can be used as a causal model describing the desired responses of heritage visitors.

The symmetric techniques (e.g., regression) help to explain the net impact of explanatory variables on the dependent variable. The symmetric results show various levels of the individual predictors of outcome variables. In a configurational modeling (e.g., qualitative comparative analysis (QCA)) the impact of a combination of independent variables on a specific outcome is used as causal complex configurations to predict the outcome variable. Asymmetric approach (e.g., fsQCA) uses Boolean algebra to explore how predictors (i.e., ingredients) need to be combined to achieve sufficient conditions for the result (Di Fatta, Patton and Viglia, 2018; Fiss, 2007; Olya and Al-ansi, 2018; Woodside, 2013). One of the advantages of the configurational modeling is its ability to predict a combination of dependent variables as one outcome condition. The current study aims at predicting various combinations of motivations and demographics that are sufficient for visitors to be both satisfied and loyal. Furthermore, configurational modeling helps to calculate causal recipes leading to low scores of the outcome (e.g., dissatisfaction and disloyalty), which are not simply the opposite mirror of algorithms for high scores in an outcome condition.

2.5 Research model

The proposed configurational model, which is developed based on the logics of complexity theory consists of two causal configurations, namely demographics and motivation, and one outcome configuration (see Figure. 1). Scholars investigated the impacts of demographic characteristics (e.g., age, gender) and duration of stay on tourist satisfaction and loyalty (e.g., Bernini and Cracolici, 2015; Thrane and Farstad, 2012). In the study,

demographic configuration includes age, gender, education level, and marital status. Motivation configuration is composed of five factors, namely social interaction, escape, Hanok experience, family togetherness, and novelty and exploration that are used to illustrate the causal models indicating both high and low levels of satisfaction and loyalty. Length of stay is used along with motivation and demographics configurations in predicting heritage visitor behavioral response (Figure. 1). To achieve visitor satisfaction and loyalty specific motivations of various segments need to be created in line with the calculated causal models of positive outcomes. The causal models, which describe outcome negation, can be used as a guideline for policy makers to identify motivations that lead to visitor dissatisfaction and disloyalty.

Insert FIGURE 1 here

3. Methodology

3.1. Study site

The study was conducted in the Hanok heritage village, Seoul, South Korea. This particular site was chosen because it represents a unique cultural place that attracts many international visitors to South Korea (Kang, Lee, and Lee, 2016). The Hanok heritage village consists of traditional Korean guesthouses called Hanoks. Hanoks are hundreds years old and reflect the architectural style of the ruling class houses evolved during the Joseon dynasty (AD 1392-1910). One of the best-preserved Hanok areas, Bukchon Hanok Village, has 920 Hanoks and is located near two palaces that is Changdeok Palace (UNESCO World Heritage site) and Gyeongbok Palace. Visitors recognize Hanok houses as one of the best cultural heritage attractions and lodging choices in Seoul.

3.2. Measurement and instrument

This study extracted measurement items of motivation, satisfaction, and loyalty from previous tourism studies (Bigley et al., 2010; Crompton, 1979; Iso-Ahola, 1982; Kim et al., 2003; Lee, 2000; Lee et al., 2004; 2008; Yoon and Uysal, 2005) and interviews with two Hanok managers and one Chinese and two Japanese guests. Motivations (social interaction, escape, Hanok experience, family togetherness, and novelty and exploration), satisfaction, and loyalty were assessed on a 5-point Likert scale (1=strongly disagree or very dissatisfied, 5=strongly agree or very satisfied). In total, 27 motivation items, four satisfaction items, and four loyalty items were used for the purpose of the final analysis (see Table A1 in Appendix A). The socio-demographic variables (e.g., age, gender, education, length of stay) were also examined and used as demographic configurations in the proposed model.

The structured questionnaire was initially developed in English and then translated into the Chinese and Japanese languages by native Chinese and Japanese speakers, using a back translation technique. The original and translated versions of the questionnaire were compared for consistency. University researchers and heritage tourism experts confirmed the clarity of the measuring items.

3.3. Data collection and sample

The questionnaire was administered to guests who stayed at the Tea Guest House and were contacted by email through Survey Monkey. Out of 220 guests contacted, 183 completed the online survey (83% of the response rate). Randomly selected respondents received small Korean gifts to show appreciation for their participation in the survey.

The sample consisted of 52% Chinese and 48% Japanese respondents. The sample included more single (54.6%) than married (45.4%) respondents. Female represented the majority (79.2%) of the respondents, whereas male represented only 20.8% of the

respondents. In terms of age groups, more than one third (36.6%) was in the age group between 30 and 39 and one third (30.1%) was in the age group between 20 and 29. About one fifth of the respondents was in the age group between 40 and 49, less than 10% were younger than 50 years old, and the rest was younger than 20 years old. Of the total sample, the majority (57.9%) reported having an undergraduate university degree, followed by a graduate degree (16.9%), a Junior college degree (15.8%), and a high school diploma (9.4%). Nearly one third (28.4%) of the respondents visited the site with friends or relatives, 27.3% with family, 26.8% with a tour group, and 17.7% were alone. Half (50.8%) of the respondents obtained information about the site from the Internet (e.g., Trip Advisor), 14.8% from the Korea Tourism Organization, 11.5% from local newspapers and magazines, 7.7% from friends and relatives, and the rest obtained the information from other sources (e.g., travel brochures, Korean movies).

3.4. Analytical approach

The collected data were analyzed in two stages. First, the measurement model was checked. A set of rigorous tests, including Cronbach's α and composite reliability (CR), exploratory analysis (EFA), and confirmatory factor analysis (CFA) were performed to assess validity of the measurements. Fit statistics (i.e., X^2 /df, CFI, GFI, IFI, and RMSEA) were calculated to check whether empirical data fit the model well. Second, the research configurational model was tested using the asymmetrical fsQCA approach in order to evaluate tenets of complexity theory. This analytical method was conducted using fsQCA software in three steps: calibration, fuzzy truth tabulation, and counterfactual analyses (Ragin, 2008).

In the calibration step, data were transformed from the five-point scale into a fuzzy set score. Fuzzy sets are sets in which membership can be expressed in degrees. Ragin (2008) asserts fuzzy sets to be calibrated. Calibration requires defining membership in the set from 0.00 to 1.00 (0.05 and below indicates full non-membership, 0.95 and above indicates full membership, and 0.5 indicates cases with the maximum membership ambiguity). The calibrated sets are superior to crisp sets. Calibrated sets enable the application of Boolean algebra functions for modeling social factors that are complex phenomena, not the deterministic issues that can be explained by crisp sets (Olya and Altinay, 2016).

In the fuzzy truth tabulation step, the algorithms that represented the possible conditions leading to high/low outcome scores (i.e., dis/satisfaction and dis/loyalty) were calculated. The negated sets in fsQCA mean the absence of a set. Calculation for the membership of a case in a negated set is done by taking one minus the membership score. Analyzing fuzzy set data revolves around the truth table that is composed of all possible combinations of causal sets, one row for each combination. The truth table provides all possible configurations of the predictors (e.g., motivation) that describe conditions leading to outcome conditions (e.g., satisfaction and loyalty).

In the counterfactual analysis step, the fuzzy truth table was refined based on two probabilistic measures, namely coverage and consistency. Consistency refers to the degree to which a particular causal algorithm is consistent with the outcome (consequential) condition. Consistency ranges from 0 to 1. A high consistency score shows high membership of cases in the recipe of conditions and the outcome condition. A cut-off point of 0.8 is good, however, one should try different cut-off points to see how they affect the results. Once consistency scores are calculated for all causal combinations, the decision is made which combinations

are to be included in the final solution; the rows with high enough scores are kept for the solution. The higher the cut-off point, the higher final consistency but the lower coverage.

The coverage index in fsQCA indicates how many cases with the outcome (the consequence) are accounted for by a certain causal condition. Because causal conditions lead to the outcome (consequence), the coverage for rows that have high consistency is calculated. The goal is to find a good balance when consistency and coverage are in ranges that validate the solution.

To offer sufficient and consistent causal models, the following formulas were used to compute coverage (1) and consistency (2) criteria, respectively.

$$Coverage: (X_i \le Y_i) = \sum \{ \min(X_i, Y_i) \} / \sum (Y_i) \}$$
(1)

Consistency:
$$(X_i \le Y_i) = \sum \{\min(X_i, Y_i)\} / \sum (X_i)\}$$
 (2)

In these equations, Xi denotes case i's membership score in set X, and Yi denotes i's membership score in the outcome (consequence) condition (Ragin, 2008). The predictive validity of the proposed configurational model was tested (Wu et al., 2014). The fsQCA results were then assessed with six tenets of complexity theory (Olya et al., 2017; Woodside, 2014). Necessary factors were identified using analysis of necessary condition (Dul, 2016; Olya and Al-ansi, 2018).

4. Results and discussion

4.1. Results of preliminary tests

The value of Cronbach's alpha for each construct was larger than a recommended cut-off point of 0.7, providing evidence of reliability of the measurements (Table A1). As shown in Table 2, the CR magnitudes were also greater than 0.7, which confirmed the existence of internal consistency among items of each scale (Bagozzi and Yi, 1988). According to the EFA results, the magnitude of factor loadings of two items, namely "To visit this heritage site

is one of my own big achievements" (novelty and exploration factor) and "To experience Korea's unique customs" (Hanok experience factor) was less than commonly accepted level of 0.45. These two items were dropped from the analysis. As shown in Table A1, the eigenvalues for each factor were larger than 1. According to the test of Harman's single factor (i.e., variance percentage for all factors), no general factor emerged during EFA. Thus, the study measures may not have been influenced by common method bias seriously (Podsakoff et al., 2003).

Table 2 shows the CFA results. All items were significant and adequately loaded on the assigned factors (SFL > 0.5; p < 0.001). The fit indices (i.e., $X^2/df = 2.032$, CFI = 0.887, IFI = 0.896, RMSEA = 0.075) revealed that the measurement model fitted the data tolerably well (Anderson and Gerbing, 1988; Bentler, 1990). The evidence of construct validity, including convergent and discriminate validity is provided in Table 2. In terms of convergent validity, the average variance extracted (AVE) for each construct, except for Hanok experience that was close to the recommended level (AVE = 0.443), was greater than 0.5 and was also smaller than the respective CR for each factor (Hair et al., 1998). The magnitude of AVE for all factors was larger than the maximum shared squared variance (MSV) and the average shared square variance (ASV). The results confirmed discriminant validity of the measures used in the study (Anderson and Gerbing, 1988; Fornell and Larcker, 1981). Consequently, reliable and valid constructs were used to perform fsQCA.

Insert TABLE 2 here

4.2. Results from fsQCA

The causal recipes that emerged from demographic variables are presented in Table 3. Three causal models were offered by fsQCA for achieving high levels of satisfaction and

loyalty of Hanok visitors (coverage: 0.754, consistency: 0.856). Coverage and consistency in configurational modeling correspond to the coefficient of determination (r^2) and correlation (r) in symmetric approaches, respectively. The recommended level for coverage is 0.2 and for consistency 0.8 (Ragin 2008). The first model indicates that young single female visitors who stayed in the Hanok house for a short time were satisfied and loyal (see A. M1 in Table 3). The second model shows that educated single females who stayed in the Hanok house for a long time were likely to be satisfied and loyal (A. M2). The third model suggests that older, educated and married female visitors could be targeted as a satisfied and loyal segment (Table 3). According to the outcome negation (~A), young less educated and single female visitors who stayed in the Hanok house for a short time were dissatisfied and disloyal (coverage: 0.366, consistency: 0.825).

Insert TABLE 3 here

As shown in Table 4, the fsQCA results show four causal recipes that represent the conditions leading to a high level of satisfaction and loyalty (coverage: 0.366, consistency: 0.825). The first model suggests that a combination of social interaction, Hanok experience, and novelty and exploration motivations works as a sufficient and consistent recipe for obtaining a high level of satisfaction and loyalty (see B. M1 in Table 4). The second model indicates that a high level of satisfaction and loyalty results from a combination of high escape, Hanok experience, and novelty and exploration motivations. The third recipe advises that a high level of satisfaction and loyalty results from a combination of high Hanok experience, low social interaction and family togetherness motivations. The fourth model shows that high satisfaction and loyalty levels is a result of a combination of high novelty and exploration motivation and loyalty results from a family togetherness.

motivations. The XY plot of Model 1 is depicted to illustrate the asymmetric association of motivation antecedents with satisfaction and loyalty of Hanok visitors (see bottom left side of Table 4).

Next, the fsQCA results also show four causal recipes that represent the conditions leading to a low level of satisfaction and loyalty (coverage: 0.756, consistency: 0.773). The first model shows that dissatisfaction and disloyalty result from low social interaction, family togetherness, and novelty and exploration motivations and high Hanok experience motivation. The second model shows that visitors with high novelty and exploration motivation and low social interaction, escape, Hanok experience, and family togetherness motivations are dissatisfied and disloyal (see ~B. M2 in Table 4). Model 3 shows that dissatisfaction and disloyalty is a result of low escape motivation and high social interaction, Hanok experience, family togetherness, and novelty and exploration motivations. Model 4 indicates that visitors with low social interaction motivations are also dissatisfied and disloyal. Similar to causal recipes for achieving a high outcome condition, the XY plot of the first model of negation outcome was sketched to demonstrate that the relationship between a motivation configuration and dissatisfaction and disloyalty is asymmetric, not symmetric (see bottom right side of Table 4).

Insert TABLE 4 here

4.3. Evidence of predictive validity

The results of the predictive validity test are provided in Table 5. Following Wu et al. (2014), the original sample was divided into two subsamples. The causal model calculated

from subsample 1 must report a high level of coverage and consistency with test of data from subsample 2. As shown in Table 5, the first model, which is calculated using subsample 1, was examined based on subsample 2. As shown in the XY plot at the bottom of Table 5, the level of coverage (0.201) and consistency (0.916) was satisfactory. This result proved the predictive ability of the causal model with a separate sample. According to Gigerenzer and Brighton (2009), the predictive validity of the research model is statistically significant for generalizing the fsQCA results.

Insert TABLE 5 here

4.4. Assessment of complexity theory

The fsQCA results need to be evaluated in relation to the key tenets of complexity theory. A one antecedent (e.g., escape) is necessary, but insufficient, for achieving satisfaction and loyalty (Woodside, 2014). As per the fsQCA results shown in Table 4, social interaction is not sufficient motivation, but necessary, for predicting satisfaction and loyalty. This result supports tenet 1. The second tenet of complexity theory, called 'the recipe principle', posits that a combination of two or more antecedents must be considered as a causal recipe of the outcome condition. For example, a combination of three motivations (see Model 1: social interaction, Hanok experience, and novelty and exploration) is sufficient for consistent satisfaction and loyalty of Hanok visitors. Thus, tenet 2 is supported. The third tenet of complexity theory, known as 'the equifinality principle', advises that each causal recipe is sufficient, but not necessary, for obtaining the outcome. The fsQCA results offer four causal recipes calculated from various motivations, not just one model, for obtaining a high level of satisfaction and loyalty. Similarly, four solutions emerged from fsQCA for a low level of

satisfaction and loyalty (Table 4). Exploring alternative causal recipes for modeling visitor satisfaction and loyalty provides support for tenet 3.

The fourth tenet, called 'causal asymmetry', postulates that a recipe of motivation for having satisfied and loyal visitors is not simply the mirror opposite of the model leading to a low level of satisfaction and loyalty. As shown in Table 4, comparing the four causal models for high outcomes is not the mirror opposite of the four models of a negative outcome. Therefore, tenet 4 is supported. The fifth tenet of complexity theory suggests that action of each antecedent is determined by the role of other antecedents. As shown in Table 4, escape contributes as both a positive antecedent (Model 2) and a negative antecedent (Model 4) for predicting high satisfaction and loyalty of Hanok visitors. Thus, tenet 5 is supported. The sixth tenet of complexity theory related to the coverage of a causal model suggests that it should not be equal 1. This means that each causal model represents the motivation pattern of some cases (Hanok visitors), but not all cases. The coverage of all causal models in Tables 2 and 3 was less than 1. Therefore, tenet 6 is also supported. The evaluation of the fsQCA results in relation to the key tenets of complexity theory revealed that the proposed configurational model supported complexity theory well. Di Fatta et al. (2018) acknowledged the functionality of fsQCA in explaining the complexity of customer decision-making.

The results of necessary condition analysis are presented in Table 6. The factors that received consistency greater than 0.9 are subject to necessary condition analysis. According to the study's results, gender (demographic variable) and Hanok experience and novelty and exploration (motivations) are necessary to achieve Asian visitor satisfaction and loyalty. The results help to understand factors essential to promoting and managing Korean heritage sites to Chinese and Japanese visitors. It seems that gender plays a key role among other demographic variables in target marketing. In terms of motivation, a unique and memorable

experience is of significance. The vital role of novelty and exploration must be highlighted, as it is essential for achieving satisfaction and loyalty of both Chinese and Japanese visitors.

Insert TABLE 6 here

5. Conclusion and implications

This study advances the theory of solving the complex nature of visitor responses by applying complexity theory to understand and describe the complex interactions of demographics and motivations when examining the desired responses of Hanok heritage visitors. Based on the evaluation of the fsQCA findings with key tenets of complexity theory one can conclude that complexity theory accommodates complex non-linear causal relationships for understanding the expected visitor responses well. Complexity theory suggests that causal relationships rarely result from a single ingredient (i.e., independent variable) and the same ingredients may have different effects on satisfaction and loyalty of heritage visitors. There are alternative solutions that lead to the same desired responses (satisfaction and loyalty), that is, a combination of motivations, not a net effect of a single motivation, must be used as a causal solution for indicating satisfaction and loyalty of heritage visitors. This study also extends our knowledge of Asian heritage visitor motivations by demonstrating that sufficient and consistent causal recipes for achieving high outcome conditions are unique. In other words, the causal recipes are not simply the mirror opposites of the causal models of an outcome negation. This study found that in order to achieve satisfaction and loyalty of Asian visitors to heritage sites, unique experiences, novelty and the opportunity to explore heritage sites must be promoted.

The findings of the current study have managerial implications for the heritage tourism industry. Stimulating visitor intrinsic motivations, beyond the effects of possible external

factors such as political conflicts, may act as an effective strategy for creating motivations in line with the calculated causal recipes. According to Downes and Marchant (2016), the influence of internal and psychological factors on people's behavior is relatively stronger than the impact of external factors. Thus, the heritage sites' managers would do well to attune to visitor motivations, as per the fsQCA results, to improve their satisfaction and build loyalty. For example, since novelty and exploration served as positive motivations in causal recipes, Hanok managers could promote the novelty and adventurous aspects of the Hanok village in Chinese and Japanese websites and advertisements. For example, Hanok managers and the Korea Tourism Organization (KTO) could use video marketing to promote novelty experience at Hanoks. Loyalty programs that focus on local activities, lifestyle and authentic cuisine could be offered and Korean art workshops, cultural exhibitions and events organized. Heritage managers must also be aware of the conditions of dissatisfaction and disloyalty when targeting the Asian visitor market (Jin and Wang, 2016).

This empirical study is among few studies in the area of motivation in heritage tourism (e.g., Antón et al., 2017) that used demographic characteristics as antecedent configurations for stimulating satisfaction and loyalty of Asian heritage visitors. Specifically, gender emerged as a necessary factor in achieving visitor satisfaction and loyalty; its needs to be taken into account when developing target marketing strategies. Improving satisfaction and loyalty of heritage visitors is important for economic reasons and sustainable management of the heritage site. Heritage tourism provides unique opportunities for businesses and service providers if customers are satisfied and loyal. 'Heritagescapes' generate experiential values for customers, increase sales and profits, and contribute to economic growth (Viglia and Abrate, 2017).

This empirical study is based on two visitor markets only, Chinese and Japanese. As the asymmetrical modeling using complexity theory with an asymmetric analytical approach (i.e., fsQCA) is considered to be a pragmatic approach that generates knowledge by deepening the complex tourism phenomena (Olya and Mehran, 2017), it is suggested that researchers should conduct follow-up studies to confirm the application of the complex configuration analysis based on complexity theory in other countries and contexts. For example, it is recommended for future research to model satisfaction and loyalty of Western visitors based on configurations of their motivations and demographics. Since cross-sectional data obtained from one Hanok only were used to test the model it is proposed to conduct a longitudinal study to test causal patterns of factors influencing satisfaction and loyalty of visitors to various heritage sites over time. Future studies can also investigate the effect of different types of (heritage) visitors (first-time versus repeat visitors) along with their motivations and demographics on achieving satisfaction and loyalty.

Insert Appendix A1 here

References

- Agustin, C., Singh, J. 2005. Curvilinear effects of consumer loyalty determinants in relational exchanges. Journal of Marketing Research, 42 (1), 96-108.
- Anderson, J.C., Gerbing, D.W., 1988. Structural equation modeling in practice: a review and recommended two-step approach. Psychological Bulletin, 103 (3), 411-423.
- Antón, C., Camarero, C., Laguna-García, M., 2017. Towards a new approach of destination loyalty drivers: satisfaction, visit intensity and tourist motivations. Current Issues in Tourism, 20 (3), 238-260.
- Babin, B., & Griffin, M., 1998. The Nature of Satisfaction: An Updated Examination and Analysis. Journal of Business Research, 41 (2), 127–136.
- Bagozzi, R.P., Yi, Y., 1988. On the evaluation of structural equation models. Journal of the Academy of Marketing Science, 16 (1), 74-94.
- Baloglu, S., & Uysal, M., 1996. Market segments of push and pull motivations: A canonical correlation approach. International Journal of Contemporary Hospitality Management, 8(3), 32-38
- Bentler, P.M., 1990. Comparative fit indexes in structural models. Psychological Bulletin, 107 (2), 238-246.
- Bernini, C., Cracolici, M.F., 2015. Demographic change, tourism expenditure and life cycle behaviour. Tourism Management, 47, 191-205.
- Bettman, J., 1979. An Information Processing Theory of Consumer Choice, Addison Wesley Publishing Company, Reading, Massachusetts, MA.
- Bigley, J.D., Lee, C.K., Chon, J., Yoon, Y., 2010. Motivations for war-related tourism: A case of DMZ visitors in Korea. Tourism Geographies, 12 (3), 371-394.
- Bigne, J., Sanchez, M., & Sanchez, J., 2001. Tourism Image, Evaluation Variables and After Purchase Behaviour: Inter-Relationship. Tourism Management, 22 (6): 607–616.
- Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V., 1993. A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions. Journal of Marketing Research, 30 (1), 7–27.

- Byrne, D., Callaghan, G., 2013. Complexity Theory and the Social Sciences: The State of the Art. London: Routledge.
- Chen, C.F., Chen, F.S., 2010. Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. Tourism Management, 31 (1), 29-35.
- Correia, A., Pimpao, A., 2008. Decision-making processes of Portuguese tourist travelling to South America and Africa. International Journal of Culture, Tourism and Hospitality Research, 2 (4), 330-373.
- Cova, B. and Cova, V., 2002. Tribal marketing-The tribalisation of society and its impact on the conduct of marketing. European Journal of Marketing 36(5/6): 595-620.
- Crompton, J.L., 1979. Motivations for pleasure vacation. Annals of Tourism Research, 6 (4), 408-424.
- Crompton, J., & McKay, S., 1997. Motives of Visitors Attending Festival Events. Annals of Tourism Research, 24 (2), 425–439.
- Cronin Jr, J.J., Taylor, S.A., 1992. Measuring service quality: a reexamination and extension. Journal of Marketing, 56 (3), 55-68.
- Dann, G.M., 1977. Anomie, ego-enhancement and tourism. Annals of Tourism Research, 4 (4), 184-194.
- Dann, G.M., 1981. Tourist motivation an appraisal. Annals of Tourism Research, 8 (2), 187-219.
- Devesa, M., Laguna, M., & Palacios, A., 2010. The role of motivation in visitor satisfaction: Empirical evidence in rural tourism. Tourism Management, 31(4), 547-552.
- Di Fatta, D., Patton, D., & Viglia, G., 2018. The determinants of conversion rates in SME ecommerce websites. Journal of Retailing and Consumer Services, 41, 161-168.
- Dibb, S., Simkin, L., 2016. Market segmentation and segment strategy. In Baker, M. J. and Saren, M., Marketing Theory: A Student Text (pp. 251–282). Thousand Oaks, CA: Sage
- Downes, T., Marchant, T., 2016. The extent and effectiveness of knowledge management in Australian community service organisations. Journal of Knowledge Management, 20 (1), 49-68.

- Drule, A., Chris, A., Bacila, M., & Ciornea, R., 2012. A new perspective of non-religious motivations of visitors to sacred sites: Evidence from Romania. The World Conference on Business, Economics and Management, Antalya, Turkey, May 4-6.
- Dul, J., 2016. Identifying single necessary conditions with NCA and fsQCA. Journal of Business Research, 69 (4), 1516-1523.
- Fiss, P.C., 2007. A set-theoretic approach to organizational configurations. Academy of Management Review, 32 (4), 1180-1198.
- Fodness, D., 1994. Measuring tourist motivation. Annals of Tourism Research, 21(3), 555-

581.

- Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18 (1), 39-50.
- Gigerenzer, G., Brighton, H., 2009. Homo heuristicus: why biased minds make better inferences. Topics in Cognitive Science, 1 (1), 107-143.
- Gnoth, J., 1997. Tourism motivation and expectations formation. Annals of Tourism Research, 21(2), 283–304.
- Gray, H.P., 1970. International Travel International Trade. Lexington Heath: Lexington Books.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., 1998. Multivariate Data Analysis (8th Ed.). Upper Saddle River. NJ: Prentice-Hall.
- Han, S., Griffiths, J., 2017. Why This Statue of a Young Girl Caused a Diplomatic Incident, CNN. Retrieved February 8, 2017 from http://cnn.it/2ldNyfS.
- Hughes, H., & Allen, D., 2005. Cultural tourism in Central and Eastern Europe: The views of 'induced image formation agents'. Tourism Management 26(2), 173-194.
- Ibrahim, E. E., & Gill, J., 2005. A positioning strategy for a tourist destination based on analysis of customers' perceptions and satisfactions. Marketing Intelligence and Planning, 23(2), 172–188.

- Iso-Ahola, S.E., 1982. Toward a social psychological theory of tourism motivation: a rejoinder. Annals of Tourism Research, 9 (2), 256-262.
- Jang, S.S., Wu, C.M.E., 2006. Seniors' travel motivation and the influential factors: an examination of Taiwanese seniors. Tourism Management, 27 (2), 306-316.
- Jansen-Verbeke, M., & Van Rekom, J., 1996. Scanning museum visitors: Urban tourism marketing. Annals of Tourism Research, 23(2), 364-375.
- Jin, X., Wang, Y., 2016. Chinese outbound tourism research: a review. Journal of Travel Research, 55 (4), 440-453.
- Kahneman, D., Tversky, A., 1979. Prospect theory: an analysis of decision under risk. Econometrica: Journal of the Econometric Society, 47 (2), 263-291.
- Kang, S.K., Le, C.K., & Lee, D.E., 2016. Examining cultural worldview and experience by international tourists: A case of traditional house stay. Asia Pacific Journal of Tourism Research 21(5), 477-499.
- Kerstetter, D. L., Confer, J. J., & Graefe, A. R., 2001. An exploration of the specialization concept within the context of heritage tourism. Journal of Travel Research, 39(3), 267-274
- Kiang, M., Hu, M., & Fisher, D. 2006. An extended self-organizing map network for market segmentation: A telecommunication example. Decision Support Systems, 42(1), 36-47.
- Kim, S.S., Lee, C.K., Klenosky, D.B., 2003. The influence of push and pull factors at Korean national parks. Tourism Management, 24 (2), 169-180.
- Klenosky, D., 2002. The "pull" of tourism destinations: a means-end investigation, Journal of Travel Research, 40 (4), 396-403.
- Ko, MY., Ko, KS., & Yang, P.S., 2011. The World Natural Heritage Site visitors using tourism motivation: A case study of Geomunoreum. Journal of Tourism Sciences 35(4), 11-30.
- Konu, H., & Kajala, L., 2012. Segmenting protected area visitors based on their motivations.Metsahallitus: Nature Protected Publications of Metsahallitus. Series A 194.

- Korea Tourism Organization, 2016. Statistics of Arrivals and Departures. Korea Tourism Organization Headquarters. Retrieved January 07, 2017 from https://kto.visitkorea.or.kr/eng/tourismStatics/keyFacts/KoreaMonthlyStatistics.kto.
- Krippendorf, J., 1987. The holidaymakers: Understanding the Impact of Leisure and Travel. London: Heinemann-Butterworth.
- Lang, CK., & O'Leary, J., 1997. Motivation, participation and preference: A multisegmentation approach of the Australian nature travel market. Journal of Travel and Tourism Marketing 6(3/4), 159–180.
- Lee, C.K., 2000. A comparative study of Caucasian and Asian visitors to a Cultural Expo in an Asian setting. Tourism Management, 21 (2), 169-176.
- Lee, CK., Lee, YK., Bernhard, B., & Yoon, YS., 2006a. Segmenting casino gamblers by motivation: A cluster analysis of Korean gamblers. Tourism Management, 27, 856-866.
- Lee, CK., Lee, YK., Bernhard, B., & Yoon, YS., 2006b. Segmenting casino gamblers by motivation: A cluster analysis of Korean gamblers. Tourism Management, 27, 856-866.
- Lee, C.K., Lee, Y.-K., Lee, B., 2005. Korea's destination image formed by the 2002 World Cup. Annals of Tourism Research, 32 (4), 839–858.
- Lee, C.K., Lee, Y.-K., Wicks, B.E., 2004. Segmentation of festival motivation by nationality and satisfaction. Tourism Management, 25 (1), 61-70.
- Lee, Y.-K., Lee, C.K., Lee, S.K., Babin, B.J., 2008. Festivalscapes and patrons' emotions, satisfaction, and loyalty. Journal of Business Research, 61 (1), 56-64.
- Leong, A.M.W., Yeh, S.S., Hsiao, Y.C., Huan, T.C.T., 2015. Nostalgia as travel motivation and its impact on tourists' loyalty. Journal of Business Research, 68 (1), 81-86.
- Lewin, K., 1938. The conceptual representation and the measurement of psychological forces, Duke University Press, Durham, North Carolina, NC.
- Maslow, A., 1954. Motivation and Personality, Harper, New York, NY.
- McCain, G., Ray, N.M., 2003. Legacy tourism: The search for personal meaning in heritage travel. Tourism Management, 24 (6), 713-717.

- Mendola, D., Volo, S., 2017. Building composite indicators in tourism studies: Measurements and applications in tourism destination competitiveness. Tourism Management, 59, 541-553.
- Moscardo, G., 1996. Mindful visitors: Heritage and tourism. Annals of Tourism Research, 23(2), 376-397.
- Nyaupane, G., White, D., & Budruk, M., 2006. Motive-based tourist market segmentation: An application to Native American cultural heritage sites in Arizona, USA. Journal of Heritage Tourism 1(2), 81-99.
- O'Connor, T., 2016. South Korea China Conflict: Military Opens Fire at Chinese Boat as Tensions Flare in Yellow Sea. International business times. Retrieved February 7, 2017 from http://www.ibtimes.com/south-korea-china-conflict-military-opens-fire-chineseboat-tensions-flare-yellow-sea-2441385.
- Oh, M.J., 2012. Segmentation of tourist motivation and the relationship between the motivation and satisfaction: Focusing on the moderating effect of representative list of the world heritage site. Journal of Tourism Sciences, 36 (2), 179-199.
- Oh, MJ., Lee, HS. and Yang, SY., 2009 Motivation and characteristics of the tourists to the Natural World Heritage Site: Jeju Volcanic Island and Lava Tubes. Journal of Tourism Sciences 33(2), 303-326.
- Oliver, R.L., Swan, J.E., 1989. Consumer perceptions of interpersonal equity and satisfaction in transactions: A field survey approach. Journal of Marketing, 53 (2), 21-35.
- Olya, H.G., Al-ansi, A., 2018. Risk assessment of halal products and services: Implication for tourism industry. Tourism Management, 65, 279-291.
- Olya, H.G., Altinay, L., 2016. Asymmetric modeling of intention to purchase tourism weather insurance and loyalty. Journal of Business Research, 69 (8), 2791-2800.
- Olya, H.G., Gavilyan, Y., 2016. Configurational models to predict residents' support for tourism development. Journal of Travel Research, 56 (7), 893–912.
- Olya, H.G., Mehran, J., 2017. Modelling tourism expenditure using complexity theory. Journal of Business Research, 75, 147-158.

- Olya, H.G., Shahmirzdi, E.K., Alipour, H., 2017. Pro-tourism and anti-tourism community groups at a world heritage site in Turkey. Current Issues in Tourism, 1-23. Doi: 10.1080/13683500.2017.1329281.
- Ordanini, A., Parasuraman, A., & Rubera, G., 2014. When the recipe is more important than the ingredients: A qualitative comparative analysis (QCA) of service innovation configurations. Journal of Service Research. 17(2), 134-149.
- Palmer, C., 2005. An ethnography of Englishness: Experiencing identity through tourism. Annals of Tourism Research, 32 (1), 7-27.
- Park, D. and Yoon, Y., 2009. Segmentation by motivation in rural tourism: a Korean case study, Tourism Management, 30 (1), 99-108.
- Pearce, P., 1988. The Ulysses Factor: Evaluating Visitors in Tourist Settings. New York, NY: Springer Verlag.
- Pearce, P.L., 1993. Fundamentals of tourist motivation. In D. Pearce and R. Butler (Eds.), Tourism Research: Critiques and Challenges (pp. 113–134). London: Routledge.
- Pearce, P. and Lee, U., 2005. Developing the travel career approach to tourist motivation, Journal of Travel Research, 43 (3), 226-237.
- Plog, S., 1972. Why destination areas rise and fall in popularity, paper presented at the Southern California Chapter of the Travel Research Bureau, 10 October, Los Angeles.
- Plog, S., 1974. Why destination areas rise and fall in popularity, The Cornell Hotel and Restaurant Administration Quarterly, 14 (4), 55-58.
- Plog, S., 1991. Leisure Travel: Making it a Growth Market... Again!, Wiley, New York, NY.
- Plog, S., 2001, Why destination areas rise and fall in popularity, The Cornell Hotel and Restaurant Administration Quarterly, 42 (3), 13-24.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of Applied Psychology, 88 (5), 879-903.
- Poria, Y., Butler, R., & Airey, D., 2003. The core of heritage tourism. Annals of Tourism Research, 30(1), 238–254.

- Poria, Y., Butler, R., Airey, D., 2004. Links between tourists, heritage, and reasons for visiting heritage sites. Journal of Travel Research, 43 (1), 19-28.
- Poria, Y., Reichel, A., & Biran, A., 2006a. Heritage site management: Motivations and expectations. Annals of Tourism Research, 33(1), 162-178.
- Poria, Y., Reichel, A., & Biran, A., 2006b. Heritage site perceptions and motivations to visit. Journal of Travel Research, 44(3), 318-326.
- Prentice, R., 1993. Motivations of the heritage consumer in the leisure market: An application of the Manning-Haas demand hierarchy. Leisure Sciences, 15(4), 273-290.
- Prentice, R., 2004. Tourist motivation and typologies. In A. Lew, M. Hall, and A. M. Williams (Eds.), A Companion to Tourism (pp. 261–279). Oxford: Blackwells.
- Prentice, R., Witt, S., & Hamer, C., 1998. Tourism as experience: The case of heritage parks. Annals of Tourism Research, 25(1), 1–24.
- Ragin, C., 2008. Redesigning Social Inquiry. Chicago, IL: University of Chicago Press.
- Ramkissoon, H., Uysal, M.S., 2011. The effects of perceived authenticity, information search behaviour, motivation and destination imagery on cultural behavioural intentions of tourists. Current Issues in Tourism, 14 (6), 537-562.
- Reichheld, E., 1993. Loyalty-Based Management. Harvard Business Review, 71 (2), 64-73.
- Richards, G., 2002. Tourism attraction systems: exploring cultural behavior. Annals of Tourism Research, 29 (4), 1048-1064.
- Rid, W., Ezeuduji, I. O., & Pröbstl-Haider, U., 2014. Segmentation by motivation for rural tourism activities in The Gambia. Tourism Management, 40, 102-116.
- Severt, D., Wang, Y., Chen, P., & Breiter, D., 2007. Examining the motivation, perceived performance, and behavioural intentions of convention attendees: evidence from a regional conference. Tourism Management, 28(2), 399–408.
- Shackley, M., 2001. Managing Sacred Sites. London: Continuum.

- Teo, C.B.C., Khan, N.R.M., Rahim, F.H.A., 2014. Understanding cultural heritage visitor behavior: The case of Melaka as world heritage city. Procedia-Social and Behavioral Sciences, 130, 1-10.
- Thrane, C., Farstad, E., 2012. Tourists' length of stay: the case of international summer visitors to Norway. Tourism Economics, 18 (5), 1069-1082.
- UNWTO, 2017. Tourism Highlights 2017 Edition. World Tourism Organization, Madrid, Spain. Retrieved April 07, 2018 from <u>https://www.e-unwto.org/doi/pdf/10.18111/9789284419029</u>.
- Urry, J. 2005. The complexity turn. Theory Culture and Society, 22(5), 1-14.
- Uzzell, D.L., 1996. Creating place identity through heritage interpretation. International Journal of Heritage Studies, 1 (4), 219-228.
- Uzzell, D., 1998. Interpreting our heritage: a theoretical interpretation. In D, Uzzell and R. Ballantyne (Eds). Contemporary Issues in Heritage and Environmental Interpretation (pp.11-25). London: The Stationary Office.
- Viglia, G., & Abrate, G., 2017. When distinction does not pay off-Investigating the determinants of European agritourism prices. Journal of Business Research, 80, 45-52.
- Voase, R., 2003. Rediscovering the imagination: meeting the needs of the "new" visitor. In Fyall, A., Garrod, B. and Leask, A. (eds). Managing Visitor Attraction. Oxford: Butterworth-Heinemann.
- Wang, H.C., Zhong, Y.D., Luo, F., 2009. Visitors' interpretive preference and motivation in world natural heritage site: the case of Wulingyuan World Natural Heritage Area. Journal of Central South University of Forestry and Technology, 29 (6), 122-127.
- Wight, P. (1996) North American eco-tourism markets: Motivations, preferences, and destinations. Journal of Travel Research 35(1), 3–10.
- Woodside, A.G., 2013. Moving beyond multiple regression analysis to algorithms: calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. Journal of Business Research, 66 (4), 463-472.
- Woodside, A.G., 2014. Embrace• perform• model: Complexity theory, contrarian case analysis, and multiple realities. Journal of Business Research, 67 (12), 2495-2503.

- Wu, P.L., Yeh, S.S., Huan, T.C., Woodside, A.G., 2014. Applying complexity theory to deepen service dominant logic: Configural analysis of customer experience-and-outcome assessments of professional services for personal transformations. Journal of Business Research, 67 (8), 1647-1670.
- Yan, G., So, SI., Morrison, M., & Sun, YH. 2007. Activity segmentation of the international heritage tourism market to Taiwan. Asia Pacific Journal of Tourism Research 12(4), 333-347.
- Yang, C. H., Lin, H. L., & Han, C. C. 2010. Analysis of international tourist arrivals in China: The role of World Heritage Sites. Tourism management, 31(6), 827-837.
- Yoon, Y., Uysal, M., 2005. An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. Tourism Management, 26 (1), 45-56.
- Zeithaml, V., Berry, L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. Journal of Marketing, 60 (2), 31–46.



Figure 1. Proposed configurational model

	Researcher	Major objectives	Analytic tools	Findings
-	Antón, C., Camarero, C., & Laguna- García, M. (2017)	Investigate the effect of tourist motivation on satisfaction, visit intensity, and destination loyalty in the Spanish heritage site	Hierarchical regression, ANOVA	The influence of tourist motivation on destination loyalty differed. Interaction of pull motives with satisfaction had a negative effect on loyalty; push motives did not moderate the link of satisfaction with loyalty. Interaction of push and pull motives with visit intensity had a positive effect on loyalty.
	Leong, Yeh, Hsiao, Huan (2015)	Examine the effect of nostalgia on history/heritage (H&H) and family/friends bonding (F&F) motivations and intention to visit Macau.	Factor analysis, structural equation modeling with AMOS	Nostalgia exerted a positive effect on H&H motivation; it did not affect F&F motivation. F&F motivation influenced visit intention, as opposed to H&H motivation.
	Rid, Ezuduji, & Pröbstl- Haider (2014)	Segment tourists by motivation for rural tourism activities in Gambia. Examine the effects of motivation dimensions on the willingness to revisit.	Factor analysis, cluster analysis, regression analysis	Four motivation segments were identified: (heritage & nature, authentic rural experience, learning, and sun & beach). These motivations significantly contributed to the willingness to revisit
	Bigley, Lee, Chon, & Yoon (2010)	Identify dimensions of motivation of Demilitarized Zone (DMZ) visitors in Korea for war-related tourism	Factor analysis	Six motivation dimensions emerged (opposing political regime motivation, knowledge/appreciation of history, culture and security, curiosity/adventure, war and consequences, and nature-based).
	Devesa, Laguna, & Palacios (2010)	Identify different types of tourists based on their motivation. Examine the influence of motivation on visitor satisfaction in rural tourism in Spain. Compare differences in satisfaction by various motivation groups.	Factor analysis, cluster analysis, ANOVA	Four types of tourists were identified (seeking tranquility, rest and contact with nature; cultural tourists; seeking proximity, gastronomic and nature experience; and return tourists). The influence of motivation on satisfaction differed in each group.

Table 1. Examples of the motivation, demographics, satisfaction, and loyalty studies

Jang & Wu (2006)	Identify travel motivations of Taiwanese seniors. Examine the effect of heath condition on motivation.	Factor analysis, cluster analysis; regression	The two most important travel motivations were knowledge seeking and cleanliness/safety. Health condition had a positive affect (e.g., being cheerful), and negative affect (e.g., being nervous), it enhanced travel motivation.
Yoon & Uysal (2005)	Examine the effect of motivation and satisfaction on destination loyalty in North Cyprus.	Structural equation modeling with LISREL	Pull motivations (e.g., weather and culture) decreased visitor satisfaction. Push motivation (e.g., escape and family togetherness) enhanced loyalty. Satisfaction had a positive effect on loyalty.
Lee, Lee, & Wicks (2004)	Segment festival visitor motivation by nationality and satisfaction. Test satisfaction by different motivations and nationality.	Factor analysis, cluster analysis, two- way ANOVA	Festival visitors were categorized into six clusters. Multi-purpose seekers appeared as the most important segment. Motivation and nationality affected visitor satisfaction.
Kim, Lee, & Klenosky (2003)	Identify push and pull motivations to visit national parks in Korea. Examine differences in motivations and their correlations by demographics (age, occupation, income).	Factor analysis, t- test, ANOVA, MANOVA, correlation	Push and pull factors were correlated and significantly differed with respect to visitor demographics.

Item	SFL	AVE	MSV	ASV	CR	Mean	SD
Loyalty		0.726	0.624	0.151	0.807	4.042	0.704
L1 ^a	0.779**						
L2	0.769**						
L3	0.925**						
L4	0.922**						
Satisfaction		0.849	0.624	0.140	0.721	4.094	0.691
S1	0.907**						
S2	0.903**						
S3	0.952**						
S4	0.923**						
Hanok experience		0.443	0.176	0.071	0.856	4.167	0.532
HE1	0.508**						
HE2	0.577**						
HE3	0.584**						
HE4	0.679**						
HE5	0.679**						
HE6	0.743**						
HE7	0.720**						
HE8	0.771**						
HE9	0.724**						
HE10	0.623**						
Escape		0.619	0.176	0.093	0.701	3.067	0.901
E1	0.703**						
E2	0.818**						
E3	0.875**						
E4	0.739**						
Family togetherness		0.609	0.194	0.061	0.710	2.418	0.863
FT1	0.856**						
FT2	0.833**						
FT3	0.799**						
FT4	0.609**						
Novelty and exploration		0.557	0.176	0.091	0.720	4.004	0.723
NE1	0.772**						
NE2	0.692**						
NE3	0.772**						
Social interaction		0.537	0.194	0.109	0.701	3.011	0.867
SI1	0.553**						
SI2	0.757**						
SI3	0.789**						
SI4	0.896**						
SI5	0.737**						
SI6	0.612**						

Table 2. Results of the reliability and validity tests

Note: **: p< 0.001. SFL: standardized factor loading; AVE: average variance extracted; MSV: maximum shared squared variance; ASV: average shared square variance; CR: composite reliability; Mean: composite score of items of each factor; SD: standard deviation. ^a: these acronyms represent scale items that are provided in Table A1.

	\mathbf{N}	C (1 1	1 •	C*
Table \vec{A} The following	I A collifione	tor the demog	ranhic con	tiouration
$1000.5.11015\zeta$	<i>C</i> A solutions	tor the demog	, aprile con	inguration

Models for predicting high	RC	UC	С	Models for predicting the	RC	UC	С
score of outcome				outcome negation			
A . out = $f(ag, gen, edu, ms, len)$			$\sim \mathbf{A}$. $\sim \mathbf{out} = \mathbf{f}(\mathbf{ag}, \mathbf{gen}, \mathbf{edu}, \mathbf{ms}, \mathbf{len})$				
M1: ~ag*gen*~ms*~len	0.411	0.107	0.906	M1: ~ag*gen*~edu*~ms*~len	0.366	0.366	0.825
M2: gen*edu*~ms* len	0.570	0.182	0.880	Solution coverage: 0.366			
M3: ag*gen*edu*ms	0.322	0.050	0.903	Solution consistency: 0.825			
Solution coverage: 0.754							

Solution consistency: 0.856

Note: M stands for Model; RC: Raw Coverage; UC: Unique Coverage; and C: Consistency. Out represents the combination of satisfaction and loyalty as desired outcome of the model; ag: age; gen: gender (1: male; 2: female); edu: education level; ms: marital status (1: single; 2: coupled/married); len: length of stay. Table 4. The fsQCA models derived from the motivation configuration

•				e						
Models for predicting high	RC	UC	С	Models for predicting the	RC	UC	С			
score of outcome				outcome negation						
B . out = $f(soci, escp, exp, fam, not$	ovl)			\sim B . \sim out = f(soci, escp, exp, fam,	, novl)					
M1: gooi*avp*poul	0.6	0.0	0.9	M (1)	0.5	0.0	0.9			
MI. soci exp novi	96	68	14	Mil. ~soci exp ~iain ~novi	12	74	66			
M2. agan*ayn*novi	0.6	0.0	0.8	M2:	0.4	0.0	0.9			
M2. escp*exp*novi	91	26	85	~soci*~escp*~exp*~fam*novl	40	31	66			
M2. accitours for	0.6	0.0	0.8	M2. agai* agan*ayn*form*navi	0.5	0.0	0.8			
MS: ~socr*exp*~tall	02	43	90	MS: soci*~escp*exp*failf*flovi	27	38	31			
	0.4	0.0	0.9	M4	0.5	0.0	0.8			
vi4: ~soci*~escp*~lam*novi	74	01	17	M4: ~soci*escp*exp*iam*novi	50	62	64			
Solution coverage: 0.918				Solution coverage: 0.756						

Solution consistency: 0.847





Solution consistency: 0.773





Note: M stands for Model; RC: Raw Coverage; UC: Unique Coverage; and C: Consistency. Out represents the combination of satisfaction and loyalty as desired outcome of the model, soci: social interaction, escp: escape, exp: Hanok experience, fam: family togetherness, novl: novelty and exploration. Table 5. Results of the predictive validity test







Coverage 0.476

	Satisfa	ction	Lova	alty	Outco	Outcome		
Necessary	Consiste	Covera	Consiste	Covera	Consiste	Covera		
anteceuent	ncy	ge	ncy	ge	ncy	ge		
Age	0.579	0.919	0.591	0.918	0.628	0.807		
Gender	1.000	0.445	1.000	0.436	1.000	0.361		
Education level	0.836	0.925	0.833	0.903	0.869	0.779		
Marital status	0.314	0.939	0.323	0.946	0.358	0.868		
Length of stay	0.646	0.919	0.645	0.900	0.695	0.801		
Social interaction	0.613	0.977	0.622	0.971	0.701	0.905		
Escape	0.625	0.964	0.631	0.952	0.700	0.873		
Hanok experience	0.944	0.919	0.950	0.906	0.984	0.776		
Family	0.410	0.062	0 422	0.072	0 495	0.021		
togetherness	0.410	0.962	0.425	0.972	0.485	0.921		
Novelty and	0.898	0.929	0.901	0.913	0.938	0.785		
exploration								

Note: The XY plots revealed an asymmetric relationship between outcomes and causal models. Table 6. Results of analysis of necessary condition

Note: Necessary factor is italicized. Outcome is a combination of satisfaction and loyalty.

Appendix A. Table A1. Results of the exploratory factor analysis, Cronbach's alpha, and descriptive statistics Scale Items λ Eigen % of

Scale Items	λ	Eigen	% of
		value	Variance
Loyalty ($\alpha = 0.913$)		1.101	4.696
L1. I will stay at the Tea Guest House next time.	0.605		
L 2. I will choose the Tea Guest House next time when selecting my	0.523		
L 3 I will recommend the Tea Guest House to my friends	0 729		
I 4 I will say positive things about my experience at the Tea Guest House to	0.727 0.744		
other people.	0.744		
Satisfaction ($\alpha = 0.958$)		8.401	15.252
S1. I am satisfied with my decision to stay at the Tea Guest House.	0.932		
S2. I am satisfied with experiences offered in the Tea Guest House.	0.921		
S3. I feel very good about the Tea Guest House experience.	0.917		
S4. Overall, I am satisfied with my stay at the Tea Guest House.	0.893		
Hanok experience ($\alpha = 0.882$)		5.516	14.658
HE 1. To see traditional Korean houses (Hanoks).	0.506		
HE 2. To experience traditional Korean lifestyle.	0.580		
HE 3. To experience a traditional Korean house village.	0.551		
HE 4. To see Korea in general.	0.659		
HE 5. To experience foreign culture.	0.655		
HE 6. To understand Korean culture.	0.765		
HE 7. To see traditional Korean architecture.	0.758		
HE 8. To gain more knowledge about traditional Korean houses.	0.838		
HE 9. To learn about Hanok's cultural and historical value.	0.791		
HE 10. To expand my cultural knowledge.	0.669		
Escape ($\alpha = 0.860$)		2.173	8.942
E1. To escape from my daily routine.	0.777		
E2. To relieve boredom.	0.828		
E3. To change my daily life pattern.	0.868		
E4. To relieve daily stress.	0.733		
Family togetherness ($\alpha = 0.851$)		1.958	8.548
FT1. To enhance my family's kinship and ties.	0.793		
FT2. To enjoy Hanoks with my family.	0.869		
FT3. To help my family to learn about other cultures.	0.820		
FT4. To be with my colleagues.	0.652		
Novelty and exploration ($\alpha = 0.771$)		1.306	6.122
NT1. To gain new experience.	0.761		
NT2. To gain adventurous experience.	0.688		
NT3. To satisfy my curiosity.	0.734		
Social interaction ($\alpha = 0.864$)		3.740	10.909
SI1. To be with my friends.	0.537		
SI2. To be with people who enjoy the Hanok village.	0.740		
SI3. To meet Korean hosts familiar with Korean culture.	0.810		
SI4. To meet people with similar tastes and preferences.	0.868		
SI5. To meet people from other cultures.	0.780		
SI6. To improve my social status.	0.609		

Note: λ is factor loading, Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.833, Bartlett's Test of Sphericity = 4450.111, df = 595, Sig. = 0.000.