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計畫主持人：劉瓊如

計畫參與人員：古偉波、唐琬晴、黃彩華、陳頤、杜霈、
黃文雄、賴翊婷、

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Destination fascination: Conceptualization and scale development

Abstract

The purpose of this study is to conceptualize destination fascination and develop a Destination Fascination Scale (DFS). Based on the model of person-environment compatibility, this study firstly proposes six dimensions of DFS through literature review: mystique, richness, attractiveness, uniqueness, fitness, friendliness. In item generation, 13 in-depth interviews are conducted, extracting 30 items. During purification of measures, 470 survey responses from national parks are collected, and 5 items are deleted after exploratory factor analysis. Then, 473 survey responses from national forest recreation areas are collected for testing confirmatory factor analysis of the 25-item DFS, and its criterion-related validity with destination loyalty.

Keywords: Destination fascination, scale development, person-environment compatibility, destination loyalty

1. Introduction

The concept of fascination is emphasized in the tourism industry, such as the activity to elect fascinating tourist towns by Taiwan Tourism Bureau, or the frequent use of “fascinating” in introducing destinations on the official Swiss tourism website. Although the importance of destination fascination (DF) is rising, limited related discussions could be found in tourism literature. To efficiently promote and accumulate knowledge of DF, the establishment of a Destination Fascination Scale (DFS) becomes essential.

The foundation of DF comes from the exploration about recovery in natural environment in environmental psychology (Kaplan, 1995). Environmental psychologists pointed out that people engage in numerous “attention needed” activities in daily life to continuously perform concentration and spend mental resources, which leads to burnout, tiredness, stress, anxiety, frequent task errors, and low intention to help others (Cohen & Spacapan, 1978; Moray, 1990). To mentally recover well, recent environmental psychologists suggested the need to stay in a fascinating environment (Berto, 2005, 2007; Herzog, Maguire, & Nebel, 2003; R. Kaplan & Kaplan, 2011). Kaplan (1995) defined environment fascination as an environment where people could naturally pay attention to whatever they are interested about, freely explore details in the environment, and personally define meanings of the environment. That is, a fascinating environment could provide people abundant chances to think about other things, detach physically and mentally from

daily tasks, reaching an effective recovery.

After Kaplan (1995) proposed the definition of environment fascination, related scales could only be found as one dimension of the environmental recovery scale of Hartig, Korpela, Evans, and Gärling (1997) and Laumann, Gärling, and Stormark (2001). The 6-item measures of environment fascination developed by Laumann et al. (2001) revealed the potential to establish multidimensional measures for fascination. For example, the item “there is plenty that I want to linger on here” by Laumann et al. (2001) could be extended into one dimension with items to measure richness of tourism resources and experiences in one destination. Besides, “I am absorbed in these surroundings” by Laumann et al. (2001) could be further developed as one dimension about fitness between one visitor and one destination.

Taken together, the purpose of this study is to conceptualize DF and develop a DFS. Results of this study could contribute valuable theoretical and practical implications. For theoretical contributions, the DFS developed in this study could not only enrich our knowledge in DF, but also provide a measurement scale for future studies to apply. For theoretical contributions, the DFS could assist destination management organizations (DMOs) to understand the core contents of DF, and set the content of DFS as directions for destination marketing and management.

2. Literature review

2.1 Theoretical foundations of destination fascination

The foundation of DF starts from former discussions about relationships between human and environment. Kaplan (1983) proposed the model of person-environment compatibility, and argued that based on message and resources perceived in an environment, people subjectively aware compatibility between self and the environment. The perceived compatibility could assist people’s psychological and physical health, and release stresses as well (Kaplan, 1983). Follow up empirical findings of environmental psychologists proved fascinating natural environments benefits restoration in diverse approaches, such as mental recovery through experiencing natural environments (Hartig, Mang, & Evans, 1991; Kaplan, 1995), improve quality of recovery through visiting favorite natural environments (Korpela & Hartig, 1996; Korpela, Hartig, Kaiser, & Fuhrer, 2001), and high-quality self-reflection and attention restoration through the assistance of natural environments (Berto, 2005; Herzog, Black, Fountaine, & Knotts, 1997).

Based on findings of environmental compatibility and restoration, Kaplan (1995) defined an environment as fascination when it allows people to naturally pay attention during visitations, freely explore the environment, and personally define meanings of the environment. Kaplan (1995) further explain the concept of environment

fascination into two aspects. First, environment fascination could be experienced by people through the experiential process, such as continuously playing gambling without care of time, as a participative fascination (Kaplan, 1995). Second, environment fascination could be experienced through diversity of content in an environment, such as people, things, items, and views (Kaplan, 1995). On the other hand, from the perspective of consumer psychology in consumption markets, Hogshead (2010) argued fascinating messages are like fascinating people who own charm to attract others' attention, making us fall into their charming swirl. The moment in experiencing fascination is like the peak experience in life, making us fully engage in and enjoying comfortable (Hogshead, 2010). Consumers' feelings to involve in fascinating consumption experiences are similar to visitors' feelings in enjoying environment fascination, all representing people's feelings to perceive fascination as natural participation, free imagination and exploration, and personal interpretations of meanings in the experience. Taken together, this study defines DF as: a destination where visitors could naturally pay attention to whatever they are interested about, freely explore details in the destination, and personally define meanings of the destination.

2.2 Dimensions of destination fascination

Previous scholars consider fascination as one dimension of a restorative environment (Hartig et al., 1997; Laumann et al., 2001). For the dimension of environment fascination, Laumann et al. (2001) proposed items including: "there is plenty to discover here," "there are many things here that I found beautiful," "there is plenty that I want to linger on here," "this setting has many things that I wonder about," "there are many objects here that attract my attention," and "I am absorbed in these surroundings." Based on Laumann et al. (2001), this study further extends DF as a multidimensional concept, and proposed six dimensions of DF: mystique, richness, attractiveness, uniqueness, fitness, and friendliness. These dimensions are explained as follows.

2.2.1 Mystique

The dimension of mystique is extracted from "there is plenty to discover here" of Laumann et al. (2001). This study defines mystique in DF as: the extent of a destination to arouse visitors' motivations in exploring and discovering the destination. Destinations with mystique could provide visitors novel experience, allowing visitors to perceive surprises during visitations. During experiencing mystique in a destination, visitors could experience something different from daily life, which assists them to transfer attention from work tasks, achieving the function of restoration in fascination

noted by Kaplan (1995). In designing boutique hotels, Rogerson (2010) argued the importance of mystique, and pointed out the mystique in designing hotel rooms is like a magic for people to experience visual stimulations in the space and enjoy fun in exploring the mystic space. In destination studies, mystique-related issues were addressed in rural tourism (Chen & Kerstetter, 1999), mountain image (Silva, 2012), and film tourism (Hudson & Ritchie, 2006). The concept of mystique could be applied in delivering tranquility of rural lifestyle for visitors from big cities, or introducing exotic atmosphere in films.

2.2.2 Richness

The dimension of richness is extracted from “there is plenty that I want to linger on here” of Laumann et al. (2001). This study defines richness in FD as: diversity of tourism resources in a destination. Destination with high richness can allow visitors’ attention to flow around various interesting and meaningful tourism resources. Transferring attention into various tourism resources could release attention to daily works, which also achieve the function of restoration in destination fascination (Kaplan, 1995). Richness of tourism resources is also one key factor in destination competitiveness (Dwyer & Kim, 2003; Gomezelj & Mihalič, 2008). Dwyer and Kim (2003) noted that tourists highly rated richness of heritages and culture of destinations. Gomezelj and Mihalič (2008) further argued richness in natural resources are also important in evaluating destination competitiveness. The study of Aktaş, Aksu, and Çizel (2007) further pointed out that tourists prefer to visit destinations with various tourism resources. Wang, Wu, and Yuan (2010) also proved that abundant tourism resources could stimulate tourists’ revisit intention and enjoy various experiences in one visit. Taken together, richness of a destination not only improves perceived restoration in the place, but also maintains competitiveness of the destination through tourists’ strong revisit intention.

2.2.3 Attractiveness

The dimension of attractiveness is extracted from “there are many objects here that attract my attention” of Laumann et al. (2001). This study defines attractiveness in FD as: the extent of a destination to appeal visitors’ attention. Destinations with attractiveness could appeal visitors’ attention, making them be interested to know more about the place. Since attraction is the first step to make tourists own desire to visit, many destination advertisements set attractiveness as a key evaluation factor (Du Rand & Heath, 2006; Getz & Sailor, 1994). It should be noticed that attractiveness of a destination is related to visitors’ subjective preference. For example, Moscardo (2004) argued that tourists consider destinations with big shopping malls as attractive

only when they have preference in shopping activities. Botti, Peypoch, and Solonandrasana (2008) summarized previous literature in destination attraction, and separated attraction into major attraction and minor attraction. Major attraction of a destination could sustain longer, bringing tourists explorative attraction and detached attractive. In contrast, minor attraction of a destination could only maintain for a short time, bringing only explorative attraction in visiting experiences. That is, minor attraction provides tourists chances to take a look at an environment, while major attraction is able to further assist tourists fully detach from daily work mode and enjoy a complete restoration. Additionally, the study of Kyle and Chick (2007) proved that attractiveness of a destination could improve tourists' destination attachment, developing deep connections with the place.

2.2.4 Uniqueness

The dimension of uniqueness is extracted from "this setting has many things that I wonder about" of Laumann et al. (2001). This study defines uniqueness in FD as: The level of difficulty of one destination to be replaced by other destinations. A unique destination is hard to be replaced by other destinations, making tourists own novel feelings in diverse aspects of the place. The understanding of uniqueness of destinations starts from the study of destination image by Echtner and Ritchie (1993). Echtner and Ritchie (1993) noted uniqueness is one of the key factors to measure destination image, which shapes differences among destinations, making tourists understand what's special in each destination. The trend of destination branding further recalls the importance of uniqueness of destinations. Many destination branding studies argued the purpose of branding is to improve the uniqueness of destinations, assisting tourists to identify destinations, and then enable destinations to establish long-term relationships with tourists (Blain, Levy, & Ritchie, 2005; Kim, Han, Holland, & Byon, 2009). Findings of Qu, Kim, and Im (2011) also revealed that unique image should be emphasized as cognitive image and affective image in destination branding to win tourists' revisit intention and positive word-of-mouth.

2.2.5 Fitness

The dimension of fitness is extracted from "I am absorbed in these surroundings" of Laumann et al. (2001). This study defines fitness in FD as: visitors' subjective perception about their fitness with a destination. Kaplan (1983) found that people feel free and comfortable when they perceive fitness with the environment. Fitness with an environment also enhances restoration in the environment (Kaplan, 1983). Previous fitness studies are mostly seen about the fitness between employees and their work environment. Kaplan (1987) found that fitness with an work environment could

improve employees' overall well-being and reduce work stress. The concept of fitness in destination studies is mainly in tourists' perceived self congruity with destinations. Sirgy and Su (2000) stated that tourists establish congruity with destinations through subjectively match destination image with actual self, ideal self, and social self. With high congruity, tourists could possess high loyalty and willing to spend more resources to sustain long-term relationship with the destination. Empirical findings of Beerli et al. (2007) proved the arguments of Sirgy and Su (2000), showing self-congruity could significantly influence tourists' destination choices. Stokburger-Sauer (2011) further pointed that tourists' congruity with a destination could enhance their identity with the place, and then motivate their revisit intention.

2.2.6 Friendliness

The dimension of friendliness is a newly added portion to represent feelings of human interactions and services during destination visitations. This study defines friendliness in FD as: visitors' subjective perception about friendliness of human interactions and services. Destinations with high friendliness make visitors feel welcomed in the place, which could not only reduce visitors' anxiety to stay in an unfamiliar place but also empower warm courage for visitors to explore a fascinating destination. Perceived friendliness in human interactions could be separated into interactions with service employees and local residents. Service employees at service encounters in the hospitality industry directly influence visitors' judgment of friendliness about a place because visitors expect high on service employees' service attitude and behavior (Kuo, 2009). Neal, Uysal, and Sirgy (2007) even empirically proved that tourism services could improve travelers' quality of life through improving their leisure life. On the other hand, interactions with local residents could be the essential human interaction for visitors to perceive friendliness of a place when the destination is mainly formed by local people, such as festivals. Therefore, residents' opinions and attitudes toward festivals becomes one key factor to evaluate (Song, Xing, & Chathoth, 2015). Furthermore, apart from human interactions, visitors could perceive friendliness of destinations through sweet facility design or supportive policy to promote tourism, such as the care for handicap tourists (Bizjak, Knežević, & Cvetrežnik, 2011) or the awareness to plan green tourism policies in a region (Whitford, 2009).

2.3 Conceptual model of the DF

Environment fascination could directly influence people's attitudes and behaviors in environments (Kaplan & Kaplan, 2009), while the extent of environment fascination could be considered as level of positive place image. Previous studies in

destination image have proved positive destination image could improve tourists' destination loyalty (Chi & Qu, 2008; Phillips et al., 2013; Tasci & Gartner, 2007). In line with this logic, destination loyalty could be expected as a strong outcome of DF. Thinking from dimensions of DF, diverse tourism resources have been proved to improve tourists' revisit intention (Wang, Wu, and Yuan, 2010), while fitness with a destination has also proved to cause tourists' loyal intention and willingness to invest more resources to maintain long-term relationship (Sirgy and Su, 2000). That is, dimensions of DF covers major antecedents of loyalty mentioned by Dick and Basu (1994), revealing DF could enhance visitors' destination loyalty. Figure1 provides the conceptual framework to show the relationship between DF and destination loyalty.

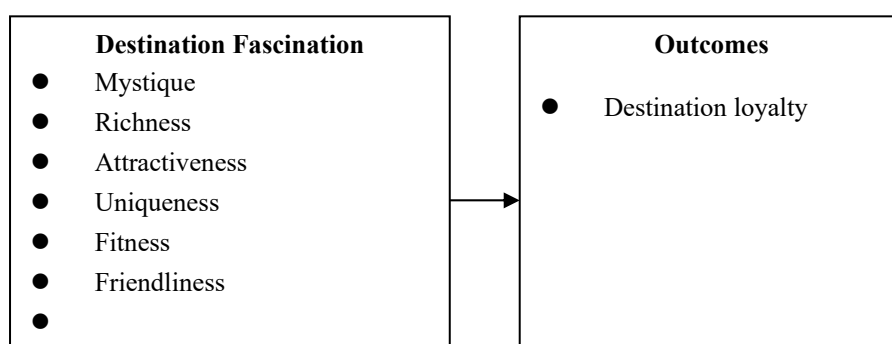


Figure 1. Conceptual framework of destination fascination

3. Developing the destination fascination scale

The process of scale development follows the guidelines of Churchill (1979). The overall procedure for developing a scale for destination fascination integrates confirmatory factor analysis (CFA) and the subsequent steps, as a three-step process. Step 1 is item generation. Step 2 is purification of measures with the first round of data collection. Step 3 is confirmation of measures with the second round of data collection. Details of these three steps are described as follows.

3.1 Step 1: Item generation

A comprehensive and representative set of items for the DFS was developed. According to Churchill (1979), a scale must be rigorous in delineating what is included in and what should be excluded from the concept. Therefore, a complete item list was generated through a literature review followed with in-depth interviews. Through literature review, six dimensions of DFS are identified: mystique, richness, attractiveness, uniqueness, fitness, and friendliness.

To further understand the content of DF, in-depth interviews were conducted to

collect information for extracting items. This study invited 13 participants aged 24-57, including five were tourism and recreation experts and eight were frequent visitors at national parks, forest recreation areas, themes parks, or museums. Participants were comprised of six males and seven females, while three gained College degree and ten completed graduate degree. Each interview lasted approximately 90 minutes.

Before the in-depth interviews, definition for each dimension of DFS was defined based on literature review. Interviewees read definitions of each dimension first. Then, during in-depth interviews, open-ended questions were asked for participants to share ideas and experiences of each dimension. Items were then extracted and sorted into the defined six dimensions. The open-ended questions include the following questions: (1) in your personal perspective, please share how to present or experience “mystique” at destinations; (2) in your personal perspective, please share how to present or experience “richness” at destinations; (3) in your personal perspective, please share how to present or experience “attractiveness” at destinations; (4) in your personal perspective, please share how to present or experience “uniqueness” at destinations; (5) in your personal perspective, please share how to present or experience “fitness” at destinations; and, (6) in your personal perspective, please share how to present or experience “friendliness” at destinations. The in-depth interviews were recorded on tapes and later transcribed into transcripts.

Content analysis was used to systematically categorize recorded responses (Kassarjian, 1977). Two researchers, one with a background in recreation management and the other familiar with content analysis, served as assessors and independently coded the transcripts into 209 statements. Two assessors iteratively read out, classified, reread, and reclassified items. Finally, the 209 statements were narrowed down into 30 statements. The inter-assessor reliability (Davis & Cosenza, 1993) exceeded 0.90, indicating the classification had content validity.

Finally, a total of 30 statements for DFS was identified and were categorized into six themes, including five statements for fitness, five statements for friendliness, six statements for uniqueness, five statements for Attractiveness, four statements for mystique, and five statements for richness. Then, these statements were transformed into measurable items.

3.2 Step 2: Purification of measures

After generation of initial items, the 30 items were turned into a survey questionnaire. A five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) was applied to rate each item. In the first round of data collection, this study selected top three national parks in Taiwan as settings and distributed survey questionnaires onsite through convenience sampling. A total of 470 valid responses

were collected, including 174 samples from Yangmingshan National Park, 154 samples from Kenting National Park, and 142 samples from Taroko National Park. The subjects to item ratio was 15.67:1, which is better than 5:1, passing the criteria suggested by Gorsuch (1974).

First, item-to-total correlations were computed for the 30 items, which should be higher than 0.30 (Churchill, 1979). An exploratory factor analysis (EFA) with a principle component and oblique varimax rotation was then performed (Gable & Wolf, 1993). We retained items with eigenvalues greater than one, as well as with factor loadings more than 0.4 on one factor and less than 0.3 on other factors (Hair, Anderson, Tatham, & Black, 1998). At this step, 5 items were deleted. Table 1 presents results of EFA. The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were used to ensure that the data had sufficient inherent correlations to run EFA. The KMO index was 0.864 and Bartlett's test of sphericity was significant at the level of 0.001, which justified the use of EFA. The screen plot showed that a six-factor solution with 25 items was the optimal solution. The combined factor loadings accounted for 62.64% of the total variance. These six factors were named as: fitness, friendliness, uniqueness, Attractiveness, mystique, and richness.

Table 1. Results of exploratory factor analysis (Sample 1, N =470)

| Items | Mean | Factor loading | Cumulative variance (%) | Cronbach's α |
|---|------|----------------|-------------------------|---------------------|
| Factor 1: Fitness | | | 12.79 | .85 |
| X23. This place truly reflects part of my personal style | 3.40 | .85 | | |
| X24. This place reflects the real me | 3.38 | .85 | | |
| X25. Visiting this place could represent how I want to be | 3.14 | .73 | | |
| X22. The atmosphere in this place is the style I like | 3.75 | .70 | | |
| X21. This place could link with my life experiences | 3.41 | .64 | | |
| Factor 2: Friendliness | | | 11.90 | .83 |
| X28. This place has warm service employees | 3.66 | .84 | | |
| X30. This place provides sweet tourism services | 3.53 | .79 | | |
| X27. This place has hospitable and friendly local residents | 3.78 | .75 | | |
| X29. Service facilities in this place can satisfy my needs | 3.40 | .72 | | |
| X26. This region supports tourism development | 3.97 | .55 | | |
| Factor 3: Uniqueness | | | 11.65 | .79 |
| X18. This place feels different from others | 3.99 | .78 | | |
| X19. This place has local features | 4.10 | .71 | | |
| X17. This place looks visually different from others | 4.04 | .69 | | |

| | | | | |
|---|------|-----|-------|-----|
| X20. This place has special themed areas | 4.03 | .68 | | |
| X16. This place performs unique style | 3.97 | .65 | | |
| Factor 4: Attractiveness | | | 10.56 | .80 |
| X11. I can transfer my mood here | 4.44 | .76 | | |
| X13. This place let me perceive good feelings | 4.24 | .75 | | |
| X14. I want to stay here longer | 4.03 | .65 | | |
| X12. Sensory experiences in this place appeals me | 4.10 | .65 | | |
| Factor 5: Mystique | | | 8.56 | .73 |
| X1. My curiosity toward the place is aroused | 3.78 | .80 | | |
| X3. This place has mystery | 3.68 | .73 | | |
| X2. This place has people, items, and things worth to explore | 3.62 | .70 | | |
| Factor 6: Richness | | | 7.19 | .68 |
| X7. This place provides various leisure activities | 3.20 | .82 | | |
| X6. I can have different experiences every time when I visit this place | 3.49 | .72 | | |
| X8. This place provides me diverse sensory experiences | 3.81 | .55 | | |

3.3 Step 3: Re-analysis of measures

The next stage in the scale development was to re-evaluate the factor structure of the DFS using confirmatory factor analysis (CFA). The CFA model is a first-order six-factor oblique model produced from the EFA in step 2 and was re-verified with a confirmatory analysis model. The scale's convergent and discriminant validities were also determined. In order to increase the generalizability to a wide range for any destination, the settings for the second round of data collection was top three national forest recreation areas in Taiwan. Through convenience sampling onsite, this study distributed survey questionnaires which include 25 items of DFS. A total of 473 valid responses were collected, including 170 responses from Alishan National Forest Recreation Area, 168 responses from Xitou National Forest Recreation Area, and 135 responses from Taipingshan National Forest Recreation Area. The subjects to item ratio was 15.67:1, which is better than 5:1, passing the criteria suggested by Gorsuch (1974).

A confirmatory factor analysis (CFA) with maximum-likelihood estimation in LISREL 8.80 was applied to examine the factor structure of the DFS. The initial estimation of the 25-item 6-factor DFS model generated a satisfactory result ($p < 0.05$, $\chi^2 = 750.92$, $df = 260$, $\chi^2/df = 2.89$, GFI = 0.89, SRMR = 0.06, RMSEA = 0.06, NFI = 0.93, NNFI = 0.95, CFI = 0.96, and AGFI = 0.86). Table 2 lists the results of CFA. All items were significant ($p < 0.01$) with factor loading of 0.48-0.80. All factor loadings are

larger than 0.45. The t-values of factor loading in all measurement items were significant ($p < 0.01$). The composite reliabilities of most constructs were above 0.6, while the average variance extracted (AVE) for each construct was larger than 0.4. To achieve discriminant validity, the coefficient for a correlation between a pair of constructs should be lower than the squared root of AVE of each construct (Fornell & Larcker, 1981). Every construct in the model achieves this requirement, indicating adequate discriminant validity (Table 3). Composite reliability (CR) of all constructs was 0.67-0.84, and almost all were above the recommended value of 0.6, indicating adequate internal consistency (Hair et al., 1998). On the basis of these results, the 25-item six-dimensional DFS was reliable and valid (Bagozzi & Yi, 1988).

Table 2. Results of Confirmatory Factor Analysis (Sample 2, N =473)

| Items | Mean | Factor loading | Construct reliability | AVE |
|---|------|----------------|-----------------------|-----|
| Factor 1: Fitness | 3.50 | | .84 | .51 |
| X 21. This place could link with my life experiences | 3.52 | .62 | | |
| X 22. The atmosphere in this place is the style I like | 3.95 | .65 | | |
| X 23. This place truly reflects part of my personal style | 3.47 | .80 | | |
| X 24. This place reflects the real me | 3.42 | .79 | | |
| X 25. Visiting this place could represent how I want to be | 3.16 | .70 | | |
| Factor 2: Friendliness | 3.77 | | .83 | .51 |
| X26. This region supports tourism development | 4.05 | .48 | | |
| X27. This place has hospitable and friendly local residents | 3.89 | .71 | | |
| X28. This place has warm service employees | 3.75 | .77 | | |
| X29. Service facilities in this place can satisfy my needs | 3.53 | .80 | | |
| X30. This place provides sweet tourism services | 3.63 | .76 | | |
| Factor 3: Uniqueness | 3.99 | | | |
| X16. This place performs unique style | 3.92 | .63 | .80 | .44 |
| X17. This place looks visually different from others | 4.04 | .73 | | |
| X18. This place feels different from others | 4.00 | .70 | | |
| X19. This place has local features | 4.05 | .69 | | |
| X20. This place has special themed areas | 3.92 | .57 | | |
| Factor 4: Attractiveness | 4.31 | | .82 | .54 |
| X11. I can transfer my mood here | 4.53 | .75 | | |
| X12. Sensory experiences in this place appeals me | 4.20 | .76 | | |
| X13. This place let me perceive good feelings | 4.35 | .79 | | |
| X14. I want to stay here longer | 4.14 | .63 | | |
| Factor 5: Mystique | 3.74 | | | |

| | | | | |
|---|------|-----|-----|-----|
| X1. My curiosity toward the place is aroused | 3.82 | .79 | .72 | .46 |
| X2. This place has people, items, and things worth to explore | 3.67 | .66 | | |
| X3. This place has mystery | 3.74 | .57 | | |
| Factor 6: Richness | 3.53 | | .67 | .40 |
| X6. I can have different experiences every time when I visit this place | 3.51 | .56 | | |
| X7. This place provides various leisure activities | 3.18 | .70 | | |
| X8. This place provides me diverse sensory experiences | 3.91 | .63 | | |

Table 3. Correlations and squared roots of AVE (Sample 2, N =473)

| | Factor1 | Factor2 | Factor3 | Factor4 | Factor5 | Factor6 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Factor 1: Attractiveness | <i>0.73</i> | | | | | |
| Factor 2: Friendliness | .45 | <i>0.71</i> | | | | |
| Factor 3: Fitness | .40 | .44 | <i>0.71</i> | | | |
| Factor 4: Uniqueness | .44 | .38 | .65 | <i>0.66</i> | | |
| Factor 5: Mystique | .24 | .28 | .44 | .38 | <i>0.68</i> | |
| Factor 6: Richness | .52 | .43 | .50 | .48 | .43 | <i>0.63</i> |

Notes: 1. The diagonal elements are the squared root of the average variance extracted.

2. The off-diagonal elements are the correlations between the constructs ($p < 0.05$).

3.4 Criterion-related validity

In the second round of data collection with responses from three national forest recreation areas, this study also investigated a four-item destination loyalty scale, rated by a five-point Likert-type scale ranging from 1 for “strongly disagree” to 5 for “strongly agree”. The criterion-related validity was assessed by examining the relationships between the six factors of DFS and the destination loyalty. Correlation coefficients were all significant at the 0.01 level (Table 4). Consequently, criterion-related validity of the DFS was supported.

Table 4. Results of criterion-related validity (Sample 2, N= 473)

| | Factor | Destination loyalty |
|----|----------------|---------------------|
| 1. | Fitness | .46** |
| 2. | Friendliness | .51** |
| 3. | Uniqueness | .50** |
| 4. | Attractiveness | .60** |
| 5. | Mystique | .48** |
| 6. | Richness | .47** |

Note: ** Correlation coefficients are significant at the 0.01 level

4. Conclusion

This study offers a significant advancement in current literature on DF. The concept of DF was developed in this study as a multidimensional construct with six dimensions, namely, fitness, friendliness, uniqueness, attractiveness, mystique, and richness. Additionally, this study established the 25-item DFS with tests to ensure its reliability and validity. With the DFS, this study contributes a key tool for follow up studies to examine the mechanism of DF. In terms of practical implications, the DFS could provide destination managers valuable information for assessing destination planning and development. Based on our collected data, average of each dimension ranged from 3.50 to 4.31, showing visitors perceive differently in each dimension of DFS. Among these six dimensions, attractiveness (M=4.31) and uniqueness (M=3.99) were rated with high score, while fitness (M=3.50) was rated with scores lower than other dimensions. Based on the fact, destination managers are suggested to utilize visitors' perceived attractiveness and uniqueness in planning related activities and services. For example, with attractiveness, destination managers could host destination-themed events and products to add attractions of the place. Besides, with uniqueness, destination managers could transfer local features or landscapes into special events, decorations, or experience activities.

Some limitations are worth to be noticed for future studies to consider. First, research settings selected in this study were all natural destinations. Future studies could extend the examination into artificial settings. Second, with the DFS, future studies could try to examine antecedent and outcomes of DF. Third, since DFS is rated based on visitors' subjective perceptions of destinations, potential changes of human subjectivity are also interesting for developing longitudinal studies. Future studies could try to collect data from a panel of participants and analyze their longitudinal changes of perceived DF toward the same destination.

References

- Aktaş, A., Aksu, A. A., & Çizel, B. (2007). Destination choice: An important-satisfaction analysis. *Quality & Quantity*, *41*(2), 265-273.
- Bagozzi, R. P., Yi, Y. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16* (1), 74-94.
- Beerli, A., Meneses, G. D., & Gil, S. M. (2007). Self-congruity and destination choice. *Annals of Tourism Research*, *34*(3), 571-587.
- Berto, R. (2005). Exposure to restorative environments helps restore attentional capacity. *Journal of Environmental Psychology*, *25*(3), 249-259.

- Bizjak, B., Knežević, M., & Cvetrežnik, S. (2011). Attitude change towards guests with disabilities: Reflections from tourism students. *Annals of Tourism Research, 38*(3), 842-857.
- Blain, C., Levy, S. E., & Ritchie, J. B. (2005). Destination branding: Insights and practices from destination management organizations. *Journal of Travel Research, 43*(4), 328-338.
- Botti, L., Peypoch, N., & Solonandrasana, B. (2008). Time and tourism attraction. *Tourism Management, 29*(3), 594-596.
- Caplan, R. D. (1987). Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational behavior, 31*(3), 248-267.
- Chen, P.-J., & Kerstetter, D. L. (1999). International students' image of rural Pennsylvania as a travel destination. *Journal of Travel Research, 37*(3), 256-266.
- Chi, C. G.-Q., & Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management, 29*(4), 624-636.
- Churchill, G. A., Jr. (1979) A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research, 16*(1), 64-73.
- Cohen, S., & Spacapan, S. (1978). The aftereffects of stress: An attentional interpretation. *Environmental Psychology and Nonverbal Behavior, 3*(1), 43-57.
- Davis, D., & Cosenza, R. M. (1993). *Business research for decision making*. Belmont, CA: Wadsworth Publishing.
- Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science, 22*(2), 99-113.
- Du Rand, G., & Heath, E. (2006). Towards a framework for food tourism as an element of destination marketing. *Current Issues in Tourism, 9*(3), 206-234.
- Dwyer, L., & Kim, C. (2003). Destination competitiveness: Determinants and indicators. *Current Issues in Tourism, 6*(5), 369-414.
- Echtner, C. M., & Ritchie, J. R. B. (1993). The measurement of destination image: An empirical assessment. *Journal of Travel Research, 31*(4), 3-13.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research, 18*(1), 39-50.
- Gable, R. K., & Wolf, M. B. (1993). *Instrument development in the affective domain* (2nd ed.). Boston, MA: Kluwer.

- Getz, D., & Sailor, L. (1994). Design of destination and attraction-specific brochures. *Journal of Travel & Tourism Marketing*, 2(2-3), 111-131.
- Gomezelj, D. O., & Mihalič, T. (2008). Destination competitiveness—Applying different models, the case of Slovenia. *Tourism Management*, 29(2), 294-307.
- Gorsuch, R. L. (1974). *Factor analysis*. Philadelphia: WB Saunders.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hartig, T., Mang, M., & Evans, G. W. (1991). Restorative effects of natural environment experiences. *Environment and Behavior*, 23(1), 3-26.
- Hartig, T., van den Berg, A. E., Hagerhall, C. M., Tomalak, M., Bauer, N., Hansmann, R., . . . van Herzele, A. (2011). Health benefits of nature experience: Psychological, social and cultural processes *Forests, trees and human health* (pp. 127-168): Springer.
- Herzog, T. R., Black, A. M., Fountaine, K. A., & Knotts, D. J. (1997). Reflection and attentional recovery as distinctive benefits of restorative environments. *Journal of Environmental Psychology*, 17(2), 165-170.
- Herzog, T. R., Maguire, P., & Nebel, M. B. (2003). Assessing the restorative components of environments. *Journal of Environmental Psychology*, 23(2), 159-170.
- Hogshead, S. (2010). *Fascinate: Your 7 Triggers to Persuasion and Captivation*. NY: HarperCollins Publishers.
- Hudson, S., & Ritchie, J. B. (2006). Film tourism and destination marketing: The case of Captain Corelli's Mandolin. *Journal of Vacation Marketing*, 12(3), 256-268.
- Kaplan, S. (1983). A model of person-environment compatibility. *Environment and Behavior*, 15(3), 311-332.
- Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15(3), 169-182.
- Kaplan, S., & Kaplan, R. (2009). Creating a larger role for environmental psychology: The Reasonable Person Model as an integrative framework. *Journal of Environmental Psychology*, 29(3), 329-339.
- Kassarjian, H. H. (1977) Content analysis in consumer research, *Journal of Consumer Research*, 4(1), 8-18.
- Kim, S.-H., Han, H.-S., Holland, S., & Byon, K. K. (2009). Structural relationships among involvement, destination brand equity, satisfaction and destination visit intentions: The case of Japanese outbound travelers. *Journal of Vacation Marketing*, 15(4), 349-365.
- Korpela, K., & Hartig, T. (1996). Restorative qualities of favorite places. *Journal of Environmental Psychology*, 16(3), 221-233.

- Korpela, K. M., Hartig, T., Kaiser, F. G., & Fuhrer, U. (2001). Restorative experience and self-regulation in favorite places. *Environment and Behavior*, 33(4), 572-589.
- Kuo, C.-M. (2009). The managerial implications of an analysis of tourist profiles and international hotel employee service attitude. *International Journal of Hospitality Management*, 28(3), 302-309.
- Kyle, G., & Chick, G. (2007). The social construction of a sense of place. *Leisure sciences*, 29(3), 209-225.
- Laumann, K., Gärling, T., & Stormark, K. M. (2001). Rating scale measures of restorative components of environments. *Journal of Environmental Psychology*, 21(1), 31-44.
- Moray, N. (1990). Designing for transportation safety in the light of perception, attention, and mental models. *Ergonomics*, 33(10-11), 1201-1213.
- Moscardo, G. (2004). Shopping as a destination attraction: An empirical examination of the role of shopping in tourists' destination choice and experience. *Journal of Vacation Marketing*, 10(4), 294-307.
- Neal, J. D., Uysal, M., & Sirgy, M. J. (2007). The effect of tourism services on travelers' quality of life. *Journal of Travel Research*, 46(2), 154-163.
- Phillips, W. J., Wolfe, K., Hodur, N., & Leistritz, F. L. (2013). Tourist word of mouth and revisit intentions to rural tourism destinations: a case of North Dakota, USA. *International Journal of Tourism Research*, 15(1), 93-104.
- Qu, H., Kim, L. H., & Im, H. H. (2011). A model of destination branding: Integrating the concepts of the branding and destination image. *Tourism Management*, 32(3), 465-476.
- Rogerson, J. M. (2010). The boutique hotel industry in South Africa: Definition, scope, and organization. *Urban Forum*, 21(4), 425-439.
- Silva, C. M. A. (2012). Mountain destination image held by residents and tourists. *European Journal of Tourism Research*, 5(2), 176-181.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9(3), 287-300.
- Sirgy, M. J., & Su, C. (2000). Destination image, self-congruity, and travel behavior: Toward an integrative model. *Journal of Travel Research*, 38(4), 340-352.
- Song, Z., Xing, L., & Chathoth, P. K. (2015). The effects of festival impacts on support intentions based on residents' ratings of festival performance and satisfaction: A new integrative approach. *Journal of Sustainable Tourism*, 23(2), 316-337.
- Stokburger-Sauer, N.E. (2011). The relevance of visitors' nation brand embeddedness and personality congruence for nation brand identification, visit intentions and

- advocacy, *Tourism Management*, 32(6), 1282-1289.
- Tasci, A. D., & Gartner, W. C. (2007). Destination image and its functional relationships. *Journal of Travel Research*, 45(4), 413-425.
- Tsai, S. P. (2012). Place attachment and tourism marketing: Investigating international tourists in Singapore. *International Journal of Tourism Research*, 14(2), 139-152.
- Velarde, M. D., Fry, G., & Tveit, M. (2007). Health effects of viewing landscapes—Landscape types in environmental psychology. *Urban Forestry & Urban Greening*, 6(4), 199-212.
- Wang, Y.-J., Wu, C., & Yuan, J. (2010). Exploring visitors' experiences and intention to revisit a heritage destination: The case for Lukang, Taiwan. *Journal of Quality Assurance in Hospitality & Tourism*, 11(3), 162-178.
- Whitford, M. (2009). A framework for the development of event public policy: Facilitating regional development. *Tourism Management*, 30(5), 674-682.