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MEASURING TOURIST MOTIVATION: DO SCALES MATTER?

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Measuring tourist motivation has always been a challenging task for tourism researchers. This paper aimed to increase the understanding of tourist motivation measurement by comparing two frequently adopted motivation measurement approaches: self-perception (SP) and importance-rating (IR) approaches. Results indicated that both SP and IR scales were highly reliable in terms of internal consistency. However, respondents tended to rate more positively in the SP scale than in the IR scale. Factor analyses extracted similar underlying structures from the two measurements, with each factor explaining almost the same amount of variances across the two scales. The study suggested that both scales could be regarded as appropriate instruments for measuring tourist motivation, because they seemed to measure the same underlying construct with high reliability.

Keywords: *tourist motivation, scale, measurement*

INTRODUCTION

Tourist motivation has been on the central stage of tourism research for several decades. A perusal of tourist motivation literature revealed that researchers mainly adopted two different approaches in measuring tourist motivation. One approach of measuring tourist motivation asks for respondents' agreement on a list of motivational statements, with a 5- or 7-point Likert scale (e.g., Crompton & Mckay, 1997; Fodness, 1994; Lee, Lee, & Wicks, 2004). Another approach measures tourist motivation by asking respondents to rate the level of importance on a series of motivational items or statements (e.g., Kim & Jogaratnam, 2002; Kozak, 2002; Jang & Cai, 2002; Zhang & Lam, 1999). The former emphasizes respondents' self perception of the motivation statements (i.e., whether they think the statements apply to them personally). For the convenience of discussion, it is labeled as the self-perception (SP) approach hereafter. Accordingly, the latter is named the importance-rating (IR) approach.



In the earlier stage of tourist motivation research, Dann (1981) warned that tourists may not be willing or able to reflect and express their real travel motives, which is a big challenge for researchers studying tourist motivation. For the two mainstream approaches of tourist motivation measurement, are they measuring the same construct? Do they hold the same level of reliability? Are there any differences between the two approaches when they are applied on the same group of respondents? If there were differences, what do they mean? This study aimed to answer these questions and offer some important hints on motivation measurement issues by conducting a comparison on data collected using the two types of measurement simultaneously.

METHODOLOGICAL AND MEASUREMENT ISSUES RELATED TO TOURIST MOTIVATION

Although motivation has been a focus of tourism research since the beginning of tourism studies, there still seems to be a lack of commonly accepted theoretical framework in researching tourist motivation. Pearce (1993) argued that while many papers in the leisure and tourism literature deal with motivation, few widely-adopted theoretical approaches exist. The reason for this may be that tourist motivation is a complex psychological construct that lacks widely-accepted research methodology and validated measurement. Pearce (1993) raised the issue regarding intellectual ownership of tourist motivation explanations. He argued that explanations on tourist motivation are likely to be tempered by the anticipated biases of observers versus actors, tourism researchers versus tourists, and armchair speculators versus quantitatively-minded data gatherers. Tourist motivation investigations have long appeared to be skewed mainly towards the researcher side. Thus, mainstream approaches could be labelled as “researcher-oriented.” Mannell and Iso-Ahola (1987) noted that, in the context of leisure studies,

“What researchers have done is to present subjects with various reasons and ask them to rate how important each of them is to their leisure participation. Subjects have made these ratings not in relation to a particular leisure experience but as statements about their perceived reasons for leisure participation in general. Invariably in these studies, the data have been analyzed by factor analysis, typically resulting in four to five ‘need dimensions’ or ‘motivation factors’. It is then assumed that such factors explain most people’s leisure motivation and satisfaction for most of the time. While such

studies are interesting and useful in their own right, they ignore the dynamic nature of leisure motivation.” (p.322)

A similar situation can be observed in tourist typology research. According to Lowyck et al. (1992), one problem with the typologies of tourists is that the results largely depend upon what the researcher has imparted to the explanations. While it may be naive and appear impossible to totally exclude researchers' influences from tourist motivation studies, efforts should nonetheless be made to reduce bias deriving from researcher subjectivity.

A positivistic or quantitative method has been commonly used to first list motivation items found in the literature and then incorporate those items into a questionnaire. After data are collected by mailing questionnaires or through other survey methods, various statistical techniques, such as factor analysis, ANOVA, and regression, are adopted to generate the results. The validity of this quantitative approach relies largely on the selection of motivation items for the questionnaire. Researchers can do little about those motivation factors that genuinely exist in a tourist's mind but are not listed in the questionnaire. The use of a predetermined set of items is problematic because there is no way to guarantee that the dimensions selected by the researchers are the most important motives of the respondents (Jewell & Crofts, 2001).

Another commonly used approach to studying tourist motivation is the adoption of a qualitative method. Most frequently-used measures are unstructured or semi-structured interviews in which open-ended questions are asked. Projective techniques, such as association and sentence completion tests, may also be appropriate. Narrative transcripts are usually coded and content analysis conducted before conclusions are reached. At the exploratory stage of tourist motivation research, a qualitative method may be more useful to generate insightful information about what motivates people to travel. Pearce (1982) and Crompton (1979) both started their investigations of tourist motivation using qualitative approaches.

Some alternative methodologies have also been seen in the literature. Jewell and Crofts (2001) advocated an under-utilized methodology, known as the Hierarchical Value Map (HVM) technique, to explore the underlying motives and needs of visitors to a heritage site. The HVM method is designed to identify both higher and lower psychological values and their connections via a series of probing questions. In the HVM interview process, subjects are asked multiple questions. After answering each question, they are asked to justify the answer. Based on their justification, follow-up probing questions are posed. This process is

repeated until the subjects can no longer justify the previous answer. Interviews usually end by repeated answers of “it just is” or “I don’t know.” Recorded information is then analyzed following a means-end cognitive structure. All subjects’ responses are combined into a collective matrix providing a representation of group-level motives. A value structure map is then created, wherein aggregated value linkages are illustrated graphically. The value structure map not only provides information of underlying higher value motives, but also gives information on the ladder structure among various levels of psychological value expressions. Sceptical about the utility of traditional methodologies, Jewell and Crofts turned to the HVM technique, which they believed can lead to a better understanding of visitors’ underlying motives and moreover can reduce researcher bias. By using the HVM method to investigate heritage tourists’ motivations, Jewell and Crofts (2001) found that all respondents’ expressed motivations converged into two underlying motives, satisfying experience/pleasure and stopping repeating mistakes of past. Klenosky (2002) used the same method to study the interrelationship between push and pull factors, and found that a bundle of pull factors (i.e., beaches, historic/cultural attraction, scenic/natural resources, skiing, new/unique location, and party atmosphere) could respond to four motives: excitement, accomplishment, self-esteem, and fun and enjoyment.

From a methodological perspective, neither the quantitative nor the qualitative approach is error-proof for tourist motivation studies. Each has its advantages and disadvantages. Qualitative motivation researchers may defend themselves by arguing that they base their results on tourists’ “own words” and “true experience.” However, as Dann (1981) pointed out, a major problem is that tourists themselves may be unaware of their real reasons for travel. Dann highlighted the issue by presenting four statements: (1) tourists may not wish to reflect on real travel motives; (2) tourists may be unable to reflect on real travel motives; (3) tourists may not wish to express real travel motives; and (4) tourists may not be able to express real travel motives.

Since the nature of tourist motivation as a latent psychological construct determines the difficulty of motivation measurement, it seems worthwhile that more research efforts should be directed to the measurement issues in line with conceptual issues. It is evident that researchers tended to overlook the difference between the SP scale and the IR scale when applying a positivistic approach in measuring tourist motivation. This study was intended to test the difference between the two scales in the tourist motivation measurement. It was hoped that

through a research design of collating the two scales toward a same group of respondents, statistical analysis would disclose more meaningful results over the issue.

METHOD

A self-administered questionnaire was developed to measure the travel motivation of mainland Chinese visitors to Hong Kong. Fourteen motivation items were generated based on a literature review and focus group interviews. Two sections in the questionnaire, both with the same 14 motivation items, were designated to measure tourist motivation. In one section, statements were assessed following the SP format; in the other section, statements were evaluated using the IR format. In the former measurement, a 7-point Likert scale was used with 1= extremely disagree and 7= extremely agree. In the latter, the importance level was rated with a 7-point scale where 1= extremely unimportant and 7= extremely important.

Data were collected in Beijing, Shanghai, and Guangzhou in China with a convenience sampling method. Respondents were asked to complete the questionnaire around shopping malls where travel agencies were located. A total of 470 usable questionnaires were returned. Data were analyzed using SPSS. First, the reliability of the two measurements was calculated. Second, paired t-tests were conducted to investigate if the same items' scores were different in the two measurements. Finally, factor analyses using principal component method with varimax rotation were run on the two measurements individually to determine if the underlying structures being measured were the same.

FINDINGS

The internal consistency reliability coefficients of the two measurements indicated that both measurements were highly reliable. The SP scale had a Cronbach alpha value of .89, while the Cronbach alpha of the IR scale was .91. No item in either measurement had to be deleted to substantively increase the reliability coefficient value.

Results of the paired t-tests showed that except for the items of "visiting friends and relatives" and "special lifestyle", all motivation items scored differently in the two measurements at the .01 significance level. All scores in the SP scale were significantly higher than those in the IR scale.

Factor analyses extracted similar underlying structures from the two measurements. Four factors were initially extracted from the SP scale, and three factors from the IR scale. Ranking by the percentage of variance explained, the first (23.71%) and second (21.32%) factors of the SP scale had the same items as the first (24.90%) and second (22.74%) factors of the IR scale. Three items under the third factor (15.27%) and one item under the fourth factor (8.28%) of the SP scale were included in the third factor (16.18%) of the IR scale. Because the fourth factor in the SP scale was a trivial factor with only one item of “visiting friends and relatives,” this item was removed and a factor analysis was rerun with the remaining 13 items for each scale. Three identical factors with the same items were extracted from the remaining 13 items for both scales. Further investigation of the factor analyses results from the two scales found that in both scales, the item “visit Ocean Park” had double loadings over .40 on the first and third factors. Therefore, this item was deleted and factor analyses were run again with the remaining 12 items for the two scales. Consequently, the results (Table 1) indicated that both scales had the same three-factor underlying structure and the percentage of variance explained by each factor was almost the same between the two scales, with maximum difference of no more than 2 percent. The underlying motivation factors were labeled as “Novelty Seeking,” “Culture Seeking,” and “Prestige.” All factor loadings in the two scales were over .60; and the Cronbach coefficient alpha scores of all factors were at .70 or above.

Table 1. Underlying Structures of SP and IR Measurements

Factor/Item	Loading	Eigenvalue	Variance Explained (%)	Reliability Alpha
SP Scale				
Factor 1: Novelty Seeking		3.235	26.95	.84
Fulfilling Curiosity	.786			
Interacting with local people	.724			
Seeing celebrities	.697			
Experiencing different lifestyle	.670			
Visiting metropolitan city	.631			
Sightseeing	.609			
Factor 2: Culture Seeking		2.953	24.61	.86
Seeing city under	.828			

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“one-country-two-systems” ^a				
Experiencing different culture	.777			
Experiencing capitalist society	.745			
Experiencing mysterious city	.670			
Factor 3: Prestige		1.839	15.33	.73
Shopping	.849			
Sharing travel experience with friends	.798			
Total			66.89	
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IR Scale				
Factor 1: Novelty Seeking		3.377	28.14	.86
Fulfilling Curiosity	.809			
Sightseeing	.730			
Interacting with local people	.710			
Experiencing different lifestyle	.685			
Visiting metropolitan city	.668			
Seeing celebrities	.640			
Factor 2: Culture Seeking		3.148	26.23	.88
Seeing city under “one-country-two-systems”	.868			
Experiencing capitalist society	.840			
Experiencing different culture	.812			
Experiencing mysterious city	.649			
Factor 3: Prestige		1.794	14.95	.70
Shopping	.870			
Sharing travel experience with friends	.763			
Total			69.32	
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^a “One-country-two-systems” refers to the arrangement after Hong Kong’s return to China in 1997. As a Special Administrative Region of China, Hong Kong

remains its capitalist system although Mainland China claims its own socialist system.

DISCUSSION AND CONCLUSIONS

The comparison of the two motivation scales indicated that both scales were similarly reliable and almost measuring the same underlying structure. Thus, the two scales could measure the same core concept, and both scales can be regarded as appropriate measurement approaches for tourist motivation. However, mainland Chinese visitors tended to rate all items in the SP scale higher than those in the IR scale. Therefore, each scale may also measure something other than the core concept and unique to the specific scale, because the SP scale asks more about respondents' personal situation while the IR scale tests more of respondents' subjective rating on the importance of motivation statements. As a further research suggestion, the SP scale and IR scale with the same set of items could be used together to generate a Multitrait-Multimethod (MTMM) model (Bollen, 1989; Marsh & Grayson, 1995). By testing the MTMM model with structural equation modeling (SEM), both random and systematic measurement errors could be identified and the latent structure of tourist motivation would be given the chance for further clarification.

It should be noted that for the purpose of scale comparison, as the case in this study, the selection of items in the SP and IR scales was not of paramount importance, provided that the items are the same in both scales. However, when applying either scale to measure tourist motivations in a specific context, the selection of items in the scale is the utmost important. If researchers excluded important motivation items in the measurement, it would be impossible to accurately measure motivation factors, particularly those underlying the overlooked items. A SP or IR scale could be reliable, but it might not be valid. To ensure the validity of a SP or IR scale, researchers should first ensure that the items in the scale have satisfactory content validity, which means that possible important motivation items pertaining to the specific context should be included in the item pool.

In this study, both SP and IR scales extracted identical factors of Novelty Seeking, Culture Seeking, and Prestige. The results indicated a high level of convergent validity for both scales. The labeling of the first two factors was quite logical, because each factor had four to six items, with similar explanations of respondents' travel motivation. However, the Prestige factor should be explained with caution. Although the two items

loaded on the factor conveyed the message of “prestige” to some extent, additional items are needed to label the factor more confidently.

The three factors identified in this study were consistent with motivation factors identified by previous studies (Dann, 1977; Lee & Pearce, 2003; Mannell & Iso-Ahola, 1987; Pearce & Lee, 2005). Pearce and Lee (2005) found that novelty was among the most important and core motivation factors to all travelers. This study also found that novelty seeking was the motivation factor that accounted for the largest percentage of variance explained. Moreover, the factor analyses results confirmed the seeking dimension of tourist motivation theorized by Mannell and Iso-Ahola (1987). Prestige can be interpreted as the tendency of seeking interpersonal rewards. However, some other important motivation factors, such as escaping and relaxing, were not found in this study. This can probably be explained by the item selection process of the scales discussed above. With only fourteen items, the scales may have left out other important items. Therefore, future studies may consider including more motivation items in the SP and IR scales and compare the two scales again to further validate the results of this study.

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