

Re-examining the Dimensionality of Leisure Motivation and Leisure Satisfaction in a Multicultural Context: Evidence from Macau

Suh-hee Choi^{1*}, Xiaoxiao Fu²

¹Institute for Tourism Studies, Colina de Mong-Ha, Macau, China,

²University of Central Florida, 9907 Universal Blvd, Orlando, FL 32819, USA.

*Email: suhhee@ift.edu.mo

Article History: Received on 14th Dec 2014, Revised on 20th Jan 2015, Published on 25th Feb 2015

Abstract

The present study calls for attention to the utility of leisure motivation and leisure satisfaction scales by examining the commonalities and differences of the factor structure in a multicultural context. Both the different number of factors extracted and the different patterns of items loaded on the factors indicate that the dimensionality of leisure motivation and leisure satisfaction proposed by Beard and Ragheb needs to be cautiously treated when adapted to a different cultural setting.

Keywords

Leisure motivation, Leisure satisfaction, Multicultural survey, Macau.

Introduction

The importance of multicultural examination in leisure has been highlighted in recent years. Cultural variation in measuring key concepts has been examined in this field, ranging from definition of leisure (Walker and Wang, 2008), leisure attitude (Walker et al., 2007), leisure motivation (Chen and Pang, 2012), to leisure satisfaction (Kim et al., 2010). As a result, issues with a cross-cultural examination of leisure theories and applications have been raised (Liu et al., 2008).

Studies have explored the dimensionality of many major instruments in leisure research. One of the most commonly used instruments for leisure motivation, termed Leisure Motivation Scale (LMS) was proposed by Beard and Ragheb (1983). Leisure Satisfaction Scale (LSS) was developed by Beard and Ragheb (1980). Such two sets of scales – LMS and LSS – were applied to different cultures and contexts (Ryan and Glendon, 1998). Since the measurements were first developed, possible variation of such scales when adapted to different leisure contexts have been acknowledged (Mannell and Iso-Ahola, 1987).

However, as the factor structure of leisure scales has been largely out of the focus of the previous studies, the examination of the structure itself has not been highlighted in-depth in most of the cases. Although situation-specific variation in the application of these classic scales may be found, relatively few studies paid attention to the utility of such scales across different cultural contexts. Even in the limited studies that acknowledged the diversified structures of leisure motivation and satisfaction in multicultural settings, they failed to examine at the item level to identify possible reasons for the inconsistency.

Therefore, a re-examination of the diversified factor structures in different cultures other than the west, where the scales were initially developed, is required. The specific wordings used for the items, and their connotations in respective culture, are also necessary to pinpoint where the variations may be rooted in.

The present study explores the applicability of LMS and LSS to the Chinese context. Specifically, it identifies the reasons which may cause issues when utilizing the scales in a non-western setting.

Literature Review

Leisure motivation

Leisure motivation has been highlighted as an important predictive construct in understanding people's leisure behavior. With a good understanding of motivation, one's actual behavior can be better contextualized. The motivational constructs specify the stimulators for actual involvement in a certain type of leisure. For example, those who are physically motivated are likely to participate in leisure activities with physical components.

One of the most commonly used indicators for leisure motivation termed LMS was proposed by Beard and Ragheb (1983). It identifies the dimensionality of leisure motivation, including an intellectual factor, social factor, competence/mastery factor, and stimulus/avoidance factor. Intellectual factor captures the idea of learning new things through leisure involvement. Social factor incorporates building skills to interact with others by meeting new people and developing a friendship. Competence/mastery factor includes mastering abilities and skills. Lastly, stimulus/avoidance factor captures the motivation to escape from everyday life.

Although many studies which adopted LMS assume its stability in terms of the dimensionality or validity (Lounsbury and Hoopes, 1988), re-examination of measurement scales is usually necessary when applied to different contexts (Kleiven, 2005) as possible modifications of factor and factor structure may be needed. Another issue is the length of the original LMS scale. Beard and Ragheb's original 48-item measurement is very long, and selected items which reflect the four dimensions have been adopted in many studies. Although shortened forms were proposed by the authors, many studies still have used selected items which fit their study contexts or abbreviated the final set for analyses based on data collection.

Leisure satisfaction

Leisure satisfaction occurs if the leisure participation meets one's expectations. Many studies have adopted the LSS and it's shortened, 24-item scale proposed by Beard and Ragheb (1980) without modification or adjustments. The scale has been tested in subsequent studies and has been used incomplete or modified forms across different Asian regions such as Taiwan (Chen et al., 2013) and Macau (Vong, 2005). Although the validity of LSS and LSS-short form has been acknowledged, modification of the scale is still involved in its application to diverse contexts. For example, in Wang et al.'s (2008) study, one item from leisure satisfaction was deleted due to reliability concerns. Re-examination of the dimensionality of LSS and each of its items is, therefore, meaningful.

Beard and Ragheb's (1980) short set of LSS includes 24 items representing six dimensions of benefits accrued from leisure involvement: Psychological, educational, social, relaxation, physiological, and aesthetic. The scale asks if the survey participants are satisfied with each aspect. The psychological dimension asks if the leisure activities hold interest to the participants and provide them with mental benefits such as helping build self-confidence. The education dimension concerns if the leisure participants are satisfied in that they can learn new things and build up skills. Social dimension inquires if the participants are satisfied in that they build up relationships with others through leisure activities. Relaxation covers release of stress and emotional well-being. Physiological factor handles the measurement of the participants' satisfaction with leisure involvement based on such activities' contribution to physical fitness and health. Aesthetics dimension measures the participants' satisfaction with the leisure environment focusing on its sanitation and design.

Methodology

An online survey with 32 shortened LMS (Beard and Ragheb, 1983) and 24 shortened LSS (Beard and Ragheb, 1980) was conducted in Macau in 2014. Invited students enrolled in diverse universities and colleges in this region were asked to answer their leisure motivation and satisfaction based on their general leisure patterns. Assuming that undergraduate students understand both English and Chinese while there might be misunderstanding of the items due to translation, the online survey was offered in both English and traditional Chinese so that the respondents could refer to both languages for clearer understanding of the items. Additionally, the set of Chinese items were carefully finalized. Chinese translations which had been used in previous studies were referenced to while two different versions of Chinese translations were independently conducted for comparison with the previously used items. For leisure motivation, Chinese items from Hung (2010) and Chen (2009) were used as reference. For leisure satisfaction, the translated items were based on Lu and Hu (2005), Li and Lee (2011), and Chao (2013). More than three different, previously used and newly-created translations were compared with each of them and discussed among the bilinguals of Chinese and English. During the pre-test of the bilingual questionnaire with 77 students majoring in the tourism field, suggestions on ambiguous wordings were considered for finalizing questionnaire items. A total of 293 complete responses were used for the analyses.

Results

Leisure motivation

The 32 items measuring leisure motivation were factor analyzed with VARIMAX rotation with Principal Component methods. Components with Eigenvalues exceeding 1 were identified as the extracted factors. As the purpose of this study was to compare the result from the present study with the original factor structure proposed by Beard and Ragheb (1983) rather than to identify the best factor structure and items to fit the current data, no further factor analyses with selected best items were conducted.

First, the Kaiser-Meyer-Olkin (KMO) index (0.949) and Bartlett's test ($\chi^2 = 6742.382$, $df = 496$, $p < 0.001$) showed adequacy of factor analysis with this data. Different from Beard and Ragheb's result, a five-factor solution resulted from the final round of analysis, which explained 66.741% of the total variance. The final five-factor solution showed slightly different factor structures with the current sample from what Beard and Ragheb proposed. Intellectual factor showed the most robust structure and explained the largest percentage of total variance with an eigenvalue of 14.554. Next factor was a stimulus-avoidance factor, with the eigenvalue of 2.668. Identical pattern of the loadings of the items other than the item, "to slow down," was found with this factor. Third, social factor, with the eigenvalue of 1.638, captured six of the eight initial items while the remaining two items were loaded with half of the Beard and Ragheb's competency-mastery items. Items describing competency-mastery were divided into two distinct factors. Four items describing the aspects of physical skills were identified as a distinct factor while the items describing overall improvement of abilities and skills were loaded on a separate factor, together with two items which were initially suggested to describe social motivation. These two items – "to gain a feeling of belonging" and "to gain other's respect" – cross-loaded with other two factors and had relatively low factor loadings. The respondents may have understood the two items partly as gaining social "skills," which is a part of the personal ability to achieve. Such a tendency was also found in the items such as "to be socially competent and skillful." Although this item loaded highly on the social factor, it also cross-loaded with the intellectual motivation as well as competency/mastery motivation, which implies that the respondents may understand this items as measuring not only the motives for socializing but also for building skills, as the wording of the item implies, and even building knowledge to be competent socially. One of the stimulus-avoidance items which was cross-loaded with physical skills – "to slow down" – may show that physical motivation may imply one of the ways of relaxation in the subjects' everyday lives. This item may need to be used carefully when used to capture stimulus-avoidance exclusively.

In sum, many traditional measurement items of social factor cross-loaded with the intellectual factor and competency mastery factor probably because the items included the keywords such as "thoughts, feelings, or physical skills" or "competent and skillful." Interestingly, "to gain a feeling of belonging" and "to gain other's respect," which are initially developed to measure the social factor, cross-loaded with the competency mastery and physical skills factors, and the two factors worsened the overall Sphericity of the items. Also, "to slow down," which was initially intended to measure stimulus avoidance, cross-loaded with the items measuring physical skills (Table 1).

Leisure satisfaction

The 24 LSS-short items measuring leisure satisfaction (Beard and Ragheb, 1980) were factor analyzed with VARIMAX rotation using Principal Component method. Eigenvalue of 1 was used as the cutoff point for identifying a factor. As was for leisure motivation, no further factor analyses were done to purify the items, as the primary focus of the present study was to examine the factor structure. The KMO index (0.951) and

Bartlett’s test of Sphericity ($\chi^2 = 4422.041$, $df = 276$, $p < 0.001$) indicated adequate dimensionality of factor structure for the present data. Different from Beard and Ragheb’s initial solution, the initial factor analysis yielded a four-factor structure, which explained 64.977% of the total variance.

In specific, items capturing psychological dimension, which indicate interest and mental benefits, were extracted together

Table 1: Factor structure of leisure motivation items

	Beard and Regheb (1983)	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Com.
Factor 1: Intellectual (Intell)							
To learn about things around me	Intell	0.655	0.344	0.167	0.138	0.037	0.595
To satisfy my curiosity	Intell	0.700	0.192	0.050	0.166	0.239	0.614
To explore new ideas	Intell	0.829	0.210	0.243	0.246	0.138	0.870
To learn about myself	Intell	0.724	0.228	0.050	0.229	0.109	0.642
To expand my knowledge	Intell	0.732	0.155	0.391	0.109	0.099	0.734
To discover new things	Intell	0.715	0.169	0.293	0.168	0.085	0.661
To be creative	Intell	0.722	0.053	0.215	0.273	0.176	0.676
To use my imagination	Intell	0.686	0.108	0.323	0.263	0.193	0.693
Factor 2: Stimulus avoidance (S/A)							
Because I sometimes like to be alone	S/A	0.183	0.609	-0.225	0.266	0.075	0.532
To relax physically	S/A	0.185	0.718	0.186	0.193	0.276	0.698
To relax mentally	S/A	0.295	0.680	0.295	0.031	0.298	0.726
To avoid the hustle and bustle of daily activities	S/A	0.138	0.739	0.209	0.093	0.294	0.704
To rest	S/A	0.151	0.691	0.342	0.057	0.237	0.676
To relieve stress and tension	S/A	0.175	0.666	0.362	0.174	0.151	0.658
To unstructure my time	S/A	0.223	0.753	0.115	0.260	0.114	0.711
Factor 3: Social							
To build friendships with others	Social	0.376	0.189	0.748	0.097	0.148	0.768
To interact with others	Social	0.433	0.136	0.716	0.098	0.050	0.731
To develop close friendships	Social	0.101	0.153	0.506	0.304	0.166	0.409
To meet new and different people	Social	0.242	0.212	0.653	0.399	0.049	0.691
To reveal my thoughts, feelings, or physical skills to others	Social	0.293	0.110	0.507	0.385	0.262	0.571
To be socially competent and skillful	Social	0.423	0.228	0.553	0.390	0.129	0.705
Factor 4: Competency mastery (C/M)							
To gain a feeling of belonging	Social	0.145	0.199	0.343	0.490	0.361	0.549
To gain other’s respect	Social	0.183	0.214	0.397	0.501	0.313	0.585
To challenge my abilities	C/M	0.312	0.240	0.179	0.742	0.161	0.764
To be good in doing them	C/M	0.312	0.149	0.220	0.703	0.211	0.707
To improve my skill and ability in doing them	C/M	0.376	0.182	0.166	0.665	0.193	0.681
To be active	C/M	0.366	0.224	0.259	0.534	0.262	0.604
Factor 5: Physical skills							
To develop physical skills and abilities	C/M	0.175	0.234	0.121	0.333	0.729	0.742
To keep in shape physically	C/M	0.336	0.310	0.189	0.203	0.681	0.750
To use my physical abilities	C/M	0.052	0.225	0.050	0.293	0.727	0.669
To develop physical fitness	C/M	0.187	0.246	0.256	0.044	0.759	0.739
To slow down	S/A	0.127	0.470	-0.055	0.119	0.496	0.501

Com.: Communality

with educational satisfaction, measured with the items including keywords of knowledge and learn. In addition, items measuring social dimension were loaded together with those for physiological dimension. Most items for the social dimension of satisfaction cross-loaded along with psychological-educational dimension, and one of the items measuring social dimension in Beard and Ragheb's battery – "I have social interaction with others through leisure activities" – was loaded most highly, among other factors, on the

psychological-educational factor. Such a pattern implies that the social dimension of satisfaction identified by Beard and Regheb may not be distinct in a different cultural context. Participants in the present study may have perceived social aspect of satisfaction as one way to achieve psychological and physiological satisfaction.

In fact, in many leisure settings, especially among the Macau's students, participants learn new things and involve with physical

Table 2: Factor structure of leisure satisfaction items

	Present study	Beard and Regheb (1980)	Psy-Edu	Soc-Phy	Relax	Aesth	Com.
My leisure activities are very interesting to me	Psy-Edu	Psy	0.657	0.065	0.397	0.104	0.604
My leisure activities give me self-confidence	Psy-Edu	Psy	0.726	0.316	0.094	0.031	0.636
My leisure activities give me a sense of accomplishment	Psy-Edu	Psy	0.744	0.263	0.127	0.141	0.658
I use many different skills and abilities in my leisure activities	Psy-Edu	Psy	0.728	0.121	0.186	0.282	0.659
My leisure activities increase my knowledge about things around me	Psy-Edu	Edu	0.646	0.186	0.333	0.279	0.641
My leisure activities provide opportunities to try new things	Psy-Edu	Edu	0.718	0.063	0.294	0.260	0.674
My leisure activities help me to learn about myself	Psy-Edu	Edu	0.652	0.308	0.223	0.121	0.584
My leisure activities help me to learn about other people	Psy-Edu	Edu	0.640	0.343	0.149	0.159	0.575
I have social interaction with others through leisure activities	Psy-Edu	Social	0.513	0.361	0.373	0.117	0.546
My leisure activities have helped me to develop close relationships	Soc-Phy	Social	0.448	0.575	0.087	0.226	0.590
The people I meet in my leisure activities are friendly	Soc-Phy	Social	0.406	0.482	0.229	0.404	0.613
I associate with people in my free time who enjoy doing leisure activities	Soc-Phy	Social	0.475	0.526	0.234	0.282	0.637
My leisure activities help me to relax	Relax	Relax	0.292	0.235	0.762	0.242	0.779
My leisure activities help relieve stress	Relax	Relax	0.315	0.235	0.773	0.165	0.780
My leisure activities contribute to me emotional well-being	Relax	Relax	0.343	0.237	0.722	0.244	0.755
I engage in leisure activities simply because I like doing them	Relax	Relax	0.178	0.308	0.673	0.218	0.627
My leisure activities are physically challenging	Soc-Phy	Phy	0.210	0.751	0.176	0.141	0.658
I do leisure activities which develop my physical fitness	Soc-Phy	Phy	0.250	0.759	0.264	0.158	0.733
I participate in my leisure to restore me physically	Soc-Phy	Phy	0.189	0.577	0.306	0.265	0.532
My leisure activities help me to stay healthy	Soc-Phy	Phy	0.170	0.602	0.270	0.421	0.641
The areas or places where I engage in my leisure activities are fresh and clean	Aesth	Aesth	0.201	0.067	0.305	0.673	0.590
The areas or places where I engage in my leisure activities are interesting	Aesth	Aesth	0.252	0.296	0.307	0.632	0.645
The areas or places where I engage in my leisure activities are beautiful	Aesth	Aesth	0.180	0.241	0.068	0.775	0.695
The areas or places where I engage in my leisure activities are well designed	Aesth	Aesth	0.131	0.252	0.147	0.800	0.742

Psy: Psychological, Edu: Educational, Relax: Relaxation, Phy: Physiological, Aesth: Aesthetic, Psy-Edu: Psychological-Educational, Soc-Phy: Social-Physiological, Com.: Communality

leisure activities by interacting with friends, and therefore, there may be a mixed perception of satisfaction across the dimensions. Also, especially for students, growth of confidence, as well as abilities and skills, which captures psychological satisfaction in traditional notion (Ibid.), may be achieved by learning and trying new things and learning about people, which the educational dimension (Ibid.) indicates. Therefore, the results from the present study suggest that the mixed perception between psychological and educational dimensions of leisure satisfaction may be found (Table 2).

Conclusion

Because of the established psychometric nature and strong theoretical justification, Beard and Ragheb's (1980, 1983) scales of leisure motivation and leisure satisfaction have been widely adopted in a broad spectrum of leisure participation. One of the most crucial reasons why different factor structures diverged from the original version occur is due to diversified contexts that leisure incorporates and the diverse cases where the measurement scales are applied across cultural contexts.

The present study calls for caution in applying its dimensionality without considering the context and the culture where the surveys are conducted as factor structures were found partially differently from Beard and Ragheb's leisure motivation (1983) and leisure satisfaction (1980). The result, therefore, shares common implications with that suggested in multicultural studies such as Murray and Nakajima (1999). Special cautions should be exercised in using Beard and Ragheb's (1983) LMS across different cultures, as suggested by the current study. For example, the competency mastery dimension, initially proposed as one dimension, evolved into two distinct dimensions comprising of the factor capturing physical aspects of skills and abilities only and skills and abilities in general. Additional attention should also be paid to using items describing social motivation, since some of the social motivation items, such as "to gain other's respect," may also be understood as one of the skills and abilities in Chinese culture. In the domain of leisure satisfaction, a mixture of psychological satisfaction and educational satisfaction may be found especially among students because this particular demographic group may perceive learning new things through leisure highly associated with the opportunity to use skills, build confidence, and feel accomplished. A cross-loading tendency of the social dimension of leisure satisfaction should also be noted. Social satisfaction may not be a distinct dimension in many contexts because satisfaction with leisure, derived from psychological and physical sense of achievement, is likely to be associated with how social interaction through leisure involvement contributes to a satisfactory leisure experiences.

References

- [1] Beard, J.G., & Ragheb, M.G. (1980). *Measuring leisure satisfaction*. *Journal of Leisure Research*, 12(1), 20-33.
- [2] Beard, J.G., & Ragheb, M.G. (1983). *Measuring leisure motivation*. *Journal of Leisure Research*, 15(3), 219-228.
- [3] Chao, U.K. (2013). *A Study of Leisure Participation, Leisure Satisfaction and Subjective Wellbeing of High School Students in Macao*. (Master's Thesis). Macau: University of Macau.
- [4] Chen, M., & Pang, X. (2012). *Leisure motivation: An integrative review*. *Social Behavior and Personality: An International Journal*, 40(7), 1075-1081.
- [5] Chen, Y.C. (2009). *A Study of Personality Traits, Leisure Motivation, and Customers' Reaction for Casual/theme Restaurants' Consumers*. (Master's Thesis). Taiwan: Kaohsiung Hospitality College, Kaohsiung.
- [6] Chen, Y.C., Li, R.H., & Chen, S.H. (2013). *Relationships among adolescents' leisure motivation, leisure involvement, and leisure satisfaction: A structural equation model*. *Social Indicators Research*, 110(3), 1187-1199.
- [7] Hung, S.C. (2010). *A study on the relationship between college students' background and the recreation motivation*. *Journal of Sport, Leisure and Hospitality Research*, 5(2), 86-106.
- [8] Kim, M.L., Lee, Y.J., & Hwang, S. (2010). *Cross-cultural Validation Test and Application of LSS-short Form (LSS-short form)*. *Journal of the Korea Contents Association*, 10(11), 435-445.
- [9] Kleiven, J. (2005). *Measuring leisure and travel motives in Norway: Replicating and supplementing the leisure motivation scales*. *Tourism Analysis*, 10(2), 109-122.
- [10] Li, L.L., & Lee, C.K. (2011). *The study of university students' leisure time participation pattern, participation obstacle, and satisfaction-case study: National Kaohsiung University of Hospitality and Tourism*. *屏東教大運動科學學刊*, (7), 187-205.
- [11] Liu, H., Yeh, C.K., Chick, G.E., & Zinn, H.C. (2008). *An exploration of meanings of leisure: A Chinese perspective*. *Leisure Sciences*, 30(5), 482-488.
- [12] Lounsbury, J.W., & Hoopes, L.L. (1988). *Five-year stability of leisure activity and motivation factors*. *Journal of Leisure Research*, 20(2), 118-134.
- [13] Lu, L., & Hu, C.H. (2005). *Personality, leisure experiences and happiness*. *Journal of Happiness Studies*, 6(3), 325-342.
- [14] Mannell, R.C., & Iso-Ahola, S.E. (1987). *Psychological nature of leisure and tourism experience*. *Annals of Tourism Research*, 14(3), 314-331.
- [15] Murray, C., & Nakajima, I. (1999). *The leisure motivation of Japanese managers: A research note on scale development*. *Leisure Studies*, 18(1), 57-65.
- [16] Ryan, C., & Glendon, I. (1998). *Application of leisure motivation scale to tourism*. *Annals of Tourism Research*, 25(1), 169-184.
- [17] Vong, T.N. (2005). *Leisure satisfaction and quality of life in Macao, China*. *Leisure Studies*, 24(2), 195-207.
- [18] Walker, G.J., & Wang, X. (2008). *The meaning of leisure for Chinese/Canadians*. *Leisure Sciences*, 31(1), 1-18.
- [19] Walker, G.J., Deng, J., & Chapman, R. (2007). *Leisure attitudes: A follow-up study comparing Canadians, Chinese in Canada, and Mainland Chinese*. *World Leisure Journal*, 49(4), 207-215.
- [20] Wang, E.S., Chen, L.S., Lin, J.Y., & Wang, M.C. (2008). *The relationship between leisure satisfaction and life satisfaction of adolescents concerning online games*. *Adolescence*, 43(169), 177-184.