



# Comparison of Chinese and Korean Students Understanding Their Constraints on Participation of Leisure Activities context of Environmental Education

Guang-Hui Qiao  
Henan University of Technology, CHINA

Received 17 September 2016 • Revised 23 January 2017 • Accepted 3 March 2017

## ABSTRACT

The purpose of this study was to compare the differences of leisure participation activities and leisure constraints between Chinese students and Korean students. A random on-site survey was conducted from April 20<sup>th</sup> to June 20<sup>th</sup> 2015 and a systematic sampling approach was used to select 630 respondents (300 Chinese students and 330 Korean students) in Korea Paichai University. This study used factor analysis to select 5 constraint factors on recreational activities participation (Psychological, Time, Accessibility, Partner, and facility & Safety). T-test analysis also revealed the significant differences from Chinese students and Korean students on the constraint of recreational activities participation. In the end the insufficiency of this study is put forward and recommendations on the future study are also given.

**Keywords:** Constraint, International Students, Leisure Activities, Environmental Education

## INTRODUCTION

During the past decade, the constraints on recreational and leisure participation have received increasing attention in recreational and leisure studies in Korea as well as other countries (Wang, 2014).

The statistical data shows that there will be 5.5 million graduates from universities or colleges, and 14.85 million graduates from senior high schools in China. This means the population base of those who have the opportunity to study abroad will increase by about 25% over 2007 (<http://www.chuguo.cn/news/107927.xhtml>). Experts have forecast that additional factors, including the 2008 Beijing Olympic Games, the inland employment situation, and appreciation of the RMB and the development of new visa processes may lead to a 30% increase in students choosing to go abroad. Thanks to the good relations and frequent cultural exchanges between China and Korea, the big influence of “Korean Wave” in China, Korean traditional charming cultures and Korean complete and modern educational system, the number of those Chinese studying abroad in Korea is increasing by 25% per year.

© **Authors.** Terms and conditions of Creative Commons Attribution 4.0 International (CC BY 4.0) apply.

**Correspondence:** Guang-Hui Qiao, *School of Management, Henan University of Technology, China. Address to No.100, Lianhua St., High-tech Dist., Zhengzhou City 450001, China. Tel: +86-186-2371-7101.*

✉ [yangqiao1980@126.com](mailto:yangqiao1980@126.com)

### **State of the literature**

- Studies on constraints of leisure participation have gained plenty of results over the last three decades. The main aim of these researches is the understanding of reasons why people are not able to participate to the recreational and leisure activities.
- Identification of students' constraints for the leisure participation, is different from the other social groups. Good identification becomes a prominent first step to deal with the problems which prevent students from participating.
- Differentiation of foreign and local students with their different constraints on recreational and leisure participation is still handy and this point might be the causes of difficulties for foreign students living overseas.

### **Contribution of this paper to the literature**

- The significance of the present study lies in its contribution to the literature with the critical overview of the general analysis in constraints of recreational and leisure participation. Furthermore, foreign students' participation to leisure activities and their satisfaction may be a direct impact on local tourism and leisure industry to a higher level of development.
- According to the study, differentiation the constraints between local and international students is more important to guide the different groups of students to make university life better.
- The results of this study indicates that university students' constraints to recreational and leisure activities are a function of cultural and social interpretations of nationalities differences. Most of the research on recreational and leisure constraints for individuals does not argue that foreign students have no leisure, but that they have less leisure, or face more constraints, than do local students' counterparts.

The number of Chinese overseas students in Korea has increased significantly in recent years (<http://www.chuguo.cn/news/107927.xhtml>). A huge number Chinese student exists in Korea, so a research on their participation to recreational activities and the constraints to participation is very meaningful and will play a role for Korean recreational and leisure tourism industry. As we known leisure has a great meaning for foreign student, through the participation of leisure to spend their time after daily going to school, and then improve the quality of service for life. The leisure participation and experience of leisure constraints among foreign students may provide new insights into the nature of leisure participation on foreign student in Korea. International students encounter many challenges in the process of their adjustment to their host country (Barker, Child, Gallois, Jones, & Collan, 1991).

The purpose of this study is to investigate the constraints to use of outdoor recreation resources and participation in leisure activities among Chinese students in Korea. The purpose was: to compare the differences of leisure participation activities and leisure constraints between Chinese students and Korean students.

## LITERATURES REVIEW

### **What is leisure and recreation?**

**Leisure:** Consists of your free time and what you enjoy to do. It also involves fun and social acceptance (Heung, et al, 2011).

**Recreation:** The local part refers to your home area and what you do there (Park, 2007).

### **What is leisure and recreational constraints?**

Leisure constraint refers to any factor that intervenes between leisure and satisfaction with one's leisure (Kay & Jackson, 1991).

Several recreational and leisure researchers have developed a variety of conceptual and methodological approaches that serve to explain how constraints on recreational and leisure activities might operate (Shinew, Floyd, & Parry, 2004). Crawford and Godbey (1987) proposed intrapersonal, interpersonal, and structural constraints. Intrapersonal constraints refer to individuals' psychological states and attributes. Interpersonal constraints refer to interpersonal interaction or the relationship between individuals' characteristics. Structural constraints are related to the intervening factors between leisure preference and participation.

Several theoretical frameworks exist for guiding research concerning those impediments confronting various population groups wishing to pursue leisure and tourism activities (Sparks & Pan, 2009; Arruti, 2012; Bueno, 2016). These constraint frameworks have primarily focused on two thematic areas of investigation: activity specific participation barriers, and the impediments facing particular segments of the population (Williams, & Fidgeon, 2000).

Activity research has centered on identifying the constraints associated with commencing, maintaining, and increasing involvement in particular pursuits (Backman, 1991). It has also examined the reasons for dropping out of certain activities. Specific activities examined in this regard include hiking (Kim & Wong, 2006); golfing (Backman & Crompton, 1990); cardplaying (Scott, 1991); camping (Backman & Crompton, 1990); tennis (Dunn, 1990); and skiing (Stynes & Mahoney, 1980). Shaw et al. (1991) provided support for the negotiation proposition, stating that leisure participation is dependent not on the absence of constraints but on negotiation through them. Recent studies (Alexandris, Tsorbatzoudis, & Grouios, 2002) highlighted that constraints were more frequently perceived by participants than nonparticipants and individuals do negotiate through constraints to start or continue participation in leisure. In other words, higher levels of perceived constraints do not necessarily result in less participation in recreational sport activities, and that individuals do not necessarily react passively to constraints.

## **Leisure and recreational constraints for foreign students**

During their school years, college students deal with stress from academic life and issues stemming from normal development, such as psychological autonomy, economic independence, and identity formation. Compared to host national counterparts, however, international students experience added difficulty in that they must cope with other forms of stress (Engel-Yeger, 2013; Toyokawa, T., & Toyokawa, N., 2002). This difficulty includes culture shock, language difficulties, adjustment to unfamiliar social norms, eating habits, customs and values, differences in education systems, isolation and loneliness, homesickness, and a loss of established social networks (Leong & Chou, 1996).

This paper has done a comparison of recreational and leisure participation and leisure constraints between Chinese university students and local Korean University Students

### **RESEARCH DESIGN**

#### **Questionnaire development**

The questionnaires were designed to measure perception of constraints in recreational and leisure activities, leisure participation pattern, and demographics. A five point Likert rating scale measuring constraints, ranging from 1=has not influenced me at all to 5=has influenced completely, was used. The questionnaires for this study were adapted from the research papers by Alexandris and Carroll (1997) and Mimi L. et al. (2011).

#### **Survey and data collection**

This study used a random survey. An on-site survey in bi-language Chinese and Korean was administrated to Chinese students and local Korean students from April 20<sup>th</sup> to June 20<sup>th</sup>, 2015, in Korea Paichai University. A total of 630 questionnaires were delivered, 624 questionnaires were returned and 602 usable samples were obtained, resulting in a response rate of 95.6% (298 Chinese students and 304 Korean students). The survey was administered by my classmates and I who understood well the purpose of the study.

#### **Analysis methods**

The collected data were analyzed by Statistical Package for Social Sciences (SPSS) version 15.0. Statistical techniques such as descriptive analysis, factor analysis, and T-test were used to achieve the objectives of this study. Descriptive analysis was used to find out the ranking of importance on perception of constraint. Factor analysis was used to reveal the grouping factors of the items of the constraint dimensions. And t-test was subsequently conducted on differences of the perception of constraint factors between Chinese students and Korean students.

**Table 1.** Ranking of Importance on Perception of Constraint

Perception of constraint	Mean	Std. Deviation	Perception of constraint	Mean	Std. Deviation
No physical strength or capability	5.00	1.049	Expensive fee	4.53	1.294
Not feeling fit enough	4.95	1.071	Cost of equipment	4.52	1.245
Not interested	4.94	1.114	No one teach me	4.49	1.279
Not confident	4.91	1.036	No one to participate with	4.39	1.437
Health-related problem	4.83	1.036	Don't know where to participate	4.39	1.457
Did not enjoy before	4.73	1.166	Friends don t have time	4.21	1.516
Busy life	4.73	1.116	Not necessary skills	4.08	1.329
Work/study to do	4.71	1.272	Inadequate facilities	3.97	1.365
No time	4.71	1.125	Inconvenient facilities	3.96	1.320
Social commitment	4.68	1.180	Afraid of getting hurt	3.93	1.241
Family commitment	4.66	1.121	Safety	3.90	1.575
No money	4.62	1.112			

### Ranking of Importance on Perception of Constraint

**Table 1** shows the ranking of importance on perception of constraint for Chinese university students and Korean university students according to the survey. The first five top perceptions' constraints are No physical strength or capability (mean=5.00); Not feeling fit enough (mean=4.95); Not interested (mean=4.94); Not confident (mean=4.91); Health-related problem (mean=4.83). So it means when we consider about young students' participation awareness to recreational and leisure activities, we should launch the major strategies according to perception of constraint with different importance.

### Factor Analysis to the items of the constraint

Constraint items (6 Psychological items, 5 Time item, 3 Accessibility items, 5 Partner items, and 4 facility & Safety items) have been described by factor analysis with SPSS12.0. In order to improve the results of factor analysis, some constraint factors were given up because of the loading value less than 0.5 and Common Factor Variance is less than 0.4. Finally there are 23 items which can be analyzed by factor analysis. Principal Component Method and Varimax Rotation were used on the extraction of factors rotation so that the common factors can be more satisfactorily explained. According to Eigen-value >1, extracted 5 common factors "Psychological factor", "Time factor", "Accessibility factor", "Partner factor", "facility & Safety factor", as shown in **Table 2**.

Chinese and Korean students' recreational and leisure activities participation constraint factor Cronbach reliability coefficients (Cronbach  $\alpha$ ) value = 0.922, and all the items' Cronbach  $\alpha$  nearly above 0.8, so we can say that the results of this study are reliable.

**Table 2.** Results of Factor Analysis of the Items of the Constraint Dimensions

Factors and items	Factor loading	Communality	Eigenvalue	Variance Explained (%)	Reliability coefficient
<b>Factor 1: Psychological</b>					
No physical strength or capability	.852	.846	7.736	22.1	.929
Not feeling fit enough	.833	.842			
Not interested	.827	.794			
Not confident	.774	.759			
Health-related problem	.763	.744			
Did not enjoy before	.733	.726			
<b>Factor 2: Time</b>					
Busy life	.837	.687	2.075	18.0	.851
Work/study to do	.816	.746			
No time	.749	.745			
Social commitment	.693	.675			
Family commitment	.627	.600			
<b>Factor 3: Accessibility</b>					
No money	.837	.856	1.684	16.0	.880
Expensive fee	.800	.747			
Cost of equipment	.774	.766			
<b>Factor 4: Partner</b>					
No one teach me	.879	.829	1.211	10.3	.846
No one to participate with	.801	.805			
Don't know where to participate	.810	.798			
Friends don't have time	.796	.786			
Not necessary skills	.806	.802			
<b>Factor 5: Facility &amp; Safety</b>					
Inadequate facilities	.861	.833	1.013	9.8	.798
Inconvenient facilities	.845	.811			
Afraid of getting hurt	.832	.809			
Safety	.841	.802			
Total variance explained				76.2	
Total scale reliability					.922
KMO= .873 Bartlett's test of Sphericity = 2543.590 df=153 Sig.= .000					

### Test on differences on the perception of constraint between Chinese and Korean university students

This study used t-test to analyze the differences on the perception of constraint between Chinese and Korean university students (as shown in [Table 3](#)).

To these perception of constraint factors: *Psychological* factor (Chinese students: 4.64, Korean students: 3.96,  $p=0.000$ ), *Time* factor (Chinese students: 4.65, Korean students: 3.90,  $p=0.000$ ), *Accessibility* factor (Chinese students: 3.20, Korean students: 2.68,  $p=0.041$ ), partner factor Chinese students: 3.73, Korean students: 4.14,  $p=0.027$ ), facility & safety factor (Chinese

**Table 3.** Results of T- test for the Perception of Constraint Factors by Chinese University Students and Local Korean University Students

Category	Psychological	Time	Accessibility	Partner	facility & Safety
Chinese	4.64	4.65	3.20	3.73	4.49
Korean	3.96	3.90	2.68	4.14	3.77
T-value	5.859	6.015	5.490	4.130	4.869
P-value	<b>0.000**</b>	<b>0.000**</b>	<b>0.041*</b>	<b>0.027*</b>	<b>0.030*</b>

Note : \*  $P < 0.05$  , \*\*  $P < 0.01$

students: 4.49, Korean students: 3.77,  $p=0.030$ ). Chinese students' perception of constraint is higher than Korean students'. It means that Chinese students have higher perception of constraint to recreational and leisure activities' participation.

### CONCLUSION AND RECOMMENDATION

It can be considered that the recreational and leisure are often ignored in the lives of the university students due to the heavy study. Especially, foreign students are likely to have little recreational and leisure and do not use the same criteria as local students in evaluating their leisure involvement. The present study was an exploratory one aiming to examine the relationships between university students' perception of constraints and nationalities.

In Today's society every country attaches great importance to the development of recreational and leisure tourism and local residents' participation to recreational and leisure activities. There are many previous studies for the constraints of recreational and leisure activities (Wang, 2014; Kay & Jackson, 1991). However, very few documents on the reaction and participation from the foreign students to local recreational and leisure activities, as well as the constraints involved in the analysis and research. However, the foreign students is a very important component in the local tourism industry, they play a very important role in developing local tourism. Their participation, their satisfaction may be a direct impact on local tourism and leisure industry to a higher level of development. In particular the number of Chinese students in Korea and their current situation, it is significant meaningful to have a research on Chinese students to participate in local recreational and leisure activities as well as their perceived constraints. So far, there is no such a study which has been done. I preliminarily researched Chinese students in Korea and local university students to participate in recreational and leisure activities as well as the constraints in this study. The results showed that Chinese students in Korea and the local university students are different in the five factors of leisure constraints. Especially the most significant differences are the time factor, followed by the psychological factor, followed by the partner factor, followed by the facility & safety factor, and the last one is accessibility factor. Therefore, the local tourism-related sectors will focus on the five constraints factors to develop local recreational and leisure industry, so that foreign students in Korea, especially Chinese students will be easier to take part in recreational and leisure activities.

Besides, both foreign students and local university students reported a wide range of constraints that either limited or blocked their participation in recreational and leisure activities. It should be noted that university students' constraints to recreational and leisure activities are a function of cultural and social interpretations of nationalities differences. Most of the research on recreational and leisure constraints for individuals does not argue that foreign students have no leisure, but that they have less leisure, or face more constraints, than do local students' counterparts. It is well known that foreign students are constrained to certain leisure participation. Equal opportunity in recreational and leisure is necessary to empower foreign university students in recreational and leisure participation (Lam & Hsu, 2006).

Finally I hope this paper will give some considerations to the tourism-related organizations for reducing recreational and leisure participating constraints of foreign students. Regarding the positive association between engagement in extracurricular activities and academic involvement, one possible explanation may be that students' engagement in extracurricular activities and academic involvement are reciprocally influenced by each other (Bergin, 1992; Engel-Yeger, 2012). At the same time, taking courses may lead students to strengthen their interests in certain activities. Since the students are able to use the knowledge and skills they have gained in class when they return to their out-of-class activities, they may reap an immediate reward for their learning. This reciprocal relationship, therefore, may encourage students to maintain their levels of motivation to learn in courses, as well as encouraging them to engage in out-of-class activities. The language is possible a constraint as well for participation to leisure and recreational activities. Help the foreign students with Korean language to make their life and social relational activities easier.

Future research needs to be undertaken to examine how university students' perception of constraints are formed. The findings of this research suggest several directions for further investigations of university students' recreational and leisure participation. It implies that the nature of the recreational activity appears to play a vital role in determining the extent to which perceived constraints are effective. Finally, for research to progress, it will be necessary to utilize qualitative methods that facilitate an in-depth understanding of their constraints to recreational and leisure participation. Furthermore, because of this paper is a preliminary research for recreational and leisure activities participation between foreign university students and local university students as well as their different perceptions to the constraint of participation, so in the future, it should study more about:

- 1) The differences in recreational and leisure participation between foreign students and local students based on difference gender and age.
- 2) The differences in recreational and leisure participation among foreign students based on difference pocket money and length stay in local place.
- 3) The correlation between leisure participation and intrapersonal constraints.



## ACKNOWLEDGEMENTS

The authors thank the reviewers for their careful reading and providing some pertinent suggestions. This work was partly supported by the Education Ministry Scientific Research Fund for Returned Overseas Talents [Grant Number (2013)1792], and the Key Research Base Project of University Humanities & Social Sciences, Henan, China [Project No. 2015-JD-04].

## REFERENCES

- Alexandris, K., Tsorbatzoudis, C., & Grouios, G. (2002). Perceived constraints on recreational sport participation: Investigating their relationship with intrinsic motivation, extrinsic motivation and a motivation. *Journal of Leisure Research*, 34(3), 233-252.
- Arruti, A. (2012). Sustainable leisure education (eos) as a renewed approach for the curriculum design. In *ICERI2012 Proceedings* (pp. 2441-2451). IATED.
- Backman, S. J. (1991). An investigation of the relationship between activity loyalty and perceived constraints. *Journal of Leisure Research*, 23(4), 332-344.
- Backman, S. J., & Crompton, J. L. (1990). Differentiating between active and passive discontinuers of two leisure activities. *Journal of Leisure Research*, 22(3), 197-212. Bergin, D. A. (1992). Leisure activity, motivation, and academic achievement in high school students. *Journal of Leisure Research*, 24(3), 225-239.
- Barker, M., Child, C., Gallois, C., Jones, E., & Callan, V. J. (1991). Difficulties of overseas students in social and academic situations. *Australian Journal of Psychology*, 43(2), 79-84. doi:10.1080/00049539108259104
- Bueno, F. P. (2016). Environmental education and tourism: methodologies for environmental education applied as tourist-recreational activities in natural settings. *Turismo-Estudios E Praticas*, 5(2), 60-79.
- Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, 9(2), 119-127. doi:10.1080/01490408709512151
- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences*, 13(4), 309-320. doi:10.1080/01490409109513147
- Engel-Yeger, B. (2012). Leisure activities preference of Israeli Jewish children from secular versus Orthodox families. *Scandinavian journal of occupational therapy*, 19(4), 341-349.
- Engel-Yeger, B. (2013). Comparing participation patterns in out-of-school activities between Israeli Jewish and Muslim children. *Scandinavian journal of occupational therapy*, 20(5), 323-335.
- Heung, V. C., Kucukusta, D., & Song, H. (2011). Medical tourism development in Hong Kong: An assessment of the barriers. *Tourism Management*, 32(5), 995-1005. doi:10.1016/j.tourman.2010.08.012
- <http://www.chuguo.cn/news/107927.xhtml> Admin (Feb. 2008). The number of students from China studying aboard in 2008 will exceed 200,000. Retrieve date: April 2009.
- Kay, T., & Jackson, G. (1991). Leisure despite constraint: The impact of leisure constraints on leisure participation. *Journal of Leisure Research*, 23(4), 301-313.
- Kim, S. S., & Wong, K. K. (2006). Effects of news shock on inbound tourist demand volatility in Korea. *Journal of Travel Research*, 44(4), 457-466. doi:10.1177/0047287505282946
- Lam, T., & Hsu, C. H. C. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism Management*, 27(4), 589-599. doi:10.1016/j.tourman.2005.02.003

- Leong, F. T. L., & Chou, E. L. (1996). Counseling international students. In P. B. Pedersen, J. G. Draguns, W. J. Lonner, & J. E. Trimble (Eds.), *Counseling across cultures* (4th ed.) (pp. 210-242). Thousand Oaks, CA: Sage.
- Li, M., Zhang, H., Mao, I., & Deng, C. (2011). Segmenting Chinese outbound tourists by perceived constraints. *Journal of Travel & Tourism Marketing*, 28(6), 629-643. doi:10.1080/10548408.2011.598747
- McGuire, F. A., Dottavio, D., & O'Leary, J. T. (1986). Constraints to participation in outdoor recreation across the life span: A nationwide study of limitors and prohibitors. *The Gerontologist*, 26(5), 538-544. doi:10.1093/geront/26.5.538
- Scott, D. (1991). The problematic nature of participation in contract bridge: A qualitative study of group - related constraints. *Leisure Sciences*, 13(4), 321-336. doi:10.1080/01490409109513148
- Shaw, S. M., Bonen, A., & McCabe, J. F. (1991). Do more constraints mean less leisure? Examining the relationship between constraints and participation. *Journal of Leisure Research*, 23(4), 286-300.
- Sparks, B., & Pan, G. W. (2009). Chinese outbound tourists: Understanding their attitudes, constraints and use of information sources. *Tourism Management*, 30(4), 483-494. doi:10.1016/j.tourman.2008.10.014
- Toyokawa, T., & Toyokawa, N. (2002). Extracurricular activities and the adjustment of Asian international students: A study of Japanese students. *International Journal of Intercultural Relations*, 26(4), 363-379. doi:10.1016/S0147-1767(02)00010-X
- Wang, Y. S. (2014). Effects of budgetary constraints on international tourism expenditures. *Tourism Management*, 41, 9-18. doi:10.1016/j.tourman.2013.08.006
- Williams, P., & Fidgeon, P. R. (2000). Addressing participation constraint: a case study of potential skiers. *Tourism Management*, 21(4), 379-393. doi:10.1016/S0261-5177(99)00083-7

<http://www.ejmste.com>