

Perceived Barriers to Recreation Sport Participation in University Students: A Comparison between International and Local Students in the United States

Hashim, H. A.

*Sports Science Unit, School of Medical Sciences,
Universiti Sains Malaysia, Health Campus,
16150 Kubang Kerian, Kelantan, Malaysia
E-mail: hairul@kb.usm.my*

ABSTRACT

It is generally known that sport participation promotes greater social interactions. For students in a foreign and a new country, a positive social interaction can be translated into a positive social adjustment process and a greater psychological well-being. Despite its benefits, participation in sports activities is low among university students, especially the international students. The present study, therefore, sought to examine the barriers that would likely hinder international and local college students from participating in sport activities in one of the colleges in Springfield, United States. Using purposive sampling, 64 college students participated in this cross sectional survey study. Data were collected using a modified Leisure Barriers Scale developed by Raymore, Godbey, Crawford and Von Eye (1993). Using descriptive statistics and independent group t-test, the results revealed 'convenient facilities', 'time' and 'information regarding available activities' as the most hindering factors for international students from participating in campus sport activities. The results of the independent group t-test revealed that intrapersonal barriers ($p < 0.04$) and interpersonal barriers ($p < 0.02$) were significantly higher among international students compared to the local students. No difference was found between the two groups with regard to Structural Barriers. Parallel with the results, greater efforts may be made to promote greater awareness with regard to facilities convenience, such as facilities operating hours, and availability of campus activities to the students. For international students, activities that promote the elements of social interaction and are sensitive to cultural and individual differences may encourage greater participation in campus sporting activities.

Keywords: Sport participation, perceived barriers; international students

INTRODUCTION

The enrollment rate of international students in the United States increases each year. During the 2001/02 academic year, the Institute of International Education (IIE) reported a total international students' enrollment of 582,996, i.e. with an increase of 30% as compared to the 1990/91 academic year. The current statistics revealed a total enrollment of 690,923 in the 2009/2010 academic year, an 18 percents

increase from the 2001/2002 academic year (IIE, 2010). Inherent in these environmental, social, and academic changes faced by the new international students, the adjustment they have to make can be overwhelming (Heikinheimo & Shute, 1986; Lacina, 2002; Luzzo & Henao, 1996; Tseng & Newton, 2002). Indeed, poor adjustment may result in heightened stress levels experienced by these students (Iwata & Higuchi, 2000). Even more worrying, if

Received: 14 October 2010

Accepted: 31 January 2011

this stress is not properly managed, it could potentially lead to depression. In fact, in a study involving local and international students in Australia, Oei and Notowidjojo (1990) revealed that international students were more likely to experience moderate to severe stress when compared to the local students. Given the negative outcomes associated with poor adjustment coping strategies, it is critical for the universities to assist these students in their adjustment process.

Successful adjustment to the new environment has the potential to contribute not only to better academic performance and life functions, but also to students' general psychological well-being. Indeed, it has been shown that higher level of life stress and low social support are predictors of academic stress. In turn, higher level of academic stress is likely to cause an increase in the level of reaction to general everyday life stressors (Misra, Christ, & Burant, 2003). Meanwhile, adequate social support may benefit students in managing stress as well as in their social adjustment process (Heikinheimo & Shute, 1986). In ensuring smooth adjustment to the new environment, efforts should be made by the institutions to assist international students in coping with these adjustment processes. Although a variety of strategies can be applied, it has been suggested that activities which promote greater social interactions may be effective in helping the students in their adjustment process (Heikinheimo & Shute, 1986; Lacina, 2002; Luzzo & Henao, 1996; Tseng & Newton, 2002).

A setting with potentially rich social interaction is sport. In fact, in a qualitative study conducted to examine the academic and social needs of international students, Luzzo and Henao (1996) revealed that academic responsibilities, participation in campus activities, and social networks were among the major concerns of international students. More importantly, the participants believe that the participation in campus sport activities is an essential component towards forming social networks. Despite perceived benefits of participating in the activities, the participants also perceived that

the opportunity to participate in various campus sport activities was limited (Luzzo & Henao, 1996).

Sport activity is a common component of campus extracurricular activities (Weese, 1997). However, merely offering the opportunity to participate does not always lead to actual participation. For instance, Suminski, Petosa, Utter and Zhang (2002) revealed a higher percentage of college students who did not participate in sport. More significantly, the numbers of non-participants were higher among the minority and international students (Suminski *et al.*, 2002).

International students' non-participation in campus activities, such as sports, is often due to perceived, rather than actual barriers they are confronting. To further understand individuals' perception of barriers of sport participation, Crawford and Godbey (1987) proposed three types of barriers, namely, intrapersonal, interpersonal and structural barriers. Firstly, intrapersonal barriers refer to the psychological states and attributes of individuals that influence the decision to engage in any given activity. Some examples of intrapersonal barriers are motivation, perceived self skills, availability and appropriateness of activities, and the religious aspects of their life. Secondly, interpersonal barriers refer to the barriers that result from low social interactions with significant others. The lack of social contact is an example of interpersonal barriers. Finally, structural barriers refer to external barriers such as the lack of time, facilities, financial resources, opportunities and transportation (Crawford & Godbey, 1987). As both interpersonal and structural factors represent the circumstances where the institutions can intervene, this information provides the institution with the opportunities to remove these barriers. In turn, removal of these barriers may facilitate greater sport participation.

In summary, participating in sport activities, such as those available on campus, may encourage greater social interaction among the students, international and local. Increased social interaction, in turn, can be translated into positive social adjustment process and

consequently greater psychological well-being for the international students. However, it was shown that their participation in campus sporting activities, especially among this group of students, is low. Thus, the primary objective of this study was to examine the factors that were likely to hinder the participation of international students in the campus sport activities. Secondly, this study also sought to compare the levels of perceived barriers between the local and international students in a small size college in Springfield, United States. Such comparison will allow the institution to gauge whether the perceived barriers are group specific or more general. This knowledge will undoubtedly be useful in guiding the intervention strategies in promoting greater sport participation for the students, local and international.

METHOD

Using cross sectional study design, this study examined the barriers that prevent the participation of international students in campus sport activities. The differences in the levels of perceived barriers between American and international students with regard to the three types of barriers proposed by Crawford and Godbey (1987) were also examined.

Participants

Undergraduate and graduate students involving 32 local students and 28 international students enrolled at one of the colleges in Springfield, United States, participated in this study. This number represented 100 percents response rate. The mean age of the participants was 22.65 ± 4.03 . Permission to conduct the study was obtained from the relevant authorities and participants provided informed consent.

Instrument

Modified Leisure Barrier Scale (Raymore, Godbey, Crawford, & Von Eye, 1993) was used to measure sport participation barriers in this study. The questionnaire consists of 21

items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items represent three types of barriers, as proposed by Crawford and Godbey (1987), which are intrapersonal, interpersonal and structural barriers. The questionnaire was scored by summing up the scores of each item. The total possible point for each specific type of barriers ranged from 7 to 35 and the total possible points for general constraints ranged from 21 to 105. Detailed descriptions of the validity and reliability of this questionnaire have been reported elsewhere (see Raymore *et al.*, 1993). Raymore *et al.* (1993) reported the alpha coefficients of .57, .64, and .79 for the intrapersonal, interpersonal, and structural barriers, respectively. In the present sample, the reliability coefficients for the intrapersonal, interpersonal, and structural barriers were .74, .65, and .65, respectively.

Procedure

The questionnaires were distributed to the participants in person. International students completed the questionnaire during a social gathering, which was held at the end of the spring semester. Local students were encountered at several venues on campus, such as the library, dining hall and gymnasium. They were requested to take part in the survey and the objective of the survey was explained to them. It was reinforced to them that the information might help the institution to enhance its sport related services. Those who were willing to participate were given the questionnaire to be completed. The participants were asked to respond to all the questions in the questionnaire and to provide honest responses. The respondents took about five minutes to complete the questionnaire.

Statistical Analysis

Descriptive statistics were used to analyze each item. Independent groups t-test was used to analyze the differences between the international and local students with regard to the three types of barriers. The citizen status was used as the

dependent variable. A total of four independent groups t-tests were calculated to measure the differences in the levels of barriers, as perceived by both the groups.

RESULTS

The data were analyzed in two stages. The descriptive statistics were performed on each of the items in the questionnaire. The results of this analysis are presented in Table 1. The breakdown in the number of the international students were Asian (n = 19), European (n = 3), African (n = 3), South American (n = 1) and West Asian (n = 2). The numbers of sports participants and non-participants were 40 and 24, respectively.

As shown in Table 1, international students rated convenient facilities (Mean = 4.00 ± 0.76), time (Mean = 3.84 ± 0.96), and information regarding available activities (Mean = 3.69 ± 0.93), as the three factors that would likely influence their decision to participate in campus sport activities. Shyness (Mean = 2.00 ± 0.92) and friend not having money to participate (Mean = 2.19 ± 0.90) were regarded as the least likely factors that would influence their decision to participate in campus sport activities.

To compare the differences in the level of specific constraints (intrapersonal, interpersonal and structural) and global constraints between the American and international students, four separate independent groups t-tests were calculated. The international students reported

TABLE 1
Descriptive statistic of sport participation barriers of international and American students

Items	American Students		International Students	
	Mean	SD	Mean	SD
Convenient facilities	4.00	0.76	3.85	1.15
Time	3.48	0.95	3.36	1.14
Know what activity is available	3.69	0.93	3.82	1.01
Personal transportation	3.66	1.13	3.79	0.90
Facilities are crowded	3.41	0.88	3.09	1.18
Activities make one feels uncomfortable	3.37	1.16	3.00	1.23
Activities make one feels awkward	3.34	0.94	3.12	1.11
Peers approval	3.25	1.20	2.64	1.05
Self commitments	3.19	1.03	2.82	1.18
Friends do not have time	3.03	1.29	2.67	1.11
Friends have other commitments	2.91	1.03	2.73	1.13
Friends do not have transportation	2.81	1.15	2.27	0.77
Friends do not know what activity's available	2.75	0.92	2.24	1.03
Activities require a lot of skills	2.69	0.93	2.33	1.19
Friends live too far	2.69	1.10	1.67	.86
Family s approval	2.62	1.27	2.64	1.17
Friend do not have skill	2.56	1.05	2.18	0.92
Religious restrictions	2.44	1.37	2.12	1.08
Lack of money	2.34	1.07	2.27	1.21
Friends not having money	2.19	0.90	2.12	1.00
Shyness	2.00	0.92	1.52	0.97

significantly higher scores in the intrapersonal constraints ($p = 0.04$) and interpersonal constraints ($p = 0.01$) than the American students. No significant ($p = 0.32$) difference was found between the international and American students with regard to structural barriers. Furthermore, the international students reported significantly higher ($p = 0.02$) perception of the global barriers than the American students. The mean and SD for each type of barriers are presented in Table 2.

DISCUSSION

The present study sought to examine the factors that might influence international students' decision to engage in campus sport activities. The results of the descriptive analysis indicated that 'convenient facilities', 'knowledge of available activities' and 'personal transportation' were the most likely reasons that would influence international students' participation in sport activities. Conversely, 'shyness', 'friend not having money to participate', and 'religiosity' were the least likely reasons that would influence their decisions to participate in campus recreational activities. The results of the independent group t-test indicated that the international students displayed higher levels of intrapersonal and interpersonal barriers compared to the American students. International students also indicated higher levels of global barriers.

Based on these results, it seems that factors within the structural barriers were the most influential factors that would encourage or discourage both the international and local

students from participating in campus sports. The practical value of the present finding is that it corresponds to situation where relevant authorities can intervene. In more specific, greater efforts should be made to promote greater awareness towards facilities convenience, such as the facilities operating hours and the availability of the campus activities to students. More importantly, this information should be made available and the authorities should ensure that it reaches the intended audience (Weese, 1997).

Karlis and Dawson (1995) argued that although the knowledge of the participation *rate* is essential, the *reasons* that lead to participation and non-participation are equally imperative. In line with Karlis and Dawson's (1995) view, the present study offers some understanding of that reasons that could discourage international students from participating in campus sport activities. In this regard, the results of the present study highlighted the importance of intrapersonal factors in influencing students' decision to participate in campus sport activities. The practical value in these findings is related to the design of the sport programmes. In specific, intrapersonal factors, such as ethnicity, gender, as well as religiosity, should be taken into consideration when offering sport programmes to students (Carr & William, 1993).

Related to these intrapersonal factors is the issue of activity appropriateness. In fact, the appropriateness of an activity was cited as one of the factors that stimulates participation in recreation and physical activities (Briggs,

TABLE 2
Descriptive statistics for the intrapersonal, interpersonal and structural barriers for specific and total respondents

Student status	Intrapersonal barriers	Interpersonal barriers	Structural barriers	Global barriers
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
International	25.03 (4.44)	26.35 (4.66)	19.23 (3.96)	47.16 (7.79)
Local	22.39 (4.17)	22.84 (4.54)	17.94 (4.42)	42.90 (7.46)
Total sample	23.71 (4.47)	24.60 (4.89)	18.58 (4.21)	45.03 (7.86)

1994; Wankel, 1985). Nakamura (2002), for example, revealed that appropriateness of the activity is one of the reasons that facilitates individuals' desire to continue their participation. For instance, in term of activity scheduling, some religious obligations and celebrations may limit the possibilities for participation on a particular day or at a particular time that may render some activity as inappropriate (Kahan, 2003). Additionally, there are also opportunities for the authorities to enhance their programme inclusivity for women, such as offering 'women's only' sessions for particular sports and/or gym sessions. Such initiatives can encourage women from particular backgrounds, who may feel restricted from participation for some intrapersonal reasons, such as cultural and religious reasons to participate in the activities (Nakamura, 2002). Various methodologies can be utilized to assess the extent to which the activities are appropriate for the intended audience. Luzzo and Henao (1996) suggested using an interview as a mean to gather the information; however, as this technique can be time-consuming, the instruments of leisure barriers (Crawford & Godbey, 1987; Raymore *et al.*, 1991) could be used as a mean to gather the data.

In pursuing their academic goals away from their home country, international students are exposed to the challenges that could negatively influence their general well-being and academic success (Tseng & Newton, 2002). Various coping techniques has been recommended to help international students to adapt to the new environment in which they live. Central to these recommended techniques is initiating social interaction. Luzzo and Henao (1996) suggested that participating in campus sports and recreation is an appropriate platform for international students to establish social contacts. In fact, the benefits of participation in campus sport and recreation activities are not only limited to establishing social contact, but it also serves as a stress coping mechanism associated with daily stress (Coleman & Iso-Ahola, 1993).

To summarize, the results of the present study provide a general understanding on the factors that influence the students' decision to engage in campus recreational activities. The present study, however, is limited by the small size of the sample. As the institution in which the study was conducted is rather small in size, the sample of the international students was not randomly selected. Future studies may address this limitation by surveying a larger number of international students. In the wake of conflict in many parts of the globe, efforts should be made to promote greater understanding between students from different nationalities. Although there are various ways to promote intercultural understanding, sport can be utilized as a mean to encourage greater social interaction between students of different nationalities. Not only would it foster greater understanding, it also helps international students to adjust to the new environment emotionally and socially.

REFERENCES

- Briggs, J. D. (1994). An investigation of participant enjoyment in the physical activity instructional setting. *Physical Educator*, 51, 213-222.
- Carr, D. S., & Williams, D. R. (1993). Understanding the role of ethnicity in outdoor recreation experiences. *Journal of Leisure Research*, 25(1), 22-38.
- Coleman, D., & Iso-Ahola, S. E. (1993). Leisure and health: the role of social support and self – determination, *Journal of leisure research*, 25(2), 111-129.
- Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, 9, 119-127.
- Heikinheimo, P. S., & Shute, J. (1986). The adaptation of foreign students: students' views and institutional implications. *Journal of College Students Personnel*, 27(5), 399-405.
- Institute of international Education. (2010). International students: Enrollment trends. Retrived from <http://www.iie.org/en/Research-and-Publications/Open-Doors/>

- Data/International-Students/Enrollment-Trends/1948-2010.
- Iwata, N., & Higuchi, H. R. (2000). Responses of Japanese and American university students to the STAI items that assess the presence or absence of anxiety. *Journal of Personality Assessment*, 74(1), 48-62.
- Kahan, D. (2003). Islam and physical activity: Implication for Americans sport and physical educators. *Journal of Physical Education Recreation and Dance*, 74, 48-54.
- Karlis, G., & Dawson, D. (1999). Ethnicity and recreation: Concepts, approaches, and programming. *Canadian Ethnic Studies*, 27(2), 166-180.
- Lacina, J. G. (2002). Preparing international students for successful social experience in higher education. *New Direction for Higher Education*, 117, 21-28.
- Luzzo, D., & Henao, C. (1996). An innovative approach to assessing the academic and social needs of international students. *Journal of College Student Development*, 37(3), 351- 352.
- Misra, R., Crist, M., & Burant, C. J. (2003). Relationships among life stress, social support, academic stressors, and reactions to stressors of international students in the United States. *International Journal of Stress Management*, 10(2), 137-157.
- Nakamura, Y. (2002). Beyond the hijab: Female Muslims and physical activity. *Women Sport & Physical Activity Journal*, 11, 21-48.
- Raymore, L., Godbey, G., Crawford, D., & Von Eye, A. (1993). Nature and process of leisure constraints: An empirical test. *Leisure Sciences*, 15, 99-113.
- Suminski, R., Petosa, R., Utter, A., & Zhang, J. (2002). Physical activity among ethnically diverse college students. *Journal of American College Health*, 51, 75-78.
- Oei, T. P., & Notowidjojo, F. (1990). Depression and loneliness in overseas students. *International Journal of Social Psychiatry*, 36(2), 121-30.
- Tseng, W-C., & Newton, F. B. (2002). International students' strategies for well-being. *College Students Journal*, 36(4), 591-598.
- Wankel, L. M. (1985). Personal and situational factors affecting exercise involvement: The importance of enjoyment. *Research Quarterly For Exercise and Sport*, 56, 275-282.
- Weese, J. W. (1997). The development of an instrument to measure effectiveness in campus recreation programs. *Journal of Sport Management*, 11, 263-274.