

A Case Study of International Students' Social Adjustment, Friendship Development, and Physical Activity

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ABSTRACT

Previous literature has focused on international student's social transition and monocultural and bicultural ties. Little research has explored international students' multicultural friendship development and the role that physical activity plays in their social interaction. The current case study explored a group of international students' friendship development and the social aspect of physical activity. Data from individual interviews (pre and post), and 5 months of participant observations was used to describe two female international students' experiences. Results suggested international students faced both language and cultural barriers in their social interactions with American students. Engagement in physical activities served as the context where observations of peer-to-peer social behaviors happened. Researchers argued that the multicultural friendship developed and strengthened by engaging in these physical activities. This paper also discussed implications and limitations of the study as well as future recommendations.

Keywords: Cross-cultural transition, friendship, international students, physical activity, social adjustment

Many international students make the cross-cultural transition for more education. However, they are more than just cross-cultural travelers. Certain

factors influence the international students' journey and should be considered and studied. Previous literature suggested the use of English as a second language in an academic setting (Duanmu, Li, & Chen, 2009; Mori, 2000) contributes to the international students' stress. In addition, the adjustment required in being a member of a new and different community and culture (Duanmu et al., 2009; Thomas & Althen, 1989) adds more to the situation. Finally, the demand for multiple roles, such as student, teaching assistant, or research assistant (Wang, 2004) contributes further to academic stress.

LITERATURE REVIEW

Many of the research literature cover international students' academic performance, especially in higher education settings. Fewer studies have taken a closer look at international students' social adjustment and friendship development. Networking for friendship and developing a supportive peer system can be a challenge (e.g., becoming part of a social circle in a culturally different environment). Previous studies suggested that international students experienced alienation (Klomegah, 2006), marginalization (Brown, 2009), social loss (Hayes & Lin, 1994), loneliness (Sawir, Marginson, Deumert, Nyland, & Ramia, 2008), and helplessness (Klomegah, 2006). Companionship, friendship, and social support can boost both physical and mental health and increase life satisfaction (Nizami, 1998; Zhou, Jindal-Snape, Topping, & Todman, 2008). Hendrickson, Rosen, and Aune (2011) identified strong and weak social ties that benefit international students' acculturation. The presence of friendship is associated with goal stability, higher self-esteem and improved adjustment (Nizami, 1998). Kim, Sherman and Taylor (2008) suggested that social circle can be used as a coping strategy (e.g., offering informational and emotional support). Thus, exploring international students' social networking experience, the social barriers, as well as social support can provide those who work with international students an in-depth understanding of how proactively support international students' adjustment in the United States.

There are three types of social network that international students would develop: monocultural, bicultural, and multicultural network. Monocultural interaction (i.e., conational friendship, international students socialize with students from their home countries) provides international students opportunities to engage in practices of their cultural origin (Bochner, 1982; Zhou et al., 2008). Klomegah (2006) found frequent contact with conational friends increased international students' satisfaction.

Brown (2009) found that conational socialization recreated what was missing for international students especially a sense of belonging, which helped them cope with homesickness. On the other hand, only socializing with conational peers decreases the possibility of intercultural communication and hinder the acculturation process (Hendrickson et al., 2011). Bicultural relations (i.e., international students develop a friendship with host students) contribute to international students' intercultural communication as well as psychological adjustment. Hendrickson and colleagues (2011) suggested that the social interaction with local students brought acculturative benefits, including less homesickness and loneliness, improved language and social communication, and positive adaptation and feelings of cross-cultural experiences. Nizami (1998) suggested that international students could acquire appropriate social skills through interacting with domestic students. However, there are more barriers to have bicultural interaction (e.g., language and cultural barriers). In Hotta and Ting-Toomey's study (2013), international students reported that American students didn't like talking to international students, especially when working on group assignments. The bicultural connection was superficial; international students felt they were guests. Multicultural relations (i.e., international students develop a friendship with other international students) have a recreational function and offer international students companionship (Bochner, McLeod, & Lin, 1977; Hendrickson et al., 2011). Previous literature has focused more on international student's monocultural and bicultural ties. Little research has explored international students' multicultural friendship. Thus, the first aim of this study is to take a closer look at international students' socialization and multicultural friendship development using a case study approach.

Physical activity can serve as an approach to socialization; it can enhance an individual's capacity to interact with social groups (Milroy, 2010). The leisure time physical activity (e.g., play basketball or in a gym) can be a social venue that people interact with one another and build friendships. Team sports contribute to social well-being. In a qualitative study, participants reported the enjoyment gained through exercising with others and interacting socially and positively with people around them (Eime, Young, Harvey, Charity, & Payne, 2013). They also perceived being in an exercise group was a positive social outcome. In a systematic review of engagement in physical activities, researchers found that participating in sports results in social health outcomes, including building relationships, increased teamwork/social skills/social functioning, sense of belonging, and reduced social anxiety (Wilcox et al., 2006).

Research which focused on international students has suggested that physical activity has socializing purposes (Allen, Drane, Byon, & Mohn, 2010; Walker, Jackson, & Deng, 2007). International students also perceived interpersonal barriers to participating in physical activity (e.g., no one to participate with; Walker et al., 2007; Yoh, 2009). However, few studies focus on international students' socialization within the physical activity. Thus, the second aim of this study is to explore the influence of physical activity on international students' cross-cultural social adjustment.

RESEARCH METHOD

A case study was applied to investigate new international students' social interaction and physical activity. Tracking new international students who were currently experiencing cross-cultural transition and engaging in physical activity offers in-depth information about their experience and perception. Both individual interviews and participant observation were applied.

The current study was conducted from a social constructive paradigm. The constructivism approach assumes that people construct their understanding of reality, and on their interpretation of their immediate surroundings (Schwandt, 2000). In this study, the researchers believed that international students constructed their own meaning of acculturation, socialization, and being physically active depending on their cultural background, the interaction with the host culture, and the environment.

During the data collection process, the researchers used ethnographic techniques. Certain assumptions and rules of ethnography governed the individual interviews and fieldwork. First of all, a naturalistic perspective was adopted. The naturalistic perspective emphasizes that the world should be studied in its natural state. In this case, observation occurred in a naturalistic setting where international students exercised and socialized. Secondly, the researchers considered the research processes as reflexive; through the interaction between the participants and their peers, then that the meanings of socialization and being physically active were studied. The researchers were aware and embraced any bias existed. Further, there was an awareness that the investigator's background (the lead researcher's background as an Asian woman) influenced the data collection and results from interpretation. They became part of the product from this research

Settings

This study took place in a public research university that has a relatively large international population. Approximately 2,000 international students are currently studying at the university from over 110 countries. The university has programs assisting international students throughout their entire stay by providing services and addressing international students' needs and concerns. The university has an exercise-friendly environment. There are on-campus facilities (i.e., student rec center, outside field, outdoor courts), and local facilities (i.e., gyms in local residential, public parks, and trails) available for students. However, transportation to facilities is limited.

Participants

The participants in this study were two first-year female international graduate students: May and Bella (both pseudonyms). They were both at the initial stage of the cross-cultural transition. They formed an exercise group to play badminton once per week in their first semester. May was from Thailand, 24 years old, and a music performance major. She informed the lead researcher that she came from a physically active family. Her parents exercise daily at the public parks with her. Bella was from Indonesia, 26 years old, and a mathematics major. She informed the researcher about being raised in Muslim culture, and her family did not have a history of regular physical activity. However, Bella reported starting to exercise (e.g., swimming, jogging) every Sunday after graduating from college. Bella had a part-time tutoring job for 2 years before she came to the current university while May had only been a student. They both had attended an English Language program that prepared international students for the classroom before regular classes started. May stayed in the English program for her first semester while Bella only had English program for six weeks. May had a part-time job on campus in her first term. Bella received a fellowship for Indonesian students and did not work. Both had prepared for 2 years to come to the United States.

Procedures

Phase 1: The First Individual Interview

Institutional review board approval was obtained before data collection. Interviews took place at the beginning of the spring semester in 2015 (i.e., January) using a semi-structured format as a guide. The lead researcher initially introduced herself and described the study. Once the

participant signed the consent form, the researcher tried to establish rapport by asking background questions (e.g., how is your first semester going?). Then questions about initial perceptions of transition followed, including their preparation, significant events that happened, and opinion of her experiences and social adjustment. Inquiries on physical activity included perception of being physically active, physical activity history, current exercising habits, and motivation.

Phase 2: Fieldwork

There was 5 months of fieldwork. After the first interview, the lead researcher contacted both of them to ask for the permission to participate in their physical activity. Since their exercise schedule changed frequently, the lead researcher contacted them every week before observation. Observation took place immediately upon arriving in the field. The researcher used observation (participated in their badminton play as well as their social activity while conducting observation) with an open mind. Sands (2002) suggested that “live with naive” is one of the principles of taking field notes. Eventually, the researcher focused on the local environment, their conversation and behaviors, duration, and routine. In the first a few times of observation, the researcher took notes by speaking into a digital recorder. After building a connection with the participants (especially they started to invite the lead researcher to their social occasions), notes were taken immediately after observation. The research log was completed within 24 hr after the observation. The research log contained detailed description based on the investigator's digital notes, the interaction with May and Bella, self-reflection, and interpretation.

Phase 3: The Second Individual Interview

In the summer semester of 2015 (also the end of the participants' first-year), the lead researcher conducted a second interview using a similar guide to facilitate the reconstruction of the meaning of transition, socialization, and engagement in a given physical activity. Given the questions that emerged from the first interviews, the researcher also included the data from participant observations. The post interviews also provided the participants an opportunity to process their first-year experiences where there might be a reduction of the stress experienced from acculturation.

Phase 4: The Follow-Up

After the planned research steps, May and Bella continued to invite the lead researcher for exercise and social activities as their “friend.” The researcher only use one social occasion (in August 2015, also the beginning of their second year) to collect more observation notes and include it as part of the research data.

Data Analysis

Qualitative data can be complex especially when it comes from multiple sources and facilitates several outcomes and interpretations after the analysis. Saldana (2002) suggested that a series of specific questions are needed to assist the researcher when data is collected, reviewed, and coded. In the current study, two questions were used to guide the data analysis: (a) What, when, why, on what condition, and how does the social adjustment happen during transition? (b) How does physical activity interact with the social transition? Those questions helped the researchers determine the areas that need further exploration.

The researchers transcribed the interviews verbatim. Before data analysis, the researchers compared the transcription with the interview audio to check the accuracy. Then, a research team was developed that included two additional researchers trained in qualitative methods. The individual interview data were initially assembled in chronological order and placed in two “pools” (the first and the second semester) before coding. Descriptive coding was used. Descriptive coding is also referred as “topic coding”. The researchers chose descriptive coding for two reasons: (a) descriptive coding is particularly useful while analyzing a variety of data forms (in the current study, data included interview transcripts and field notes; Saldana, 2012); (b) due to the language barrier, May and Bella used incorrect words or phrases, or body language to help communication, it was more important to identify the major topics rather than scrutinizing the nuances. The research team read through the transcripts and field notes and assigned topics (codes) to participants’ statements. Then the researchers discussed the codes and put them into multiple categories. Based on the categories and codes, the research team assigned a definition to each code and category. If there was a disagreement, the researchers discussed the codes while looking at the literature in this field until reaching consensus.

RESULTS

Five themes emerged from data analysis depicting May and Bella's social interaction and physical activity: logistical support, bicultural social barriers, social networking, physical activity as a social opportunity, and multicultural friendship development.

Logistical Support

May and Bella entered this country and started a new life in an unfamiliar environment, and they brought only essential things in their luggage. At the beginning of their transition, they were in need of logistical support. May's Thai friends helped her with transportation, finding an apartment, and moving. Bella initially stayed with a host family who helped her stay. After she moved to a new apartment, her roommates offered her logistical support (e.g., rides, free furniture).

Bicultural Social Barriers

Barriers may appear in monocultural, bicultural, and multicultural social interaction. However, when May and Bella shared the barriers that they faced in social adjustment, they only referred to the bicultural social barriers.

Language Barriers

May and Bella both reported using the English language as difficult in their communication with others socially, especially during the first semester. They both suggested that they have difficulty understanding American students' conversation, both in class and social settings. May said, "American students, they talk very fast. I don't understand when people speak . . . I don't know what they are saying, or how to respond." However, May didn't think language was the biggest barrier, because "They can understand when I don't finish my sentences." Bella suggested that "academic conversation" was easy; the social conversation and getting engaged with American students was difficult. She said, "If you try to engage with them, you will have to understand the slang, the sense of joke. Sometimes, everybody laughs, I don't really understand what is funny."

Cultural Barriers

Another type of barrier that May and Bella both experienced was cultural barriers when they socialized with American students. Cultural discrepancy played a role in socialization process. May and Bella both suggested that they had nothing in common with American students. Thus, the interaction was difficult. May said,

“Sometimes, we have parties; we talk with American friends. The hard part is that, if you gather a bunch of American people, you don’t really know what they are talking about, it is not interested to you, and you are talking about is not interested to them. We have a big gap between the ways we think. It is different, it is hard to gather together. But basically, if you do it, you will find the feeling. But with international students, you like have the same issue.”

The subculture in this country was another obstacle that both participants identified. In this culture, socializing in bars or through drinking is common. However, May and Bella found it uncomfortable. Bella said,

“I don’t like to change myself. That is why it is hard for me to get engaged with them. I just become myself everywhere I go; it is hard to, getting melted with American culture. For example, if they invite you to a party, they like dancing, I am not going to do that. Sometimes, people asked me, let’s go to the bar. Oh, no, even though I will not drink, I still don’t want to go, since it is not my culture to go to the bar. Yeah, it is hard for me to get engaged with.”

As a girl from Muslim culture, Bella experienced more barriers and discouragement in her bicultural interaction. She shared that she experienced hateful behaviors towards her religion, which discourage her from making an effort to build bicultural relations. She elaborated,

“That is the moment I told you that made me really sad. We walk, in High Street, already dark, at 8 pm. It is a Friday night, you know, people going crazy. I think these guys were already drunk maybe. He said bad words to us about Islam; it is really hurtful I tell you. And there are a bunch of people, I just ignore. I don’t want to confront with people . . . Here, whatever you do, especially me, since I wear Hijab. So people can see me as a Muslim, immediately when they see me. Whatever I do, they will judge it, as a Muslim Asian. So it is hard.”

Social Networking

Both May and Bella made friends from the English program, their departments, and campus events. Although they both had conational friends, most of their friends were Asian international students. The main way they socialized with their friends was through lunch and dinner parties (e.g., cook and eat in one's apartment). They also interacted with American students. However, the interaction only took place for academic purpose (i.e., the discussion in or after classes, group assignment, and study group). They referred their relationship with domestic students as "superficial" and "not warm." Neither of them had American friends. In their first individual interviews, May showed interests to make more American friends since it could help improve her English while Bella did not plan to put extra effort into developing a bicultural friendship. May had more difficulty communicating in English. Her plan was to eventually pursue a DMA in the current university. Thus, she saw the benefits through socializing with American students.

Field notes, January 30, 2015. "May showed great interests in making domestic friends; she believed it helped with her language development. May still has a major language barrier in her second semester. She struggled with communicating in English. Occasionally, she had to use writing and digital dictionary to help with her conversation. She shared her social interaction with the language partner (i.e., an American undergraduate student) in the English program in her first semester. She learned the cultural difference and improved her English-speaking through interactions with her language partner. She believed that spending time with Thai friends did not benefit her communication since they only spoke Thai."

However, Bella can communicate in English fluently. Her initial goal was to finish the master's degree and move back to her home country. Thus, she reported no interests to make an effort or even sacrifice her original culture to build temporary connections with American students. At the beginning of the second year, both May and Bella were satisfied with their multicultural network. They both planned to pursue their doctoral degree. However, neither of them wanted to spend more time to build a friendship with domestic students.

Physical Activity as a Social Opportunity

In the two individual interviews, both May and Bella suggested that the major motivation to engage in regular physical activity was to lose weight. They both gained weight due to an unhealthy diet (e.g., eating food and ice cream from Burger King and McDonalds) that they developed in their first semester. Moving to the United States, the availability of unhealthy food was increased, especially some low price food that was not attainable or affordable in their home countries. Thus, dealing with the “toxic food environment” (Brownell & Horgen, 2004) was the most important motivation. However, the researcher’s observation suggested differently.

This exercise group served a social function. Several phenomena suggested that socialization was an important component for this group. First of all, socialization shared more time than playing badminton. The routine of the exercise group was 10 min of playing badminton and then around 20 min of break (for rest and conversation). Even when the participants were playing, they continually move to the middle of the court to chat.

Field notes, April 30, 2015. “Overall, they stayed at the rec center for one hour and a half, probably only played 30 minutes. They continually took breaks and chatted with each other. Both of them would go back home during the summer break. Bella said that she would have the transition in Tokyo airport. Then the two girls started researching the gifts that they could buy from Japan, how and where to exchange money, and if people at the Tokyo airport can speak English.... During another break, they spent almost 20 minutes researching the chocolate they both really like, if they could buy, and how much it cost in their home countries. They also used the google map to figure out the place in the middle if they really wanted to see each other during the summer. They found that they could both travel to Malaysia. Although it seemed very unrealistic, the two girls enjoyed their research.”

Secondly, social activity was associated with their physical activity. After badminton play, May and Bella always walked together to the grocery store for shopping. After shopping, they would walk to the bus station and take the bus. May lived close to the student rec center and the grocery store. Thus, walking to the bus station and riding the bus took her longer time than

just walking back home. To be a company with Bella, she chose the inconvenient way.

Besides that, playing badminton in the student rec center was a place for them to arrange social activity. For example,

Field notes, April 15, 2015. "May and Bella planned to start at 4 pm. They chatted for 11 minutes before they started playing. Bella was checking email on her phone during that time. She became very excited when she saw the trip that international student office arranged (to Washington, DC) on April 26th. She immediately signed up and persuade us to go with her. She said she would also invite other friends so that they would have a good day in National Mall, Memorial Parks and probably the zoo."

Playing badminton was a venue to meet new international students. Sometimes, they invited their other friends, which offered the researcher a chance to meet and socialize with international students from other countries. During the research process, the lead researcher had socialized with students from China, Malaysia, Indonesia, Thailand, South Korea, Saudi Arabia, and India since the researcher started playing badminton with May and Bella. When Bella and May played in the student rec center, unknown international students may join. The researcher observed that although they might not develop friendships with all the students whom they played with, intercultural communication (e.g., sharing cultural traditions and history) occurred during the physical activity. For example, one Indian student participated in the badminton game.

Field notes, April 15, 2015. "During the break when they were playing, an Indian student asked if he can play with us. Before the started to play, the Indian student shared the cricket team culture and physical activity in India. Everyone all briefly shared physical activity in their home countries."

Multicultural Friendship Development

May and Bella knew each other from the English program. They started to exercise and socialize with each other in the first year winter break to lose weight. Then they kept socializing and exercising once per week. At the end of the first year, they became good friends. In the second interview, May said that "We become so close in our first year." Bella moved to the same place, and they became neighbors in their second year. The lead researcher's experience socializing with May and Bella was another

demonstration of multicultural friendship development. She (the lead researcher) entered this group as a researcher, and her role was known to them. Conversation topics were common themes for international students, including home country, general experiences (i.e., how do you like the university?), major, future career plans (i.e., do you want to stay in the United States or return to your home country after graduation?), and research. Through the socialization from playing badminton and related activities, the researcher became a member of May and Bella's social circle. Several phenomena suggested that the researcher held a membership of this social group. First, the exercise schedule changed partly depending on the researcher's availability. Secondly, Bella consulted her about pursuing a Ph.D., which suggested that the researcher's perspectives might play a role in Bella's decision making. Third, May and Bella brought the researcher to their social circle and referred her as a friend.

Field notes, August 28, 2015. "Bella invited her Malaysian friends to play badminton. May could not make it due to a meeting in her department. After the exercise, May and Bella had a dinner party. It was a diverse dinner party that included Chinese, Indonesian, Malaysian, and Thai food. May and Bella introduced me (the researcher) as 'a friend we knew from playing badminton.' Both of them forgot that I initially approached them for the purpose of research."

The last evidence which suggested that multicultural friendship was established was that the researcher conducted the second individual interview in Bella's bedroom.

Field notes, June 17, 2015. The second individual interview was combined with another international dinner party. After dinner, the researcher interviewed Bella in her bedroom. She did not organize her room specifically for this visit. She was going to move and there were a lot of bags and boxes. The second interview was like two old friends sharing stories.

DISCUSSION

The current study explored a group of international students' social adjustment, friendship development, and physical activity in naturalistic settings. The aim was to describe and understand their physical activity, socialization, and the context as it really was. The researcher spent time with May and Bella and their social circle, to create closeness and gain an inner

understanding of their social life. The data analysis was not to generalize to all international students in the U.S., which is a heterogeneous population. The researcher focused on reporting the facts observed through the researcher's lens and making an interpretation of May and Bella's social network and the role that physical activity played in their social life.

Socialization and Multicultural Friendship

Results suggested that May and Bella had more multicultural friends than monocultural or bicultural friends. This result was different from previous literature. Numerous studies have suggested that international students spent most of the time socializing with conational friends (Bochner, Buker, & McLeod, 1976; Furnham & Bochner, 1986; Nizami, 1998; Rienties & Nolan, 2014; Ward, Bochner, & Furnham, 2005; Zhou et al., 2008). In this study, there were a limited number of international students from Indonesia or Thailand in the current university. Thus, they might not have an opportunity to make more conational friends. Although they were from different countries, their friends were all East Asians. They still had a higher level of cultural similarity. Previous studies suggested that cultural similarity was the strongest determinant of international students' friendship (Bochner et al., 1976; Nizami, 1998). Thus, their multicultural friendship may serve a conational function.

May and Bella only reported barriers socializing with domestic students. The main barrier that May faced came from the communication in English while Bella experienced more cultural barriers. May was aware of the negative influence of only socializing with Thai friends and the benefits of interacting with American students. She expressed the willingness to develop a bicultural friendship in her first semester when she was in her initial stage of cross-cultural transition. In this stage, international students faced the greatest sociocultural differences and acculturative stress. Thus, she was in need of bicultural interaction. In line with the acculturation theory (Ward, Okura, Kennedy, & Kojima, 1998), the expectation is that May would eventually build more bicultural ties since she expressed the needs, and she was aware of the benefits. However, she only maintained the monocultural and multicultural friendship at the end of her first year when she became more adjusted and confident navigating the culturally different environment. This trajectory was similar to Rienties and Nolan's findings (2014), the degree of segregation between Confucian Asian students and host students increased over a year.

Bella's preference was multicultural friendship throughout her first year. Compared with May, Bella did not have meaningful bicultural contact or benefits from the bicultural interaction. Oppositely, she experienced offensive behaviors from the host culture. The socialization pattern (e.g., drinking in a pub) was against her religion. Moreover, her initial goal was to return back home to develop her career. Thus, Bella chose the similar option that other international students might choose (Schartner, 2015), she had no plan to sacrifice her original culture and identity to build a temporal relationship with American students.

As an insider of this multicultural circle, the researcher engaged in both individual and group conversation with May and Bella and their friends. In the current case, the multicultural friendship mainly served a recreational function and offered companionship (Bochner et al., 1977; Hendrickson et al., 2011). When international students shared the cultural traditions and values in their home countries, the multicultural interaction provided an opportunity to engage in cultural practice (Bochner, 1982; Zhou et al., 2008).

One of the major functions of social network and friendships is to provide social support, which could be useful as a coping strategy. In this case, neither May nor Bella had used the social group to cope with stressful events. None of them had disclosed any struggles or negative feelings in their social interactions. Bella shared a stressful experience that happened one-time about hateful behaviors towards her religion. However, it took place during the first individual interview when the researcher was an outsider to her social circle. Eventually, the researcher gained membership and trust and became an insider. The researcher found that personal emotional issues or stressful events never came up in the socialization. It was possible that both of them made a smooth transition. They both spent 2 years on preparing for the cross-cultural transition so that they could handle the acculturative stress. They both lived in a diverse and open environment (i.e., the university), and they might not face a high level of acculturative stress (Lopez-Class, Castro, & Ramirez, 2011). It was also possible that they might not be comfortable sharing struggles or maladaptation due to social desirability. Misra and Castillo (2004) suggested international students might under-report their stress due to the stigma of showing a problem or weakness. The third possibility was that the cultural norms influenced Asian students' use of social support. Kim and colleagues (2008) explained that people were connected with others or groups in Asian cultures (collective cultures). Group interests were more important than personal needs. People might be more cautious bringing personal issues to the attention of their

groups. Thus, they suggested that it was more appropriate for the people in individualistic cultures to utilize social support as a coping strategy since social support was more about explicitly seeking and receiving. For Asians, it was more likely to ask for social support without disclosing any particular struggles.

Physical Activity and Social Interaction

In the current case, May and Bella mainly used physical activity as a social approach. Intercultural communication took place, and social events were organized during the badminton play. Social circle and friendship were developed and strengthened through engaging in physical activity. This result was consistent with Allen and colleague's study (2010) that sport can be a social venue for international students. It is beneficial to note that physical activity can serve as a social vehicle which facilitates intercultural communication within international students. In general social occasions (e.g., parties, pubs), international students might feel confused and uncomfortable. For example, international students might need the in-depth knowledge of the local language, social, and cultural background to understand and respond to Americans' jokes. Even if they were knowledgeable in English, the context information was missing. The intercultural communication in physical activity (i.e., sports play, recreational exercise) can be an easier start which does not require context information.

Another interesting finding was that cultural aspect of physical activity did not emerge in the current case. As a scholar who is interested in physical activity and cultural diversity, the researcher expected to see socio-cultural factors coming up through the interaction with Bella. Numerous studies have explored the barriers of Muslim women in sport. For example, Marwat and colleagues (2014) suggested that the possible constraints that Muslim women face to participate in sports included lack of role models, family responsibilities (e.g., housework, child care), financial hardships, and religious and socio-cultural restrictions (e.g., dress code). In the current case, Bella did not report any socio-cultural discouragement for her to play badminton and socialize as an international student. However, she did mention the barriers in general social interaction (e.g., the high self-consciousness that people might scrutinize her behaviors as a Muslim since she wore Hijab). Compared with general social occasions, physical activity was a more comfortable social venue for Bella.

The findings discussed above both suggested that the social aspect of physical activity benefits international students' social interaction and adjustment. The results can be useful to university administrators and staff who work closely with international students. Physical activity can be used to facilitate bicultural social interactions. Inviting American students to play with international students would be a beneficial event to create or sponsor by the University as part of planning and programming for student activities. Also, it would be an opportunity for international students to interact and communicate with American students and learn about American culture. Finally, the American students would have more exposure to cultural diversity through these types of social interaction.

LIMITATIONS AND RECOMMENDATIONS

The current study demonstrated some limitations starting with participants composed of only two female international students. The results might not apply to all international students. Future research could explore more on other international students' experience (e.g., European, African, South American students) using a larger sample. This study mainly focused on multicultural friendship. Future studies could explore international students' monocultural and bicultural friendship development in real-world settings. Due to the limited time, the research only explored international students' first-year experience. The cross-cultural adjustment was a broad definition. Kim (2000) referred the cross-cultural adjustment as a lifelong activity to maximize the "fit" to the host culture. Their first year was only the initial step of this journey. Thus, the 5 months of fieldwork might not be long enough to capture their cross-cultural social adjustment. Future research could prolong the duration to explore international students' cross-cultural transition and friendship development.

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Manuscript submitted: July 11, 2016

Manuscript revised: October 15, 2017

Accepted for publication: October 15, 2017
