A COMPARISON OF SPORT CONSUMPTION MOTIVES BETWEEN

AMERICAN STUDENTS AND ASIAN INTERNATIONAL STUDENTS

A Thesis

by

CHANHO KANG

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

December 2009

Major Subject: Kinesiology

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	George B. Cunningham
Committee Members,	Arnold Leunes
Head of Department,	Richard Kreider

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ABSTRACT

A Comparison of Sport Consumption Motives Between American Students and Asian
International Students. (December 2009)

Chanho Kang, B.E., Kyung Hee University

Co-Chairs of Advisory Committee: Dr. Paul J. Batista
Dr. George B. Cunningham

The purpose of this study was to explore the differences between American
students and Asian international students' frequency of sport spectating, motivation,
team identification, future behavior and perceived barriers to attending intercollegiate
sporting events. This study designed to provide sport marketers and athletic directors
within intercollegiate programs a more comprehensive understanding of Asian
international students and American students' characteristics by comparing the
differences of spectating behavior, team identification, motivation and potential barriers
between the groups. The results of this study show that there were significant differences
on the variables between groups. Two groups differed on frequency of attending,
frequency of watching, education, income, and marital status. Moreover, American
students scored significantly higher on the motivation, team identification and future
behavior than Asian international students. On the other hand, Asian international
students scored significantly higher on the barrier factor than American students.

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CHAPTER I

INTRODUCTION

Sport spectating has been a popular leisure activity in the United States, which is evidenced by the $11 billion spent annually by paying spectators (Trail, Anderson, & Fink, 2000; Lee, 2002). A significant number of people attend sporting events and consider themselves sports fans (James & Ridinger, 2002). One of the most popular spectator sports is college football. During the 2008 college football season, 628 college and universities played 3,493 games, with more than 48 million spectators attending intercollegiate football games sponsored by the National Collegiate Athletic Association (NCAA) (NCAA Football Attendance, 2008). Although a large number of spectators attend college football games, according to Fulks (2008), a majority of Division I intercollegiate athletic programs do not generate a profit. During the fiscal years 2004 to 2006, only 19 NCAA Football Bowl Subdivision (FBS) athletic programs reported positive net revenue. Fulks (2008) also reported that expenses continued to increase at a faster pace than revenues at the Division I level. As a result, sport managers within intercollegiate athletic program are faced with generating more revenues to offset the increasing expenses (James & Ross, 2004).

Statement of the Problem

Revenue from spectator attendance at college football games is more important than ever before, because most athletic departments seek to be self-sufficient (Robinson & Trail, 2005; Kwon & Trail, 2001). Therefore, sport marketers and athletic directors in

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This thesis follows the style of *Sport Marketing Quarterly*.

university athletic departments need to acknowledge the important factors that drive individuals to attend sporting events (Robinson & Trail, 2005). However, understanding the factors of diverse attendants is not simple because individuals' attitudes and behaviors are not determined by a single motive or factor, and they have different and diverse profiles (Mashiach, 1980). In the process of decision making to attend sporting events, sport fans have different profiles (e.g., sport fan motivation or sociodemographic variables), and different sports have different sport profiles (Trail et al., 2002). For example, game promotions influence the attendance African Americans' decisions to attend National Basketball Association (NBA) games more than those of Whites (Zhang, Pease, Hui, & Michaud, 1995). Therefore, different marketing strategies and multilateral studies are needed for specific target markets and sports (Kwon & Trail, 2001).

Numerous studies have recently been conducted to examine the specific and uncommon markets (e.g., African Americans, Hispanic Americans, and Asian-American) as sport consumers of spectator sports (Armstrong, 1998; Clarke & Mannion, 2006, Armstrong, 2002). Although these many unusual market segments have been examined, there are some market segments remaining unexamined in sport. One of the untapped target markets is international students. Although Kwon and Trail (2001) suggested the usefulness of international students at intercollegiate sporting events as a potential market, even among international students, various ethnic and cultural backgrounds should be considered (Won & Kitamura, 2007). For example, Asian societies have some common values that are different from those of Western societies, such as collectivism, family-centeredness, hierarchy and valuing harmony (Wang, 2006).

Implementing effective market segmentation programs could be one way to generate more revenue.

As mentioned above, one often-overlooked segment of the college student market is international students. The number of international college students continues to increase in the United States (Wang, 2006). According to the annual census by the Institute of International Education (IIE), International students contribute about $15.5 billion to the U.S. economy through their expenditure on tuition, fees, and living expenses, with 62.3 percent receiving the primary source of funding from personal and family funds. Further estimates suggest that 623,805 international students attended universities and colleges in the United States in the 2007/8, with almost 57% of these international students being from Asia (Wang, 2006). Moreover, according to the Open Door Report (2008), among many countries in Asian, three countries (i.e., India, China, and South Korea) remain leading sender. The number of foreign students from India, China, and South Korea has also increased dramatically. India is the leading place of origin for international students in the U.S. with 94,563 in 2007/8 (an increase of 280% from 1997/8), followed by #2 China (82,127, up 173%) and # 3 South Korea (69,124, up 161%), while other leading places (i.e., #4 Japan and #6 Taiwan) have been decreased slightly. Interestingly, although the total number of Asian international students at colleges and universities has been increasing continuously in the United States, researchers and practitioners have paid little attention to the Asian international student segment.

Significance of the Study

As sport marketers are in a highly competitive sport industry, they should not only maintain their consumer base but also develop the potential market to maximize profits. To find viable customers within the market, sport marketers should focus on why people consume sport services and how they can use the information to promote sales on the existing markets. Moreover, athletic departments should try to find untapped markets (e.g., Asian international students) and determine whether these segments are viable markets. If the unexamined market is a viable market, sport marketers could obtain new revenue acquisition.

The purpose of this study is to explore the differences between American students and Asian international students' frequency of sport spectating, motivation, team identification, future behavior and perceived barriers to attending intercollegiate sporting events. Through this research, sport marketers could understand their established target market (American students) as well as the rapidly growing market (Asian international students). Further, sport marketers in intercollegiate sport programs could use the information to establish the strategic promotion on the sporting event.

Organization of the Thesis

This thesis is categorized into five chapters. Chapter I consists of the introduction and an explanation about the fundamental purpose of the study. In Chapter II, I discuss the literature that is applicable to the subject. Chapter III contains a description of the research methods utilized in the study, while Chapter IV reveals the results of the data

analyses. Finally, in Chapter V, I discuss the implications of the study, the conclusion,

and directions for future research.

CHAPTER II

LITERATURE REVIEW

The purpose of this chapter is to review the literature on frequency of attendance, team identification, motivation, potential barriers and future behavior of sport fans, as well as sport fan motivation scales that have been used to assess the fan motives.

Sport Spectating Frequency

Various researchers have examined the sport spectating frequency at sporting events (Kahle, Kambura, & Rose, 1996; Kwon & Trail, 2001). Kwon and Trail (2001) found that international students and American students differed significantly on attending the sporting games. International students attended an average of 0.22 collegiate home football games and 1.11 men's basketball games, while American students attended an average of 2.00 football games and 3.22 men's basketball games (Kwon & Trail, 2001). Moreover, the univariate tests indicated that gender differences were also apparent on watching sporting games (Kwon & Trail, 2001).

Spectating sport game is dependent on other variables, such as team identification (Wann & Branscombe, 1993). Wann and Branscombe (1993) found that frequency of sport spectating is significantly correlated with the level of team identification. Given the importance of identification in how frequently people attend sport events, I review the literature related to this concept in the following section.

Team Identification

Team identification is defined as "the perceived connectedness to a team" (Ashforth & Mael, 1989; Swanson, Gwinner, Larson & Janda, 2003, p.153), and "the extent to which a fan feels a psychological attachment to the team" (Wann, 1997; Wann & Branscombe, 1993; Wann, Royalty, & Rochelle, 2002, p. 208). Milne and McDonald (1999) defined fan identification as "personal commitment and emotional involvement consumers have with a sport team." As can be seen from these definitions, identification is an important concept related to consumer behavior in regard to leisure and sport consumption (Trail et al., 2000).

Scholars have been trying to identify the degree of fan identification with a sport team. Sutton, McDonald, Milne, and Cimperman (1997) suggested that there are three recognizable levels of fan identification. Level 1 individuals, or "social fans," refers to "a relatively passive long-term relationship with the sport – low on emotion, low on financial commitment, low on involvement, but a definite relationship exists" (Sutton et al., 1997, p. 17). The individuals in Level 1 were characterized as having a low level of identification with a team. Sutton et al. (1997) noted that fans characterized as low identification attended sports due to the games' entertainment value or the opportunities for social relationship during the game, rather than their emotional attachment to a team.

Level 2 individuals, or "focused fans," refers to "an association with a sport or team that is based upon some attributes or elements found to be attractive" (Sutton et al., 1997, p. 17). These fans have shown a short term or transitory emotional attachment to a

specific team because of their achievement-seeking behavior. According to their team's performance, they may change their attachment to the team.

Level 3 individuals, or "vested fans," refers to "the strongest, most loyal and longest term-relationship a fan/participant can have with a sport or team" (Sutton et al., 1997, p.17). These fans often devote significant portions of their personal and financial investment in terms of time or money (Pooley, 1978; Sutton et al., 1997). This level of fan is not simply affected by the game result in terms of their identification or loyalty to their teams, but strongly identified fans view their specific team as an extension of their community (Sutton et al., 1997).

It is important to understand and measure the degree of fan/team identification for sport marketers, because team identification could be utilized to understand and predict various sport fan behaviors (Trail, Fink, & Anderson, 2003; Wann & Schrader, 1997; Madrigal, 1995). For instance, several researchers found that identification is significantly correlated with game attendance and purchasing game tickets (Wann & Branscombe, 1993). Trail et al. (2000) hypothesized that identification correlates with other motives and fan behavior. As a result, Trail et al. (2003) found that certain motives (e.g., aesthetic motives and vicarious achievement motives) are highly related to identification with team. Therefore, building high levels of team identification is important to sport marketers (Trail et al., 2003).

<p style="text-align:center">Motives of Sport Consumers for Spectating</p>

In general, motivation is an important tool for understanding consumer behaviour (Shank, 1999). Motivation is defined as "a conscious experience or subconscious

condition, which serves as a factor in determining an individual's behaviour or social conduct in a given situation" (Anderson, 1955, p.8). Deci (1971) suggested that motives are either innate or learned and generate certain types of behavior. Sloan (1989) stated that most spectator or fan behaviours fulfill social or psychological needs.

Several motivational theories have studied to analyze sport fan behaviour for spectating in sport. As one example, Sloan (1989) attempted to identify the factors which might influence sport consumers to watching sports, and suggested a number of theories that could apply to motives of fans for watching sports. Specifically, he categorized sport motivation theories into five categories to represent psychological desires and distinct emotions: the salubrious effects theory, stress and stimulation theories, catharsis and aggression theories, entertainment theory, and achievement seeking theories. As McDonald, Milne, and Hong (2002) explain

> *Salubrious effects theories* suggest that involvement in sport is motivated by pleasure and increased physical and mental well-being. *Stress and stimulation seeking theories* propose that when levels of risk, stress and arousal fall below desired levels, organisms will seek opportunities to increase arousal intensity. *Catharsis and aggression theories* suggest that participation in, or being a spectator of, aggressive acts will either result in a reduction of aggression levels, or alternatively, result in increased levels of aggression. *Entertainment theories* are concerned with attractions to sport based on the aesthetic and moral representations derived from the meaning of the sports events. Lastly,

achievement-seeking theories propose that individuals fulfill their need for achievement through athletic competition (p.101).

Despite being one of the first to theorize about sport fan motivations, Sloan's (1989) work has been criticized. Mahony, Nakazawa, Funk, James, and Gladden (2002), for instance, critique the model for a lack of empirical support. Although there is a relationship between achievement seeking and a variety of spectator behaviours, many of the other theories (e.g., catharsis theory) are inconsistent with much of the research on the impact of being a sport spectator (Goldstein, 1989).

Wann (1995) asserted that previous research overlapped one another in terms of content, and developed the Sport Fan Motivation Scales (SFMS) based on existing motivation theories (e.g., Duncan, 1983; Sloan, 1989). The SFMS included eight motivational factors: eustress, self-esteem, escape, entertainment, economic factors, aesthetics, group affiliation, and family needs. Wann (1995) found that college students have differences in motives by gender. For example, male fans were significantly higher in motivation related to the level of aesthetic, escape, eustress, entertainment and self-esteem than female fans, while females tended to have higher motivation on the family needs (Wann, 1995).

Similar to Wann's (1995) scale, Milne and McDonald (1999) introduced the Motivation of the Sport Consumer (MCS) scales. The MCS includes twelve motivational factors: aesthetics, self-esteem, self-actualization, stress release, skill mastery, value development, social facilitation, affiliation, achievement, risk-taking, aggression, and competition. Milne and McDonald (1999) stated that these factors were distributed into

four categories. The first category is the mental well being needs, which comprise the following motivational constructs: self-actualization, self-esteem and value development. The second category is social needs, which consists of the social facilitation and the affiliation factors. The third category is personal needs factor consisting of skill mastery, aesthetics and stress release. The fourth category is sport-based needs involved risk-taking, aggression, competition, and achievement. Milne and McDonald (1999) concluded that the personal needs group most likely tended to watch and listen to sports

Improving upon the scale of Wann's (1995) Sport Fan Motivation scale and Milne and McDonald's (1999) Motivations of Sport Consumers scale, Trail and James (2001) developed a motivation scales that is the Motivation Scale for Sport Consumption (MSSC). The MSSC contained 27 items related to nine motivational factors. The nine factors are: achievement, knowledge, aesthetics, drama, escape, family, physical attraction, physical skills, and social interaction. Trail and James (2001) reported that the reliability value, Cronbach's alpha coefficient for the overall scale was 0.87. Although one factor (i.e., family) was below the 0.70 cutoff recommended by Nunnally and Bernstein (1994), the overall performance of the scale was good that alpha values for the other factors ranged from 0.72 (Escape) to 0.89 (Achievement). Overall, the MSSC appeared to be a more reliable measurement for sport fan motivation than previous scales rendered.

Funk, Mahony, Nakazawa, and Hirakawa (2001) developed the Sport Interest Inventory (SII). The SII combined 30 items, and was developed and validated with the

purpose of measuring potential motives of spectators attending at the 1999 Women's World Cup. The SII included 10 motives: drama, vicarious achievement, aesthetic, interest in the teams, interest in the players, interest in soccer, national pride, excitement, social opportunities and support for women's opportunities. The finding revealed that six of the ten motives predicted 35 % of the variance in interest in the tournament. The six motives were: interest in the teams, interest in soccer, excitement, vicarious achievement, drama, and support for women's opportunities.

More recent studies have been conducted to further extend and improve the SII (e.g., Funk, Mahony, & Ridinger, 2002; Funk, Ridinger, & Moorman, 2003). Based on spectators' recommendations that were collected in the first study (Funk et al., 2001), Funk et al. (2002) added four additional factors to the 10 factors in SII. The new factors were: players as role models, entertainment value, bonding with family and wholesome environment. The reliability of the SII developed by Funk et al. (2002) was .78. The result yielded that 54% of interest in the United States women's national team was explained by five factors: interest in team, interest in soccer, entertainment, vicarious achievement, and players as role models.

Further, Funk et al. (2003) have improved the SII to include a total of 18 motives: interest in sport, bonding with friends, drama, bonding with family, aesthetics, customer service, excitement, entertainment value, sport knowledge, vicarious achievement, escape, wholesome environment, socialization, interest in team, community pride, support women's opportunities, role models and interest in players.

Another attempt to develop and refine spectator motivation scales was made by Mahony et al. (2002). Mahony et al. (2002) suggest the following seven motive scales: drama, vicarious achievement, aesthetics, team attachment, player attachment, sport attachment, and community pride. Mahony et al. (2002) examined the effect of these scales to measure the Japanese league spectators' motives. Analysis of the collecting data revealed a reasonable internal consistency for the seven motives ranging from 0.70 to 0.87. In terms of spectators' behavior, the scale predicted 17% of the variance in length of time as a fan as well as 15% of the frequency in attendance (Mahony et al., 2002).

This research suggests that the SII provides the best means for assessing motivations to attend a sport event. Thus, I provide a more in-depth review of the different dimensions of that model in the space below.

Sport Interest Inventory

Funk and his colleagues developed the Sport Interest Inventory (SII) with the purpose of identifying specific motivational factors for women's professional sports' spectators and to develop a survey instrument to measure these motives (Funk et al., 2001). Although the first version of the SII included 10 factors to examine unique spectators' motives at the 1999 Women's World Cup (WWC), 9 factors were previously identified in the literature on men's sporting games (Sloan, 1989; Trail et al., 2000; Wann, 1995). Funk et al. (2002) added four factors that emerged from the Funk et al.'s (2001) study and measured the SII to verify and extend the first version of the SII (Funk et al., 2002). The result revealed that the SII was psychometrically sound and confirmed

the factors related to women's professional soccer (Funk et al., 2002). Further, Funk et al.

(2003) improved the SII to examine "core" motive in a diverse context of sport and

identify specific motives in women's sport games. They asserted that the developed SII

can be used to examine sport spectators in variety of sport contexts. The SII provide

researchers with a valuable tool to examine unique motivational factors for sport

consumers.

In addition, the SII can provide marketers with a number of potential applications

(Funk et al., 2002; Funk et al., 2003). First, the SII can be used in developing content for

advertising campaigns (Funk, et al., 2002). For example, understanding of sport

consumer's interest in sporting events could help sport marketers to build an effective

advertisement. Second, the SII can be used in determining how to present the event in

the sport facility (Funk, et al., 2002). Funk et al. (2002) stated that the presentation of the

event involves a variety of aspects in sport events. For instance, sport practitioners could

plan a great half time show to fulfill the entertainment motives. Third, a motivational

profile of spectators can be used in the sale of sponsorships (Funk et al., 2002).

<div align="center">Barriers and Constraints</div>

"Constraints are reasons individuals have for not participating in some form of

sport consumption activity" (Funk, 2008, p.192). Jackson (1991) stated that constraints

perceived or experienced by individuals inhibit or prohibit participation in sport activity.

In other words, although motivation facilitates sport consumption behavior, constraints

or barriers can prevent or alter it (Funk, 2008). While various researchers have examined

the motivations for attending sport events, few have examined barriers to such activities.

There are exceptions, however, as evidenced by the work from Kwon & Trail (2001), Armstrong (2001), Cunningham & Kwon (2003), and Cunningham and Singer (2009).

Based on a review of literature, Armstrong (2001) identified some factors that were selected as being barriers for ethnic minority students to attend intercollegiate sporting games. The factors identified were the price of tickets, academic commitments, significant other, circle of friends, the opportunity to watch the athletic events on television, the option to spend money on other things besides sports, not knowing when tickets are available, and the quality of the opponent (Armstrong, 2001). She examined ethnic minority students' barriers that prevent the students' decision to attend intercollegiate sporting events. Although the outcome revealed that most of the factors identified as barriers do not have a substantial influence on the students' attendance at the sporting events, significant differences were found between African American students and Asian students on three of the factors: academic commitment, circle of friends, and significant other. The three factors were more influential on the Asian students' decision to attend sport events than those of African American students (Armstrong, 2001). The four items of Armstrong's scales are related with students' time and money resources. For example, money resources were assessed using two items: "the price of tickets" and "the idea that [they] can spend money on other things". Moreover, time resources were estimated by two items: "academic commitments" and "significant other" (Armstrong, 2001, p.191).

Cunningham & Kwon (2003) examined the perceived behavioral control factors to attend a men's hockey game. They considered that time and money factors can

represent prominent barriers to attending sporting games and measured each dimension using two items: "it would be difficult for me to have the time to go to a ____men's hockey game this season" (reverse scored), "I do not have the money available to go to ____men's hockey game this season" (reverse scored) (Cunningham & Kwon, 2003, p.134). They predicted two factors could have a positive relationship with participants' intentions to attend sporting games. As a result, they found that only time factor was significantly related to intentions to attend sporting games (Cunningham & Kwon, 2003). However, Cunningham and Singer (2009) interviewed students and found that the high ticket prices could have a negative impact on attending sporting events.

Although some salient barriers were identified for college students to attend sporting events, Asian international students could have different barriers to spectating sporting events with American students. For instance, Kwon and Trail (2001) stated that about 8% of the international students indicated that they are not sport spectators due to their language problems while they are watching or attending sporting events. The barrier of language problems could be a unique factor to hinder international students from attending or watching sporting events. Kwon and Trail (2001) supposed that other potential barriers may exist to restrict the attendance of highly identified international students, as well as asserted that the barriers should be defined in future research. To find out the barriers of Asian international students, the author interviewed Asian international students (n=165) and asked why they did not attend or watch intercollegiate football games during the fall 2007 season. The study resulted in four answers: (1) time conflict with their work (26%), (2) ticket prices are too expensive (22%), (3) not

interested in football games (13%), (4) do not know the football game rules (13%), and (5) others (14%) (e.g., was not enrolled at the time). For the study, items (3) and (4) were selected and added to the barriers' scale developed by Armstrong (2001).

Understanding perceived constraints can provide sport marketers with important information to build and develop marketing strategies designed to help sport consumers negotiate barriers. Moreover, examining barriers can allow sport marketers to help individuals overcome constraints or find acceptable substitute behaviours (Funk, 2008). For instance, sport marketers can use a ticket plan developed for students to increase ticket sales as well as to overcome constraints of the ticket price (Cunningham & Singer, 2009; Funk, 2008).

Future Behavior

Future behaviors are related to predict sport fan behavior, such as viewing or attending sporting events, television viewing, purchasing tickets, and consumption of sport merchandise or products marketed through sports. Fink et al. (2002) categorized the future sport fan behaviors that could have a great influence on revenue generation. The categories were environmental factors related to game attendance (ticket pricing and advertising/promotions), the spectators' present behavior (consumption of merchandise, media, and wearing product), and the spectators' behavior intention (continued loyalty, intention of merchandise consumption, and intention of attendance). The advantages of effective future behavior model are not only to improve our understanding and our ability to predict the sport consumption behavior, but also to assist sport marketers to produce effective marketing and advertising (Trail et al., 2000).

Research Questions

Through literature review it was identified that several motives, barriers, team identification, frequency of sport spectating and future behavior received academic attention from a variety of perspectives. Kwon and Trail (2001) stated that sport marketers have traditionally focused solely on the American students' profiles and those of international students have received little academic attention. As a result, an examination of Asian international students' profiles could be valuable information to sport marketers in intercollegiate sport programs. As Fink et al. (2002, p.9) stated that "if such differences do in fact exist, then it is critical to identify them in order to develop more effective marketing schemes".

Based on the literature review, the following research questions were generated:

1. What motivation factors influence Asian international students and American students to attend or watch college football games?

2. Does team identification influence Asian international students and American students to attend or watch college football game?

3. What are the potential barriers that hinder Asian international students from attending/watching college football games?

4. Do significant differences exist between American students and Asian international students in motivation, team identification, barriers and future behavior?

CHAPTER III

METHODOLOGY

This study is designed to explore the differences between American students and Asian international students' motivation, team identification, frequency of spectating behavior, future behavior and perceived barriers to attending intercollegiate sporting events. It is a quantitative study, non-experimental design, in which surveys were used for data collection purpose. For this study, the sample should include an acceptable representation of two groups (i.e., American students and Asian international students).

Participants

The data were collected from a southwestern university in the United States. The university selected for this study has a very rich history of athletic excellence. Moreover, this university also had a very large student population (exceeding 48,000) in 2009, with a substantial number of international students (approximately 4,400). The three largest international student populations at the university were Indian (26%), Chinese (18%), and Korean (12%). Participants in this study were students enrolled during the 2009 spring semester. The survey was distributed to 300 Asian international students who held F-1 visa, and 203 (83 females and 120 males) usable questionnaires were returned, a response rate of 67.3%. The survey was also sent to 300 American students, and 229 (112 females and 117 males) usable questionnaires were collected, a response rate of 76.3%.

Procedures

Mall intercept methods were used at the several places on campus, including the student center, recreation center, and the main university library. Investigators directly contacted American students and Asian international students and asked them to participate in the study. Snowball sampling was also employed. To obtain a cross-section of the student population, investigators asked participants to recommend other students they know who are attending a southwestern university. Investigators handed out the survey and asked them to fill it out.

Measures

Participants were asked to respond to team identification with the football team (Wann & Branscomb, 1993), potential barriers, motivations for attending/watching football games (Armstrong, 2001; Funk et al., 2002; Funk et al., 2003), spectator behavior (Fink, Trail, & Anderson, 2002; Trail et al., 2003), and demographic variables.

In order to measure the fan motives for this study, previously developed scales (SII) were used. For the study, one latent factor (i.e., support women's opportunity) is excluded from the SII, and 17 items (i.e., community pride, escape, interest in sport, entertainment value, aesthetics, bonding with family, vicarious achievement, drama, bonding with friends, customer service, interest in players, role model, socialization, interest in team, sport knowledge, excitement and wholesome environment) were employed from the SII. Moreover, the wording of the items of community pride was revised to examine students' school pride. The reported reliability (internal consistency) of these scales was adequate. The Cronbach's alphas of the original 54 item scale ranged

from α=0.75 to α=0.93. All of the scales had a 7-point response format ranging from *strongly disagree* (1) to *strongly agree* (7).

The seven items of team identification were adopted from the Scale for the Team Identification Measure by Wann and Branscombe (1993). Wann and Branscombe (1993) reported that the Cronbach's standardized reliability coefficient was .91. Moreover, the scores of test-retest reliability were quite consistent. The scale measured the team identification levels of the respondents relating to the university's football teams.

To measure frequency of spectating behavior, two items were used: "How many OOO football games did you attended, during the 2008 season?", "How many OOO football games did you watch on television?" Participants answered one of the following: "None", "1-2", "3-4", "5-6", "7+".

For measuring intention for future sport consumption behavior (e.g., intention to attend football games, intention to watch football games on television, intention to support the football team), three items of the future behavior scale constructed by Trail et al. (2003) were selected. This scale's reliability was adequate (α=.84) (Trail et al., 2003).

To identify barriers to attending sports events, eight factors developed by Armstrong (2001) were used. The scale includes eight items: the price of tickets, academic commitments, significant other, circle of friends, the opportunity to watch the athletic events on television, the option to spend money on other things besides sports, not knowing when tickets are available, and the quality of the opponent. Armstrong (2001) reported that the reliability coefficient of the items was .71. In addition, the

author decided to include two items: not interested in football games and do not know the football game rules.

Several demographic variables were measured. These include: age, ethnicity, gender, household income, and level of education.

Analysis

Data were coded into the Statistical Package of Social Sciences (SPSS) for Windows version 16.0. Frequency statistics were used to present demographic information, such as gender, age, nationality, education, marital status and income. A chi-square analysis was conducted to identify significant differences for demographic variables. Descriptive analysis was used to access statistical data such as mean and standard deviation.

A confirmatory factor analysis (CFA) was performed through AMOS 16.0 to examine construct validity of the scale items. Confirmatory Factor Analysis (CFA) was conducted to assess the psychometric properties of the 51 items and seventeen motivation factors. Hair, Black, Babin, Anderson, and Tatham (2006) stated that CFA is defined as "a way of testing how well measured variables represent a smaller number of constructs" (p.773). Moreover, Mahony et al. (2002) stated that "CFA is a useful multivariate approach for validating the relationship between scale items and the measurement of specific constructs" (p.9). The measurement model examined the relationships between 51 variables and 17 latent constructs (Vicarious achievement, Wholesome environment , Escape , Bonding with Friends , Socialization, Excitement, Entertainment value, Interest in Sport , Aesthetics , Interest in Team, Drama, Role

model, Sport knowledge, Bonding with family, Interest in Players , Customer service and School Pride; see Figure 1). Consistent with Tabachnic and Fidell's (1996) recommendation, respondents with missing data points were deleted from the analysis. Following Kline's (2005) recommendation, five fit indexes were used to evaluate the model's fit: the model chi-square (χ^2/df), the Steiger–Lind root mean square error of approximation (RMSEA; Steiger, 1990) with its 90% confidence interval, the Bentler comparative fit index (CFI; Bentler, 1990), non-normed fit index (NNFI; Bentler, 1990) and the standardized root mean square residual (SRMR). Hair et al. (2006) stated that reliability is "an assessment of the degree of consistency between multiple measurements of a variable" (p.137). The reliability estimates were examined using Cronbach's alpha for 17 latent constructs on motivation (See the table on page 30). Cronbach's coefficient alpha (α) is the most commonly used measure to calculate internal consistency reliability for scale or subscale (Kline, 2005). Values greater than .70 are recommended to be adequate (Nunnally & Bernstein, 1994). In addition, Hair et al. (2006) stated that "One of the biggest advantages of CFA is its ability to assess the construct validity of a proposed measurement theory" (p.776). They defined the construct validity as "the extent to which a set of measured items actually reflects the theoretical latent construct those items are designed to measure. Thus, it deals with the accuracy of measurement" (p.776).

Bivariate correlation was executed to examine the relationship among motivations, barriers, team identification and future behavior.

The study used multivariate analysis of variance (MANOVA) procedures to identify whether there were differences between American students and Asian international students on each of the dependent variables (motives, team identification, frequency of spectating behavior, future behavior, and barriers). The dependent variables were the seventeen motivational subscales, one subscale of team identification, one subscale of the future behaviors, and one subscale of barrier. There are several advantages that researcher can gain from the use of MANOVA rather than multiple ANOVAs. Hair et al. (2006) stated that there are three main advantages of MANOVA. First, "if the researcher desires to maintain control over the experimentwide error rate and at least some degree of correlation is present among the dependent variables, then MANOVA is appropriate" (p. 400). Second, "If multiple variates are formed, then they may provide dimensions of differences that can distinguish among the groups better than single variables" (p. 400). Third, "MANOVA may detect combined differences not found in the univariate tests" (p. 400).

CHAPTER IV

RESULTS

Sample Characteristics

A sample of 432 students volunteered to participate in the study. The participants were asked to complete a survey that included motivation to attending/watching football games, team identification scale with the football team, potential barriers, spectator behavior, and demographic variables. Detailed demographic characteristics are shown in Table 1.

Table 1
Demographic Characteristics by Frequency and Percentage (N= 432)

Variable	Asian international students		American students	
	Frequency	Percent	Frequency	Percent
Frequency of Spectating				
Football games attended	.84		4.03	
0	132	65.0	40	17.5
1 – 2	47	23.2	35	15.3
3 – 4	14	6.9	37	16.2
5 – 6	7	3.4	66	28.8
More than 7	3	1.5	51	22.3
Football games watched on TV	2.06		2.79	
0	67	33.0	40	17.5
1 – 2	68	33.5	70	30.6
3 – 4	40	19.7	76	33.2
5 – 6	18	8.9	28	12.2
More than 7	10	4.9	15	6.6
Gender				
Female	83	40.9	112	48.9
Male	120	59.1	117	51.1
Age				
Under 20	15	7.4	91	39.7
20-22 yrs.	38	18.7	97	42.4
23-25 yrs.	70	34.5	28	12.2
26-28 yrs.	43	21.2	10	4.4

Table 1 continued
Demographic Characteristics by Frequency and Percentage (N= 432)

		Asian international students		American students	
Age		**Frequency**	**Percent**	**Frequency**	**Percent**
	29-31 yrs.	24	11.8	2	.9
	32 yrs. or older	13	6.4	1	.4
Level of Education					
	Freshmen	8	3.9	43	18.8
	Sophomore	5	2.5	41	17.9
	Junior	15	7.4	51	22.3
	Senior	12	5.9	54	23.6
	Master	72	35.5	23	10.0
	Doctoral	81	39.9	12	5.2
	Others	10	5.0	5	2.2
Marital Status					
	Single	158	77.8	210	91.7
	Married	43	21.2	16	7.0
	Others	2	1.0	3	1.3
Income					
	Less than $15,000	91	44.8	69	30.1
	$15,000 to $24,999	45	22.2	18	7.9
	$25,000 to $39,999	10	4.9	23	10.0
	$40,000 to $59,999	7	3.4	14	6.1
	$60,000 to $84,999	6	3.0	15	6.6
	More than $85,000	2	1.0	43	18.8
	Decline	42	20.7	47	20.5
Nationality					
	American			229	100
	India	64	31.5		
	China	58	28.6		
	Republic of Korea	29	14.3		
	Taiwan	21	10.3		
	Vietnam	9	4.4		
	Kazakh	4	2.0		
	Japan	2	1.0		
	Malaysia	2	1.0		
	Iran	2	1.0		
	Indonesia	2	1.0		
	Others (Asian)	10	5.0		
	Total	203	100		

Comparisons of Sample Characteristics

A chi-square analysis was utilized to identify whether there were significant

differences for demographic variables between Asian international students and

American students. There were significant differences for frequency of attending ($\chi^2 =$

150.671, $df = 4$, $p < .001$), frequency of watching ($\chi^2 = 19.695$, $df = 4$, $p < .001$),

education ($\chi^2 = 175.763$, $df = 7$, $p < .001$), income ($\chi^2 = 62.205$, $df = 6$, $p < .001$), and

marital status ($\chi^2 = 18.406$, $df = 2$, $p < .001$). No significant difference was identified for

gender. As Table 2, concerning the level of education, it revealed that 82.5% of

American students were undergraduate students compared to 19.7% of Asian

international students who were undergraduate students; 15.3% of American students

were graduate students compared to 75.4% of Asian international students who were

graduate students.

Table 2
Comparison of Education between Groups

	Asian international students		American students	
	Frequency	Percent	Frequency	Percent
Undergraduate	40	19.7	189	82.5
Graduate	153	75.4	35	15.3
Others	6	3.0	3	1.3
Decline	4	2.0	2	.9
Total	203	100.0	229	100.0

Reliability and Validity of the Motivation Scales

The most of motivation scales of the study were employed by SII, because one

latent factor (i.e., support women's opportunity) was excluded from the SII, and the

wording of the previous item (i.e., community pride) had been slightly revised to

examine students' school pride, it was necessary to verify the reliability and the

construct validity of the motivation scales.

Reliability

The reliability were examined using Cronbach's alpha (α), Construct reliability

(CR), and average variance extracted (AVE) for seventeen motivational factor (see

Table 3 on page 30). Cronbach's alpha (α) values were greater than the .70 standard

(Nunnally & Bernstein, 1994), ranging from a low of α = .82 (customer service) to a

high of α = .95 (excitement or escape) for motivation factors.

Validity Evidence

The results of the confirmatory factor analysis (CFA) revealed the data

adequately fitted the seventeen motivational factor model (see figure1). The chi-square

value (χ^2 = 2111.35, N = 432) divided by the degrees of freedom (df = 1088) was 1.94, p

< .05, signifying a close fit (Kline, 1998). The RMSEA value of 0.051 was within the

0.05−0.08 range for an acceptable model fit (Browne & Cudeck, 1993; Hair et al., 1998).

The NNFI (0.93) and CFI (0.95) measures were both above the 0.90 benchmark (Bentler,

1990). The SRMR (0.04) was below the recommended 0.10 ceiling indicating an

adequate fit (Kline, 1998). The results of the CFA and construct validity tests on

seventeen latent factors of the SII revealed that the most of 51 items of 17 latent factors

had shown acceptable validity evidence.
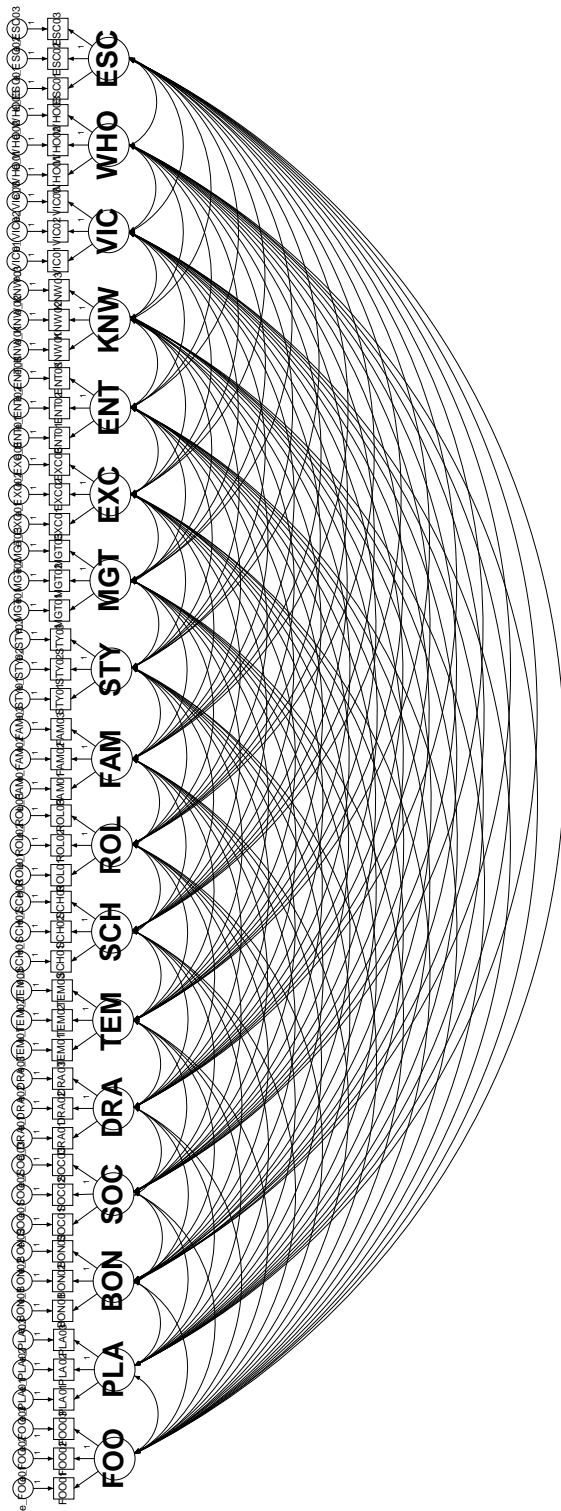
Model Fit
S-B χ^2/df (1937.56/1088) = 1.78
RMSEA = .051 (90%
C.I..047,.055)
NNFI = .944
CFI = .944
SRMR = .048

Figure 1 Measurement Model of Motivation

Results for Research Question 1

Research Question 1 asked "What motivation factors influence Asian

international students and American students to attend or watch college football games?

The participants answered their level of motivation by 17 motivational scales with 51

items. All of the scales had a 7-point response format ranging from *strongly disagree* (1)

to *strongly agree* (7). The reported reliability (internal consistency) of these scales was

adequate. The Cronbach's alpha values were greater than the .70 standard (Nunnally &

Bernstein, 1994), ranged from α=0.82 (customer service) to α=0.95 (excitement or

escape).

Table 3
Means, Standard Deviations and Cronbach's Alphas for Motivation Factors (*N*= 432)

Variable	Combined Sample	Group	
		Asian	American
Drama (DRA) (= .92)	5.49 (1.58)	5.01 (1.72)	5.83 (1.36)
Excitement (EXC) (= .95)	5.40 (1.51)	4.76 (1.48)	5.85 (1.38)
Interest in Team (TEM) (= .93)	5.24 (1.70)	4.64 (1.66)	5.67 (1.61)
School Pride (SCH) (= .88)	4.95 (1.67)	4.66 (1.63)	5.16 (1.67)
Sport knowledge (KNW) (= .91)	4.86 (1.58)	4.33 (1.45)	5.24 (1.56)
Wholesome environment (WHO) (= .90)	4.72 (1.50)	4.37 (1.37)	4.96 (1.55)
Bonding with Friends (BON) (= .92)	4.70 (1.59)	4.15 (1.45)	5.08 (1.58)
Vicarious achievement (VIC) (= .94)	4.66 (1.74)	4.46 (1.61)	4.81 (1.82)
Escape (ESC) (= .95)	4.30 (1.75)	3.98 (1.50)	4.54 (1.87)
Socialization (SOC) (= .86)	4.16 (1.53)	4.00 (1.43)	4.27 (1.59)
Customer service (MGT) (= .82)	4.15 (1.33)	4.02 (1.27)	4.24 (1.59)
Entertainment value (ENT) (= .94)	4.14 (1.67)	4.01 (1.43)	4.23 (1.81)
Aesthetics (AES) (= .90)	4.06 (1.61)	3.71 (1.38)	4.31 (1.72)
Role model (ROL) (= .91)	4.03 (1.55)	4.19 (1.38)	3.92 (1.66)
Bonding with family (FAM) (= .92)	3.43 (1.72)	3.24 (1.51)	3.57 (1.85)
Interest in Sport (FOO) (= .87)	3.34 (1.69)	3.11 (1.42)	3.51 (1.85)
Interest in Players (PLA) (= .91)	2.50 (1.39)	2.88 (1.44)	2.24 (1.29)
Future Behavior (FUB) (= .89)	5.01 (1.62)	4.53 (1.44)	5.43 (1.67)

Descriptive Statistic Analysis

Table 3 contains summated means and standard deviations for each of the 17

factors of motivation for Asian international students and American students. As Table 4

shows, the means for each construct on Asian international students ranged from 2.88 for

Interest in Players to 5.01 for Drama, while standard deviations ranged from 1.27 to 1.72.

On the other hand, as Table 5, the means for each construct on American students ranged

from 2.24 for Interest in Players to 5.85 for Excitement. Standard deviations ranged from

1.29 to 1.87.

Bivariate Correlation Analysis

For Asian international students' sample, the bivariate correlations are presented

in Table 4. The inter-correlations among the motives were moderate, but Interest in

player showed low correlations with eight motives. Moreover, interest in player showed

a negative relationship with School pride. Future behavior has statistically significant

positive correlations with all motivation factors except the motive of interest in player

(see Table 4). Moreover, ten of the relationships are high ($r \geq 0.52$), while demonstrating

a strong relationship between the motivation factors (Cohen and Cohen, 1983).

On the other hand, for American students' sample, the bivariate correlations are

presented in Table 5. The inter-correlations among the motivation subscales were

moderate, but the interest in player showed low correlations with seven motivation

subscale. In addition, interest in player showed negative relationships with escape,

school pride, interest in team, excitement and drama. Future behavior has statistically

significant positive correlations with all motivation factors except the motive of interest

in player (see Table 5). In addition, eight of the relationships are high ($r \geq 0.53$), while

demonstrating a strong relationship between the motivation factors (Cohen and Cohen,

1983).

Table 4

Bivariate Correlations of Asian international students' Motivation, Future Behavior, Team Identification, and Barrier ($N = 203$)

	DRA	EXC	TEM	SCH	KNW	WHO	BON	VIC	ESC	SOC	MGT	ENT	AES	ROL	FAM	FOO	PLA	FUB	TID	BAR
DRA	1																			
EXC	.55**	1																		
TEM	.76**	.63**	1																	
SCH	.53**	.64**	.69**	1																
KNW	.53**	.70**	.63**	.58**	1															
WHO	.47**	.64**	.58**	.58**	.61**	1														
BON	.53**	.48**	.58**	.43**	.50**	.53**	1													
VIC	.55**	.67**	.65**	.69**	.68**	.75**	.46**	1												
ESC	.45**	.52**	.50**	.47**	.51**	.61**	.45**	.53**	1											
SOC	.53**	.45**	.57**	.41**	.51**	.49**	.67**	.45**	.49**	1										
MGT	.41**	.59**	.49**	.56**	.59**	.55**	.46**	.55**	.49**	.59**	1									
ENT	.39**	.58**	.48**	.51**	.64**	.57**	.42**	.56**	.42**	.44**	.54**	1								
AES	.38**	.57**	.58**	.57**	.56**	.52**	.52**	.55**	.49**	.63**	.70**	.49**	1							
ROL	.39**	.42**	.43**	.57**	.34**	.45**	.30**	.46**	.36**	.45**	.59**	.45**	.55**	1						
FAM	.18*	.26**	.20**	.19**	.27**	.29**	.30**	.33**	.16*	.40**	.50**	.31**	.54**	.42**	1					
FOO	.29**	.31**	.48**	.41**	.46**	.36**	.47**	.40**	.31**	.57**	.49**	.45**	.59**	.34**	.42**	1				
PLA	.14*	.06	.09	-.02	.11	.17*	.30**	.08	.13	.41**	.28**	.14	.25**	.13	.33**	.44**	1			
FUB	.46**	.59**	.58**	.62**	.60**	.68**	.41**	.69**	.63**	.45**	.52**	.55**	.57**	.40**	.25**	.38**	.07	1		
TID	.23**	.37**	.48**	.49**	.42**	.38**	.25**	.46**	.28**	.36**	.42**	.36**	.55**	.33**	.22**	.50**	.11	.53**	1	
BAR	.20**	.11	.16*	.07	.08	.18*	.18**	.11	.12	.22**	.18*	.11	.14*	.21**	.10	.10	.17*	.09	-.12	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Note: Vicarious achievement (VIC), Wholesome environment (WHO), Escape (ESC), Bonding with Friends (BON), Socialization (SOC), Excitement (EXC), Entertainment value (ENT), Interest in Sport (FOO), Aesthetics (AES), Interest in Team (TEM), Drama (DRA), Role model (ROL), Sport knowledge (KNW), Bonding with family (FAM), Interest in Players (PLA), Customer service (MGT), School Pride (SCH), Future Behavior (FUB), Team Identification (TID), and Barrier (BAR)

Table 5

Bivariate Correlations of American students' Motivation, Future Behavior, Team Identification, and Barrier (*N* = 229)

	DRA	EXC	TEM	SCH	KNW	WHO	BON	VIC	ESC	SOC	MGT	ENT	AES	ROL	FAM	FOO	PLA	FUB	TID	BAR
DRA	1																			
EXC	.41**	1																		
TEM	.46**	.67**	1																	
SCH	.25**	.50**	.60**	1																
KNW	.27**	.40**	.39**	.30**	1															
WHO	.26**	.59**	.55**	.54**	.45**	1														
BON	.35**	.56**	.46**	.43**	.23**	.44**	1													
VIC	.12	.53**	.50**	.55**	.40**	.59**	.37**	1												
ESC	.27**	.57**	.41**	.50**	.36**	.54**	.39**	.51**	1											
SOC	.26**	.51**	.46**	.44**	.39**	.49**	.59**	.42**	.47**	1										
MGT	.23**	.45**	.37**	.32**	.37**	.51**	.26**	.35**	.33**	.40**	1									
ENT	.16*	.51**	.47**	.41**	.34**	.54**	.33**	.46**	.41**	.47**	.40**	1								
AES	.23**	.50**	.45**	.38**	.54**	.51**	.25**	.47**	.40**	.36**	.57**	.49**	1							
ROL	.06	.35**	.33**	.41**	.35**	.44**	.18**	.44**	.40**	.38**	.42**	.41**	.51**	1						
FAM	.06	.25**	.17*	.28**	.30**	.32**	.22**	.24**	.28**	.30**	.41**	.23**	.45**	.45**	1					
FOO	.11	.36**	.36**	.25**	.63**	.38**	.14*	.38**	.33**	.39**	.38**	.46**	.63**	.40**	.26**	1				
PLA	-.13	-.02	-.20**	-.01	.16*	.08	.01	.10	-.01	.16*	.24**	.15*	.24**	.21**	.19**	.31**	1			
FUB	.31**	.68**	.63**	.60**	.47**	.59**	.39**	.58**	.57**	.44**	.42**	.58**	.53**	.43**	.30**	.49**	.03	1		
TID	.13	.59**	.58**	.60**	.41**	.52**	.34**	.66**	.51**	.48**	.35**	.55**	.53**	.47**	.29**	.52**	.09	.77**	1	
BAR	-0.1	-.22**	-.19**	-.03	-.16*	-0.102	.03	-.18**	-0.1	-0.03	-.05	-.27**	-.17**	.02	.00	-.14*	.24**	-.22**	-.26**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Note: Vicarious achievement (VIC), Wholesome environment (WHO), Escape (ESC), Bonding with Friends (BON), Excitement (EXC), Entertainment value (ENT), Interest in Sport (FOO), Aesthetics (AES), Interest in Team (TEM), Drama (DRA), Role model (ROL), Sport knowledge (KNW), Bonding with family (FAM), Interest in Players (PLA), Customer service (MGT), School Pride (SCH), Future Behavior (FUB), Team Identification (TID), and Barrier (BAR)

Results for Research Question 2

Research Question 2 asked "Does team identification influence Asian international and American students to attend or watch college football game?" The participants answered their level of team identification by the team identification scale developed by Wann and Branscombe (1993).The reported reliability (internal consistency) of the scale was adequate. The Cronbach's alpha value ($\alpha = 0.91$) was greater than the .70 standard (Nunnally & Bernstein, 1994).

Bivariate Correlation Analysis

Means, standard deviations and bivariate correlations between team identification and future behavior for Asian international students and American students are separately presented in Table 4 and Table 5. Team identifications of Asian international and American students are positively related to future behaviors. Further, both of the relationships are high ($r \geq 0.52$), while demonstrating a strong relationship between the subscales (Cohen and Cohen, 1983).

Results for Research Question 3

The third research question asked "What are the potential barriers that hinder Asian international students from attending/watching college football games?" The participants answered their level of barriers by 10 items of barrier. All of the scales had a 7-point response format ranging from *strongly disagree* (1) to *strongly agree* (7). The reported reliability (internal consistency) of these scales was adequate. The Cronbach's alpha value ($\alpha = 0.72$) was greater than the .70 standard (Nunnally & Bernstein, 1994).

Bivariate correlations are presented in Table 4. The barrier factor for Asian

international students was not related to future behavior. Table 6 contains summated

means and standard deviations for each of the 10 factors of barrier for Asian

international students.

Table 6
 Means and Standard Deviations of the Items of Barrier Factor of Asian International
Students ($N = 203$)

Items of barrier factor	Mean	SD
The price of tickets (B_pri)	4.74	1.64
Academic commitments (B_aca)	4.67	1.78
My circle of friends (B_cir)	4.61	1.63
The idea that I can spend my money on other things (B_mon)	4.33	1.68
The opportunity to watch athletic events on television (B_opp)	4.21	1.56
My significant other (B_sig)	4.12	1.61
The quality of the opponent (B_qua)	4.10	1.67
Not interested in football games (B_noi)	3.94	1.90
Do not know the football game rules (B_rul)	3.87	1.95
Not knowing when tickets are available (B_nok)	3.66	1.71

Results for Research Question 4

The fourth research question four asked "Do significant differences exist

between American students and Asian international students in motivation, team

identification, barriers and future behavior?" A GLM-Multivariate procedure was

utilized to examine whether differences existed by group (American students and Asian

international students). The dependent variables were the seventeen motivation

subscales, the team identification subscale, the barrier subscale, and the future behavior

subscale. The multivariate effects of group, Wilks' $\Lambda = .65$, $F (20, 411) = 11.13$, p <

.001, on the set of attitudinal and behavioral measures were significant. The results

reflected a large association between groups and the set of attitudinal and behavioral

measures ($\eta^2 = .35$) (Cohen and Cohen, 1988).

Comparisons of Spectator Motives

The univariate tests procedure for the motivation factors are represented in Table

7. As Table 7, the univariate tests indicated that the two groups differed on fifteen

subscales of seventeen motive subscales. American students scored significantly higher

on the fifteen subscales than Asian international students. Detailed values (mean and

standard deviation) were presented in Table 8.

Table 7
Univariate Results for Group on Motives of Participants

Source	DV	df	F	p	η^2	Power
Group	Excitement (EXC)	1	74.409	.000	.007	.400
	Bonding with Friends (BON)	1	59.093	.000	.121	1.000
	Interest in Team (TEM)	1	53.374	.000	.110	1.000
	Drama (DRA)	1	45.765	.000	.096	1.000
	Sport Knowledge (KNW)	1	37.451	.000	.080	1.000
	Wholesome Environment (WHO)	1	24.344	.000	.054	.998
	School Pride (SCH)	1	17.439	.000	.039	.986
	Aesthetics (AES)	1	15.404	.000	.035	.975
	Interest in Players (PLA)	1	15.197	.000	.034	.973
	Escape (ESC)	1	12.144	.001	.027	.935
	Socialization (SOC)	1	9.500	.002	.022	.868
	Vicarious Achievement (VIC)	1	9.186	.003	.021	.856
	Interest in Sport (FOO)	1	5.167	.024	.012	.621
	Customer Service (MGT)	1	5.159	.024	.012	.620
	Bonding with Family (FAM)	1	4.861	.028	.011	.595
	Entertainment Value (ENT)	1	2.926	.088	.148	1.000
	Role Model (ROL)	1	1.835	.176	.004	.272

Table 8

Means (Standard Deviation) of Motives of Participants by Group

Item	Sample	Group	
Motives of Sport Consumers		Asian International	American
Interest in Sport (FOO)	3.35	3.16	3.52
	(1.65)	(1.44)	(1.81)
Interest in Players (PLA)	2.60	2.87	2.36
	(1.40)	(1.41)	(1.34)
Bonding with Friends (BON)	4.79	4.22	5.29
	(1.53)	(1.46)	(1.42)
Socialization (SOC)	4.20	3.96	4.40
	(1.51)	(1.45)	(1.54)
Drama (DRA)	5.39	4.87	5.85
	(1.58)	(1.69)	(1.33)
Interest in Team (TEM)	5.20	4.62	5.72
	(1.66)	(1.65)	(1.49)
School Pride (SCH)	4.99	4.65	5.28
	(1.59)	(1.59)	(1.53)
Role model (ROL)	4.11	4.21	4.02
	(1.47)	(1.35)	(1.56)
Bonding with family (FAM)	3.54	3.35	3.71
	(1.67)	(1.46)	(1.83)
Aesthetics (AES)	4.06	3.75	4.33
	(1.56)	(1.36)	(1.67)
Customer service (MGT)	4.13	3.98	4.26
	(1.30)	(1.29)	(1.29)
Excitement (EXC)	5.38	4.77	5.91
	(1.49)	(1.51)	(1.24)
Entertainment value (ENT)	4.20	4.06	4.32
	(1.59)	(1.39)	(1.74)
Sport knowledge (KNW)	4.80	4.34	5.21
	(1.53)	(1.42)	(1.51)
Vicarious achievement (VIC)	4.79	4.55	5.01
	(1.60)	(1.49)	(1.67)
Wholesome environment (WHO)	4.75	4.39	5.07
	(1.46)	(1.35)	(1.48)
Escape (ESC)	4.39	4.09	4.64
	(1.67)	(1.46)	(1.80)

Comparisons of Team Identification

The univariate tests procedure for the team identification factor is represented in Table 9. The tests indicated that American students ($M = 4.67$) scored significantly higher on the team identification than American students ($M = 3.70$) (see Table 10).

Table 9
Univariate Results for Group on Team Identification of Participants

Source	DV	df	F	p	η^2	Power
Group	Team Identification	1	41.409	.000	.088	1.000

Table 10
Means (Standard Deviation) of Team Identification of Participants by Group

Item	Sample	Group	
		Asian International	American
Team Identification	4.21	3.70	4.67
	(1.65)	(1.62)	(1.53)

Comparisons of Barrier

The univariate tests procedure for the barrier factor is represented in Table 11. The tests indicated that Asian international students ($M = 4.22$) scored significantly higher on the barrier than American students ($M = 3.86$) (see Table 12).

Table 11
Univariate Results for Group on Barrier of Participants

Source	DV	df	F	p	η^2	Power
Group	Barrier	1	59.184	.000	.119	1.000

Table 12

Means (Standard Deviation) of Barrier of Participants by Group

Item	Sample	Group	
		Asian International	American
Barrier	3.86	4.22	3.86
	(0.99)	(0.87)	(0.99)

*Co*mparisons of Future Behavior

The univariate tests procedure for the future behavior factor is represented in

Table 13. The tests indicated that American students ($M = 5.43$) scored significantly

higher on the barrier than Asian international students ($M = 4.53$) (see Table 14).

Table 13

Univariate Results for Group on Future Behavior of Participants

Source	DV	df	F	p	η^2	Power
Group	Future Behavior	1	35.134	.000	.076	1.000

Table 14

Means (Standard Deviation) of Future Behavior of Participants by Group

Item	Sample	Group	
		Asian International	American
Future Behavior	5.01	4.53	5.43
	(1.63)	(1.44)	(1.67)

CHAPTER V

CONCLUSIONS

Discussion and Implications

The purpose of this study was to explore the differences between American students and Asian international students' frequency of sport spectating, motivation, team identification, future behavior and perceived barriers to attending intercollegiate sporting events. This study designed to provide sport marketers and athletic directors within intercollegiate programs a more comprehensive understanding of Asian international students and American students' characteristics by comparing the differences of spectating behavior, team identification, motivation and potential barriers between the groups.

There were significant differences found in demographics, the frequencies of spectating, future behavior and team identification between Asian international students and American students. As Table 2, concerning the level of education, it revealed that 82.5% of American students were undergraduate students compared to 19.7% of Asian international students who were undergraduate students; 15.3% of American students were graduate students compared to 75.4% of Asian international students who were graduate students. Generally, the academic commitment of graduate students is often greater than that of undergraduates, therefore influencing their extracurricular activities. Previous research indicated that the graduate students' academic commitment could act as a barrier to sport attendance (Armstrong, 2001).

As Table 1, the result indicated that the attendance frequency of American students was very high, with almost half (i.e., 45%) of the total number of American students attending over 3 home games. Otherwise, the attendance frequency of Asian international students was very low, with about 88% of the total number of Asian international students attending less than 3 home games. Approximately 65% of the Asian international students reported that they had never attended an intercollegiate football game. Moreover, there were significant differences on television viewing by group. Asian international students watched home team's football games less frequently than those of American students. Moreover, American students were more likely to attend future game than were Asian international students. In addition, American students were significantly higher in their level of team identification than that of Asian international students (see Table 10). As Table 4 and Table 5, the results of bivariate analysis indicated that the construct of team identification were positively related to future behavior on Asian international students and American students. These results indicated that spectators who highly identified with a sport team were willing to attend more games and pay more for tickets (Wann and Vranscombe, 1993). Sutton et al. (1997) have noted that from a managerial perspective, fan identity produces two results of benefit: "decreasing price sensitivity" and "decreasing performance-outcome sensitivity." Based upon this information, it can be suggested that intercollegiate managers engage in more marketing efforts to better foster team identification with each football team. Sutton et al. (1997) suggested four strategies to increase fan identification that are under the control of management. The first is "increase team/player accessibility

to the public" (Sutton et al., 1997, p20). They stated that the accessibility of the team could provide sport fans greater attraction for their team (Sutton et al., 1997). The second is "increase community involvement activities" (Sutton et al., 1997, p20). The effort of the community relationships between sport fans and sport teams could play an important role in building and increasing fan identification on the teams (Sutton et al., 1997). The third is "reinforce the team's history and tradition" (Sutton et al., 1997, p21). The reinforcement of a team's reputation could play a significant role in building fan identification (Sutton et al., 1997). The fourth is "create opportunities for group affiliation and participation" (Sutton et al., 1997, p21). Teams should promote marketing communications with fans to increase their sense of belonging and affiliation (Sutton et al., 1997).

Otherwise, Asian international students were significantly higher in their level of barriers than were American students (see Table 12). Although the current study indicated that the barrier factor was not related to future behavior, previous researches have reported that factors of constraint were negatively correlated with attendance (Zhang, Pease, Hui, & Michaud, 1995; Welki and Zlatoper, 1999). Welki and Zlatoper (1999) reported that such barriers negatively influenced on attendance at US football games. Through the study, one of Asian international students stated that "sometimes, I do not attend the football game just because I have no information about the time of the football game. Hence, if there is an effective announcement about the football game or there is a professional website to tell students the rules of the game, it will attract more people to attend the game." Based upon these results, marketing directors of athletic

department could consider the strategic promotion/event toward Asian international segments to overcome these constraints that Asian international students have. For example, a large Southwestern university athletic program has an annual football symposium for international students. By purchasing the symposium tickets, international students get an opportunity to know the football game rules as well as the school's tradition and culture via the symposium; in addition, they get a free football game ticket. Through this kind of promotion, intercollegiate athletic departments could enhance Asian international students' interests and attendance to football games, as well as Asian international students' knowledge on football game rules. However, Cunningham and Singer (2009, p47) stated that "one-time promotion aimed at attracting certain market segments are likely to fail." Because the one-time promotion could have limitation to enhance the ongoing interest of each international student to attend sporting games, marketers should consider effective marketing strategies to attract international students continuously. For example, most international groups have student associations. Marketers can contact a representative of the association and propose the reasonable group discount promotion if the members of the association attend the sport games as a group. Promoting a large group could be a more effective marketing strategy than marketing individuals separately. Moreover, through the official websites of team, managers could allow students to learn football game rules easily and efficiently.

Shank (1999) stated that motivation is an important tool for understanding consumer behavior. The fundamental questions of this study related what motivational factors influence Asian international students and American students to attend college

football games, and what the differences were between groups. The results of this study

indicated that highly ranked motives of Asian international students and American

students were drama and excitement. Individuals who are influenced by the motive of

drama would be expected to prefer watching a close game where the outcome is

uncertain (Funk et al., 2001; Mahony et al., 2002). However, because the drama of the

football games is hard to control, it is difficult to satisfy spectators' needs for drama. For

example, it is not easy to satisfy the consumers if their home team is losing in a blow-out

game. However, in spite of the limitation in practice, sport marketers and athletic

directors in university athletic departments could use some promotion strategies to

satisfy the desire for drama, such as showing replays of dramatic or key plays, or

offering past dramatic games by using the big screens at a stadium (Mahony et al., 2002).

Furthermore, as Table 4, Excitement, Interest in team, Interest in Team and Vicarious

Achievement were highly ranked motives among Asian international students. Thus,

sport marketers should focus on these factors to increase the future ticket sales. In the

motive of vicarious achievement, marketers can enhance fans' vicarious achievement

through post-game celebrations where players and fans intermingle (Mahony et al.,

2002). However, the factor of vicarious achievement is not under the control of

management, and it is impossible for teams to win every game. Therefore, sport

marketers need additional strategies for increasing other factors, such as, Excitement,

Interest in Team and School pride. Because these factors were less dependent on the

outcome of the game than drama or vicarious achievement, practitioners at athletic

departments could control these motivational factors. For example, enthusiastic cheering

and cheerleading music could help spectators to be excited during the game. In addition, sport marketers could advertise a message that a college football team enhances the reputation of school or represents the identity of school. Moreover, concerning of interest in team, managers could also endeavor to increase the interactions between the students and the team. If the team can has positive interactions with the students who have strong interest in team, it will have a better chance of increasing attachment to the team (Mahony et al., 2002). For example, marketing through official well-made team websites could provide numerous interesting information of team, such as tradition and history of team.

On the other hand, as Table 4, Asian international students and American students were not likely to be interested in football players. The result is consistent with the previous studies (Funk et al., 2002; Funk et al., 2004; Mahony et al., 2002).

Through the comparing the two groups' respondents on motives by MANOVA, American students were found to be significantly higher in motives for the most part. The results indicated that there were more hard-core fans among American students than were Asian international students. Based on the results, to encourage the Asian international students to become more active fans and attend more events could need more effort and cost than those of American students. The costs perhaps outweigh the benefits of accessing the new market segment. However, if attendance at sporting events can be increased by even 1%, that could make a great contribution to the revenue of the athletic department. For example, at the top 10 football revenue schools, that increase would translate into additional revenue of ticket sales from $371, 739 to 475,563 beside

the revenue from concessions and parking fees. Therefore, athletic departments should carefully determine whether these segments are viable markets. If the market segment of Asian international student is financially feasible, athletic departments should try to develop the untapped markets, and to obtain new revenue acquisition through the market segment.

<div align="center">Limitations and Future Directions</div>

There are limitations to this study. First, the data-collection effort only focused on students of one university. Thus, the generalizability is certainly limited that the results might be slightly different in other setting. Moreover, because the study only focused on a college football game, the results cannot be generalized to other sports other than college football. Therefore, future research efforts should also examine other sport, such as basketball, volley ball and softball. Second, although the scale of barriers by Armstrong (2001) includes a fairly comprehensive factor of barriers, and the researcher tries to include some apparent barriers that Asian international students could have, there are probably more that might be applicable that the study did not include. Future research should include other potential barriers that hinder Asian international student to attend sporting games, such as the language problems while they are watching or attending sporting events (Kwon and Trail, 2001). Third, concerning the education level, differences could exist between graduate students and undergraduate students, because the academic commitment of graduate students is often greater than that of undergraduate students. Therefore, future research should examine whether the level of education influence students to attend or watch intercollegiate sporting games. Fourth,

although previous studies found that there were significant difference between females and males on motives, sport consumption behavior, or team identification (James and Ridinger, 2002), the study did not concerned with gender differences. Clearly, future research should investigate gender differences in Asian international students regarding their motives, team identification, spectating behavior and barriers.

REFERENCES

Anderson, W. (1955). *A functional approach to consumer motivation. Consumer behavior and motivation*. Urbana: University of Illinois Press.

Armstrong, K. L (1998). Ten strategies to employ when marketing sport to Black consumers. *Sport Marketing Quarterly*, *7*(3) 11-18

Armstrong, K. L (1999). A quest for a market: A profile of the consumers of a professional women's basketball team and the marketing implications. *Women in Sport and Physical Activity Journal, 8*(2), 103-126

Armstong, K. L. (2001). Creating multicultural sport spectating experience: Marketing the sociology of sport consumption. *International Journal of Sport Management, 2*(3), 183-204

Armstrong, K. L. (2002). Race and sport consumption motivation: A preliminary investigation of a Black consumers' sport motivation scale. *Journal of Sport Behavior, 25*(4), 309-330

Ashforth, B. E. & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*(1), 20-30

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238-246

Branscombe, N. R., & Wann, D.L. (1991). The positive social and self-concept consequences of sports team identification. *Journal of Sport and Social Issues, 15*, 115-127.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K.A. Bollen & J.S. Long, Editors, *Testing structural equation model* (pp.136-163). Newbury Park, CA: Sage Publications.

Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology, 34, 366-375.*

Clarke, I. & Mannion, R. (2006). Marketing sport to Asian-American consumers. *Sport Marketing Quarterly. 15*, 20-28.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression in behavioral research.* New York: Holt, Rinehart & Winston.

Cunningham, G. B., & Kwon, H. (2003). The theory of planned behaviour and intentions to attend a sport event. *Sport Management Review, 6*, 127-145

Cunningham, G. B., & Singer, J. N. (in press). "You'll face discrimination wherever you go": Student athletes' intentions to enter the coaching profession. *Journal of Applied Social Psychology.*

Deci, E. L. (1975). *Intrinsic motivation.* New York: Plenum.

Duncan, M. C. (1983). The symbolic dimensions of spectator sport. *Quest, 35*, 29-36.

Fink, J. S., Trail, G. T., & Anderson, D. F. (2002). An examination of team identification: Which motives are most salient to its existence? *International Sports Journal, 6*, 195-207.

Fournier, S. (1998). *Sport in society: Issues and consroversies (*6th ed.). Boston, MA: McGraw-Hill.

Fulks, D. L. (2008). *2004-2006 NCAA revenue and expenses of Division I intercollegiate athletic programs report*. Indianapolis, IN: National Collegiate Athletic Association.

Funk, D. C. (2008). *Consumer behavior in sport and events: Marketing action*. Boston: Butterworth-Heinemann/Elsevier.

Funk, D. C., Mahony, D.F., Nakazawa, M., & Hirakawa, S. (2001). Development of the Sports Interest Inventory (SII): Implications for measuring unique consumer motives at sporting events. *International Journal of Sports Marketing & Sponsorship, 3*, 291-316.

Funk, D. C., Mahony, D. F., & Ridinger, L. (2002). Characterizing consumer motivation as individual difference factors: Augmenting the Sport Interest Inventory (SII) to explain level of spectator support. *Sport Marketing Quarterly, 11*, 33-43.

Funk, D. C., Ridinger, L. L., & Moorman, A. M. (2003). Understanding consumer support: Extending the Sport Interest Inventory (SII) to examine individual differences among womes's professional sport consumers. *Sport Management Review, 6*, 1-32.

Funk, D. C., Ridinger, L. L., & Moorman, A. M. (2004). Exploring origins of involvement: Understanding the relationship between consumer motives and involvement with professional sport teams. *Leisure Sciences, 26*, 35-61.

Gantz, W. & Wenner, L. A. (1991). Men, women, and sports: Audience experiences and effects. *Journal of Broadcasting & Electronic Media, 35*, 233-243.

Gantz, W. & Wenner, L. A. (1995). Fanship and television sports viewing experience. *Sociology of Sport Journal, 12*. 56-74.

Garbarino, E. & Johnson, M.S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing, 63*(2), 70-87.

Gladden, J. M. & Funk, D. C. (2001). Understanding brand loyalty in professional sport: Examining the link between brand association and brand loyalty. *International Journal of Sports Marketing & Sponsorship, 3*, 67-94.

Gladden, J. M., Milne, G. R. (1999). Examining the importance of brand equity in professional sports. *Sport Marketing Quarterly, 8*(1), 21-29.

Goldstein, J. H. (1989). Violence in sports. In J. H. Goldstein (Ed.). *Sports, games, and play: Social & psychological viewpoints* (2nd ed),(pp. 279-297). Hillsdale, NJ: Lawrence Erlbaum Associates.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (4th ed.). Upper Saddle River, NJ: Prentice Hall.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Jackson, E. L. (1991). Leisure constraints/ constrained leisure: Special issue introduction. *Journal of Leisure Research, 23*, 279-285.

James, J., & Ridinger, L. (2002). Female and male sport fans: A comparison of sport consumption motives. *Journal of Sport Behavior, 25*(3), 1-19.

James, J. D., & Ross, S. D. (2004). Comparing sport consumer motivations across multiple sports. *Sport Marketing Quarterly, 13*(1), 17-25.

Kahle, L. R., Kambara, K. M., & Rose, G. (1996). A functional model of fan attendance

    motivations for college football. *Sport Marketing Quarterly, 5*(4), 51-60.

Kline, R. B. (1998). *Principles and practice of structural equation modeling.* New York:

    Guilford Press.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.).

    New York: Guilford Press.

Kwon, H. H., & Trail, G. (2001). A comparison of American students and international

    students. *Sport Marketing Quarterly, 13*(3), 147-155.

Lee, S. (2002). *A study of psychological, sociological, environmental motivation, and*

    loyalty of major and minor league baseball fans. Unpublished doctoral

    dissertation. Daphne, AL: United States Sports Academy.

Madrigal, R. C. (1995). Cognitive and affective determinants of fan satisfaction with

    sporting event attendance. *Journal of Leisure Research, 27*(3), 205-227.

Mahony, D. F., Nakazawa, M., Funk, D. C., James, J. D., & Gladden, J. M. (2002).

    Motivational factors influencing the behaviour of J. League Spectators. *Sport*

    Management Review, 5(1), 1-24.

Mashiach, A. (1980). A study to determine the factors which influence American

    spectators to see the Summer Olympics in Montreal, 1976. *Journal of Sport*

    Behavior, 3(1), 16-28.

McDonald, M. A., Milne, G. R., & Hong, J. (2002). Motivational factors for evaluating

    sport spectator and participant markets. *Sport Marketing Quarterly, 11*, 100-113.

Milne, G. R., & McDonald, M. A. (1999). *Sport marketing: Managing the exchange process*. Sudbury, MA: Jones & Bartlett.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Pooley, J. C. (1978). The sports fan: A psychology of misbehavior. *Sociology of Sports Monograph Series*, Calgary, Alberta: CAPHER.

Robinson, M. J., & Trail, G. T. (2005). Relationships among spectator gender, motives, points of attachment, and sport preference. *Journal of Sport Management, 19*, 58-80.

Rooney, J. F. (1975). Sports from a geographical perspective. In D. Ball & J. Loy (eds.), *Sport and social order.* Reading, MA: Addison-Wesley.

Rooney, J. F. (1980). *The recruiting game.* Lincoln, NE: University of Nebraska Press.

Shank, M. D. (1999). *Sports marketing: A strategic perspective.* Upper Saddle River, NJ: Prentice Hall, Inc.

Sloan, L. R. (1989). The motives of sports fans. In J.H. Goldstein, (ed). *Sports, games and play*: *Social and psychology viewpoints* (2nd ed),(pp. 175-240). Hillsdale, NJ: Erlbaum Associates.

Smith, G. J. (1988). The noble sports fan. *Journal of Sport and Social Issues, 12*(1), 54-65.

Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research, 25*, 173-180.

Sutton, W. A., McDonald, M. A., Milne, G. R., & Cimperman, J. (1997). Creating and fostering fan identification in professional sports. *Sport Marketing Quarterly, 6*(1), 15-22.

Swanson, S., Gwinner, K., Larson, B., & Janda, S. (2003). Motivations of college student game attendance and word-of-mouth behavior: The impact of gender differences. *Sport Marketing Quarterly*, *12*, 151-162.

Trail, G. T., Anderson, D. F., & Fink, J. S. (2000). A theoretical model of sport spectator consumption behavior. *International Journal of Sport Management, 1*, 154-180.

Trail, G. T., Anderson, D. F., & Fink, J. S. (2002). Examination of gender differences in importance and satisfaction with venue factors at intercollegiate basketball games: Effects on future spectator attendance. *International Sports Journal,6*, 51-64.

Trail, G. T., & James, J. D. (2001). The motivation scale for sport consumption: Assessment of the scale's psychometric properties. *Journal of Sport Behavior, 24*(1), 108-127.

Trail, G. T., Janet, S. F., & Anderson, D. F. (2003). Sport spectator consumption behavior. *Sport Marketing Quarterly, 12*(1), 8-17.

Wang, H. (2006). Teaching Asian students online: What matters and why? *PAACE Journal of Lifelong Learning*, *15*, 69-84.

Wann, D. L. (1995). Preminary validation of the sport fan motivation scale. *Journal of Sport & Social Issues, 20*, 377-396.

Wann, D. L., & Branscombe, N. R. (1993). Sport fans: Measuring degree of

identification with their team. *International Journal of Sport Psychology, 24*, 1-

17.

Wann, D. L., Royalty, J., & Rochelle, A. R. (2002). Using motivation and team

identification to predict sport fans' emotional responses to team performance.

Journal of Sport Behavior, *25*, 207-215.

Wann, D. L., & Schrader, M. P. (1997). Team identification and the enjoyment of

watching a sport event. *Perceptual and Motor Skills, 84*, 3.

Welki, A. M., & Zlatoper, T. J. (1999). US professional football game-day attendance.

Athlantic Economic Journal, *27*, 285-98.

Won, J. U., & Kitamura, K. (2007). Comparative analysis of sport consumer motivations

between South Korea and Japan. *Sport Marketing Quarterly, 16*, 93-105.

Zhang, J. J., Pease, D. G., Hui, S. C., & Michaud, T. J. (1995). Variables affecting the

spectator decision to attend NBA games. *Sport Marketing Quarterly, 4*(4), 29-39.

APPENDIX A

SPORT INTEREST INVENTORY (SII)

On a scale from 1 to 7, where "1" means strongly disagree and "7" means strongly agree, how well do you agree with the following statements regarding the **_OOO football team_**?

	Strongly Disagree			Neutral			Strongly Agree
My interest in football sparked my interest in the team	1	2	3	4	5	6	7
I attend games because football is my favorite sport.	1	2	3	4	5	6	7
First and foremost, I consider myself a fan of football.	1	2	3	4	5	6	7
I watch the games because of individual players more than of the team competing	1	2	3	4	5	6	7
I'm more of a fan of individual players than I am of the entire team.	1	2	3	4	5	6	7
The main reason why I attend is to cheer for my favorite player.	1	2	3	4	5	6	7
Attending games gives me a chance to bond with my friends.	1	2	3	4	5	6	7
I enjoy sharing the experience of attending a game with friends.	1	2	3	4	5	6	7
An important reason why I attend games is to spend quality time with my friends.	1	2	3	4	5	6	7
I enjoy interacting with other spectators and fans when attending games.	1	2	3	4	5	6	7
Games have given me a chance to meet other people with similar interests as myself.	1	2	3	4	5	6	7
I like to talk with other people sitting near me at games.	1	2	3	4	5	6	7
I prefer watching a close game rather than a one-sided game.	1	2	3	4	5	6	7
I like games where the outcome is uncertain.	1	2	3	4	5	6	7
A close game between two teams is more enjoyable than a blowout.	1	2	3	4	5	6	7
I consider myself a fan of the whole team more than a fan of a single player.	1	2	3	4	5	6	7
I come to games to support the whole	1	2	3	4	5	6	7

team.							
I am a fan of the entire team.	1	2	3	4	5	6	7
My connection to OOO Univ. is why I like the team.	1	2	3	4	5	6	7
I support the team because the team enhances the status of the OOO Univ.	1	2	3	4	5	6	7
I attend games to support the OOO Univ.	1	2	3	4	5	6	7
Players provide inspiration for girls and boys.	1	2	3	4	5	6	7
I think the players are good role models for young girls and boys.	1	2	3	4	5	6	7
The players provide inspiration for young people.	1	2	3	4	5	6	7
Attending games gives me a chance to bond with my family.	1	2	3	4	5	6	7
I enjoy sharing the experience of attending a game with family.	1	2	3	4	5	6	7
An important reason why I attend games is to spend quality time with my family.	1	2	3	4	5	6	7
The style of play of the college football provides me with a more enjoyable form of entertainment in comparison to other sports.	1	2	3	4	5	6	7
I like college football because the play style emphasizes strategy and the traditional aspects of the game.	1	2	3	4	5	6	7
The college football style is a more pure form of football compared to other sports' style.	1	2	3	4	5	6	7
The staff is always helpful and courteous to me as a fan/customer.	1	2	3	4	5	6	7
I enjoy the games because the staff is friendly and available to me as a customer.	1	2	3	4	5	6	7
I feel like customer satisfaction is important to the game day staff.	1	2	3	4	5	6	7
I like the excitement associated with the games.	1	2	3	4	5	6	7
I enjoy the excitement surrounding the games.	1	2	3	4	5	6	7
I find games to be very exciting.	1	2	3	4	5	6	7

The games provide affordable entertainment.	1	2	3	4	5	6	7
Games are great entertainment for the price.	1	2	3	4	5	6	7
I attend games because it is an entertaining event for a reasonable price.	1	2	3	4	5	6	7
Knowing the rules of football helps me to enjoy the games.	1	2	3	4	5	6	7
I enjoy the football games because I know a lot about the game of football.	1	2	3	4	5	6	7
I feel my understanding of the game of football adds to my enjoyment of watching the team.	1	2	3	4	5	6	7
I feel like I have won when the team wins.	1	2	3	4	5	6	7
I feel a sense of accomplishment when the team wins.	1	2	3	4	5	6	7
When the team wins, I feel a personal sense of achievement.	1	2	3	4	5	6	7
I like attending a game because it is good, clean fun.	1	2	3	4	5	6	7
There is a friendly, family atmosphere at the games.	1	2	3	4	5	6	7
The friendly environment of the games is an important reason to attend.	1	2	3	4	5	6	7
I like attending games because they provide me with a distraction from my daily life for a while.	1	2	3	4	5	6	7
The games provide me with an opportunity to escape the reality of my daily life for a while.	1	2	3	4	5	6	7
Getting away from the routine of everyday life is an important reason why I would attend a game.	1	2	3	4	5	6	7

APPENDIX B

TEAM IDENTIFICATION MEASURE

Please respond to the following items regarding the _OOO football team._

Q1. Please answer each of the following questions with the OOO football team in mind by circling the most accurate number to each item.

    a. How important is it to you that the OOO football team wins?

        Not important   1   2   3   4   5   6   7   Very Important

    b. How strongly do you see yourself as a fan of the OOO football team?

        Not at All a Fan   1   2   3   4   5   6   7   Very Much a Fan

    c. How strongly do your friends see you as a fan of the OOO football team?

        Not at All a Fan   1   2   3   4   5   6   7   Very Much a Fan

    d. During the season, how closely do you follow the OOO football team via ANY of the following: in person or on television, on the radio, via the internet, or televised news or a newspaper?

        Never   1   2   3   4   5   6   7   Almost Every Day

    e. How important is being a fan of the OOO football team to you?

        Not important   1   2   3   4   5   6   7   Very important

    f. How much do you dislike the greatest rivals of the OOO football team?

        Do Not dislike 1   2   3   4   5   6   7   Dislike Very Much

    g. How often do you display the OOO football team's name or insignia at your place of work, where you live, or on your clothing?

        Never   1   2   3   4   5   6   7   Always

APPENDIX C

BARRIER, FUTURE BEHAVIOR, AND FREQUENCY SPECTATING BEHAVIOR

MEASURE

Barriers Measure

On a scale from 1 to 7, where "1" means strongly disagree and "7" means strongly agree, how well do you agree with the following statements regarding the ***Factors that impede the Decision to Attend Football Games to you***?

	Strongly Disagree		Neutral			Strongly Agree	
The idea that I can spend my money on other things	1	2	3	4	5	6	7
The opportunity to watch athletic events on television	1	2	3	4	5	6	7
The price of tickets	1	2	3	4	5	6	7
Not knowing when tickets are available	1	2	3	4	5	6	7
Academic commitments	1	2	3	4	5	6	7
The quality of the opponent	1	2	3	4	5	6	7
My circle of friends	1	2	3	4	5	6	7
My significant other	1	2	3	4	5	6	7
Not interested in football games	1	2	3	4	5	6	7
Do not know the football game rules	1	2	3	4	5	6	7

Future Behavior Measure

I am more likely to attend future games.	1	2	3	4	5	6	7
I am more likely to watch future games.	1	2	3	4	5	6	7
I am more likely to support OOO football team.	1	2	3	4	5	6	7

Frequency Spectating Behavior Measure

How many times did you attend the OOO football games during the fall 2008 season?
Please circle number of football games attended: (None, 1-2, 3-4, 5-6, More than 7)

How many times did you watch the OOO Football games on TV during the fall 2008 season?
Please circle number of football games watched on TV: (None, 1-2, 3-4, 5-6, More than 7)

APPENDIX D

DEMOGRAPHIC INFORMATION MEASURE

In this part, we would like to ask questions about individual characteristics.

Q7. Gender: FEMALE   MALE

Q8. What year were you born? (e.g., 1988_____)

Q9. Nationality (e.g., United States) _____

Q10. Education: (Please mark the current status)
   a. Undergraduate, Freshmen
   b. Undergraduate, Sophomore
   c. Undergraduate, Junior
   d. Undergraduate, Senior
   e. Graduate (master degree)
   f. Graduate (doctoral degree)
   g. Others (e.g., ELI):_____
   h. Decline to Respond

Q11. Marital Status
   a. Single
   b. Married
   c. Separated
   d. Divorced
   e. Widowed
   f. Decline to Respond

Q12. Total household Income: (Please mark only one option)
   a. <$15,000
   b. $15,000 to $24,999
   c. $25,000 to $39,999
   d. $40,000 to $59,999
   e. $60,000 to $84,999
   f. $85,000 +
   g. Decline to Respond

APPENDIX E

DESCRIPTION OF SPORT INTEREST INVENTORY (SII) FACTORS

Factors	Definition
Community pride (COM)	the extent to which an individual's interest in the team stems from their pride in the community (Branscombe & Wann, 1991; Funk et al., 2001; Rooney, 1975, 1980).
Escape (ESC)	the extent to which interest in the team derives from a desire to 'get away' or be a part of something different from the 'normal routine' (Gladden & Funk, 2001; Wann, 1995).
Interest in sport (BAS)	the extent to which support for the team derives from an interest in the sport (Funk et al., 2001; Funk et al., 2002).
Support women's opportunity (SWO)	the extent to which interest in the team is a reflection of support for women's sport in general (Armstrong, 1999; Funk et al., 2001).
Entertainment value (ENT)	the extent to which the affordability of the entertainment contributes to one's attendance at games (Funk et al., 2002; Wann, 1995).
Aesthetics (AES)	the excellence, beauty, creativity of athletic performance, and style of play (Mahony et al., 2002; Smith, 1988).
Bonding with family (FAM)	the extent to which a game provides an opportunity to spend quality time with one's family (Gantz & Wenner, 1995; Wann, 1995).
Vicarious achievement (VIC)	the extent to which an individual is interested in the team because of a heightened sense of personal or collective esteem based on their psychological association with the team (Kahle et al., 1996; Cialdini et al., 1976).
Drama (DRA)	the extent to which an individual is interested in the team because of the excitement associated with a close game versus a one-sided game and the element of uncertainty about the outcome of the game (Funk et al., 2001; Mahony et al., 2002).
Bonding with friends (BON)	the extent to which a game provides an opportunity to spend quality time with one's friends (Wann, 1995).
Customer service (MGT)	the extent to which customer service affects an individual's interest in attending games (Fournier, 1998; Garbarino & Johnson, 1999).
Interest in players (PLA)	the extent to which an individual attends games to watch a favourite player (Gladden & Milne, 1999; Funk et al., 2001).
Role model (ROL)	the extent to which interest in the team is related to the positive role model image of the players (Armstrong, 1999; Funk et al., 2002).
Socialization(SOC)	the extent to which a game provides an opportunity to interact with other fans (Gantz & Wenner, 1991, 1995; Wann, 1995).
Interest in team (TEM)	the extent to which one is interested in the team as a whole rather than individual players (Wann & Branscombe, 1993).
Sport knowledge (KNW)	the extent to which understanding the game (i.e., rules, strategy and technical aspects) contributes to the enjoyment of the sport (Funk & Pastore, 2000).
Excitement (EXC)	the extent to which the excitement surrounding the game adds to the enjoyment of the event (Sloan, 1989; Wann, 1995).
Wholesome environment (WHO)	the extent to which a friendly, family atmosphere contributes to the enjoyment of the event (Funk et al., 2002).

APPENDIX F

CONSENT LETTER

TEXAS A&M UNIVERSITY
Department of Health and Kinesiology

Dear a Student:

Thank you for your willingness to participate in this study.
You are part of a special group of students we have selected to explore motivations and potential barriers for Texas A&M students to attend in intercollegiate sporting events.

Your assistance is entirely voluntary and you may be assured that your answers are confidential. Individual responses will not be identified or reported. The published results will not refer to any individual and all discussions will be based on group data. You may choose to withdraw from the study at any time, and your decision whether or not to participate will in no way affect your relations with Texas A&M athletic programs, researchers of this study, the Sport Management Program.

If you have any questions about this study, please contact Chanho Kang at (979) 599-8696 or email to chanhokang75@tamu.edu. Also, contact the researcher if you would like a copy of the results.

This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices at (979) 458-4067 or irb@tamu.edu.

Sincerely,

Mr. Chanho Kang
Texas A&M University
Department of Health and
Kinesiology
TAMU 4243
College Station, TX
77843
(979) 599-8696
chanhokang75@tamu.edu

Advisor
Dr. Paul Batista
Texas A&M University
Department of Health and Kinesiology
TAMU 4243
College Station, TX 77843
(979) 845-2391
pbatista@hlkn.tamu.edu

VITA

Name: Chanho Kang

Address: Texas A&M University Department of Health and Kinesiology
TAMU4243 College Station TX 77843

Email Address: chanhokang75@neo.tamu.edu

Education: B.E., Textile Engineering, Kyung Hee University, 1999
M.S., Kinesiology, emphasis in Sport Management, Texas A&M
University, 2009