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Robin Hardin

Sylvia Trendafilova

Sarah Stokowski

Clemson University, stoko@clermson.edu

Gi-Yong Koo

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ACADEMIC MAJOR CHOICE OF INTERNATIONAL STUDENT-ATHLETES COMPETING IN THE NCAA

Robin Hardin
Sylvia Trendafilova
Sarah Stokowski
Gi-Yong Koo

The population of international students in colleges and universities in the United States has exceeded more than half a million (Rose-Redwood, 2010). Educational institutions have recognized that having international students on campus can only contribute in a positive way to the experience of other students (Rose-Redwood, 2010). International students add new perspectives to classroom discussions and increase the awareness and appreciation for other countries and cultures. This culturally diverse atmosphere fosters cross-cultural exchanges, much important in an era of globalization and emphasis on the development of relationships across regions around the world. More importantly higher education entities in the United States have been encouraged to develop policies that promote cross-cultural exchanges with the ultimate goal to prepare students for a career in multicultural settings (Brustein, 2007).

The presence of international students not only broadens the view of domestic students, promotes intercultural under-

standing and appreciation for other cultures, but also provides opportunities for business partnerships as well as teaching and research opportunities (Andrade, 2008). Recruiting international students is important because they contribute to the makeup of the institution by providing a more intellectually and culturally diverse environment (Cravcenco, 2004). Recruitment of international students has been viewed as an important factor in the process of globalization and international recruitment agencies are now prevalent in the international market place and a leading influence on where and whether a student will pursue international education (Pimpa, 2003). There are also financial benefits to having international students. A common practice is that United States research universities depend on international teaching assistants to teach American college students. The use of international teaching assistants brings a considerable economic benefit to American universities (Chiang, 2009). In fact, international students contribute \$13.5 billion annually to institutions and their

host communities (Chin & Bhandari, 2006).

Research on international students has been conducted for more than half a century. However, the main focus has been on adjustment and adaptation problems those students face while transitioning to a new cultural and educational setting and with other issues related to being away from home (Abdalla & Gibson, 1984; Zhang & Dixon, 2003). Other studies have focused on international students' academic achievements in relation to the adaptation to the institution where they studied (Ying, 2003). Wilton and Constantine (2003) found that due to cultural and language differences Latin American and Asian students have a greater level of stress than other international students. Similarly, a study conducted in Australia indicates that language and feelings of isolation are among the items associated with some of the problems faced by international students (Robertson, Line, Jones, & Thomas, 2000). More recently, an emerging focus has been placed on the identity formation and social interaction behaviors of international students (Trice, 2004). Rose-Redwood (2010) focused on international students and aimed at examining their perceptions of diversity efforts at a higher education institution in the United States and more specifically how those perceptions influenced their social interaction practices while obtaining their degree at the institution.

International students have been studied for a variety of reasons but the

literature on the choice of college major is rather scarce. Most of the research conducted on international students has focused on describing their experience in the host country, particularly in the context of education and psychology.

INTERNATIONAL STUDENT-ATHLETES

A subgroup of international students is the population of international student-athletes. The number of international student-athletes participating in the National College Athletic Association (NCAA) has nearly tripled since the turn of the century, from 5,923 in 1999-00 to 17,656 in 2009-10 (Zgonc, 2010). The NCAA is the primary governing body of intercollegiate athletics in the United States, which is comprised of more than 1,000 universities and colleges with more than 400,000 student-athletes. The NCAA is divided into three divisions (I, II, and III) of competition each having different requirements for membership and philosophies of competition. International student-athletes comprise 8.1% of all student-athletes across all three divisions of the NCAA. The percentage stands at 12.4% for Division I, which is the most visible of the three divisions and provides for the highest level of competition (Zgonc, 2010). To add perspective to that percentage, consider that the percentage of population in the United States of self-identified Black persons is 12.6% (United States Census Bureau, 2011). So, this is certainly a subpopulation within the population of collegiate student-athletes that merits study.

Recruiting international athletes could improve team performance and has become more common in intercollegiate athletics over the past 15 years (Garant-Jones, Koo, Kim, Andrew & Hardin, 2009; Ridinger, 1996). In fact, in sports such as tennis and soccer, international student-athletes have become important for the success of their team due to their superior talent over domestic athletes (Greviskes, 2004). Coaches seek to recruit the most athletically talented players to provide the university with a winning record. In addition, coaches have expressed the belief that international student-athletes are more mature and work harder toward their goals than American athletes (Asher, 1994). Therefore, international student-athletes could become a positive example for American student-athletes and students in general. International student-athletes have been studied with the purpose of identifying the motivation of those athletes to come to the United States (Garant-Jones, Koo, Kim, Andrew, & Hardin, 2008) or on their adjustment to college (Ridinger & Pastore, 2000). Other scholars have explored and evaluated their level of satisfaction, both with athletic participation and academically while attending an institution of higher education in the United States (Trendafilova, Hardin, & Kim, 2010). Despite the few studies focused on international student-athletes there are still areas that have been overlooked but deserve attention. Therefore, there is a need to expand and broaden the academic research on international student-athletes. It costs tens of thousands of dollars to

recruit and educate an international-student athlete at a Division I-FBS university. Division I-Football Subdivision is the highest level of competition in the NCAA. It is comprised of 120 members with median budgets of more than \$45 million. The member schools have the most resources for recruiting, coaching and providing services to student-athletes. Costs are not broken down by individual athletes or sports but some universities, spend more than \$1 million in football recruiting alone (Davidson, 2009; Sander, 2008). Therefore, the purpose of this study is to explore the selection of academic major for international student-athletes.

ACADEMIC MAJOR CHOICE

Despite the nearly 40% increase in undergraduate college enrollment within the last decade (U.S. Department of Education, 2011), there are few recent studies that examine factors that influence students' choice of college majors. Past literature demonstrates that gender appears to impact major choice (Dawson-Thread & Huba, 1996; Lackland & DeLisi, 2001; Turner & Bowen, 1999). Male and female college students tend to major in fields that are dominated by their same-sex peers (Dawson-Thread & Huba, 1996). The ability to obtain a job after graduation, earning potential, and a level of interest in the subject area affect college students' choice of academic major (Kim, Markham, & Changelosi, 2002; Malgwi, Howe, & Burnaby, 2005; Mauldin, Crain, & Mounce, 2000; Pritchard et al., 2004). Undergraduate stu-

dents choosing business majors tend to be swayed into the vocation through parental influence (Leppel, Williams, & Waldatter, 2001). The occupation of business students' parents as well as the students' socioeconomic status appear to play a role in students who choose to major in business (Leppel et al., 2001). Along with gender and parental influence contributing to students' decision-making process regarding major choice, the students' year in school is also a factor regarding major choice (Galotti, 1999; Strasser, Ozgar, & Schroeder, 2002). Upperclassmen select majors quickly and focus on majors that are going to assist them in achieving their career objectives, whereas first and second year students tend to focus on a wide variety of majors and pick their major based on their interest (Glotti, 1999; Strasser et al., 2002). Factors influencing major choice need to be examined among various college student populations to ensure counselors understand the interest and motivations of their students in regards to major selection (Glotti, 1999). Although past research has focused on the major selection process of the general college student body, research that investigates major choice factors within the student-athlete population, specifically the subpopulation of international student-athletes is rare.

SIGNIFICANCE OF STUDY

The increase of international students on higher education campuses has affected the role of academic counselors working in these settings, and interna-

tional students need to have access to academic counseling services to aid in their academic success (Yoon & Portman, 2004). Perhaps counselors need to be trained to have a better conceptual and practical understanding of the needs international students have away from home in order to be able to deliver crucial counseling services and programs. Academic counselors will be better equipped to effectively meet the needs of the students when they have a greater understanding of the international student-athletes' cultures (Yoon & Portman, 2004). Issues that are unique to international students are potential language barriers, different academic systems, cultural differences, and social interactions (Yoon & Portman, 2004). In addition, international students have different learning styles and cultural background when compared to domestic students (Ku, Lahman, Yeh, & Cheng, 2008). Most international students seek the assistance of counselors because of the culture shock of being in a new environment (Sandhu, 1994). Also, international students who seek counseling services experience less stress and have a better adjustment to college life in the United States (Althen, 1991; Mallinckrodt & Leong, 1992). Research needs to be conducted to help understand international student-athletes and to help provide more knowledgeable counseling services to this population (Yoon & Portman, 2004). Facilitating a positive adjustment and educational experience for international students, including student-athletes, is an issue in higher education (McLachlan

& Justice, 2010). The focus of this study was examining the factors that influence the choice of major of international student-athletes. This study would thus be beneficial to academic advisors in helping understand what factors are at play when international student-athletes are choosing a major. This will aid in the advising and the counseling services of the academic advisors. Choosing an academic major is an important step for all student-athletes competing in the National Collegiate Athletic Association (NCAA) which is the most prevalent collegiate sport governing body in the United States. Student-athletes must formally declare a major before entering into their fifth semester of college to maintain eligibility to compete (NCAA Academic and Membership Affairs Staff, 2011). This information will also be beneficial to coaches as they can gain a deeper understanding of the decision-making process of their student-athletes in why a particular major is chosen.

Research has been conducted on why students choose their academic major but there is a lack of research investigating this issue among student-athletes. The instrumentation section of this study provides dimensions that have been identified among college students in general as well as examines the circumstances that are unique to student-athletes and unique to international students as well. So, this study is conceptualized by examining academic major choice in the specific population of international student-athletes.

METHOD

Instrumentation

Research has investigated major choice among college students but none from the perspective of student-athletes. Berger (1988) speculated that the higher the present value of the expected earnings from having received an undergraduate degree in a certain major, the greater the likely hood of choosing that major. Focusing on gender differences, Blakemore and Low (1984) conducted a study exploring occupational selection and indicated that the time required to maintain the skills acquired in a certain major is an important determinant of major choice, thus explaining why women tend to choose undergraduate majors like the arts for example, where less time is required to maintain the necessary work skills (women need time off of work due to pregnancy and child-rearing).

The goal of this research was to identify possible dimensions as to why a student would choose a major and to develop scale items to explore them. Begg, Bantham, and Taylor (2008) identified six areas related to major selection. Five of those areas were adopted for use in this study: 1) course/major attribute; 2) financial success of; 3) job characteristics; 4) personal interests and strengths; and 5) information search. The sixth reason was psycho benefits which included external influence as part of this definition. External influence was separated to form a seventh reason based on the findings of Garant-Jones,

Andrew, Koo, and Hardin (2009) and Duffy and Dik (2009).

Student-athletes themselves offer a different set of circumstances in regards to major choice. Time demands for practice and competition must be considered when constructing a class schedule as well as the need to maintain NCAA eligibility standards. This has led to the clustering of student-athletes in particular majors (Upton & Novak, 2008). Student-athletes tend to be enrolled in certain majors because athletes find those majors appealing, and make them feel adequate to their sometimes more academically prepared non-athlete peers (McGinn & O'Brien, 2004). The majors that student-athletes are attracted to typically deal with the potential of financial satisfaction that can be reached upon graduation (McGill & O'Brien, 2004). It has also been suggested that student-athletes lead their teammates into their same major and it is this influence that leads athletes to cluster in similar majors as their athletic peers (McGinn & O'Brien, 2004). Major clustering occurs when more than 25% of members of an athletic team is enrolled in the same major (Case, Greer, & Brown, 1987). Major clustering is taking place due to the need of academic advisors to ensure athletes meet NCAA eligibility standards (Busch, 2007; Gurney, 1990; Gurney, 2009; Scheinder, Ross, & Fisher, 2010).

Academic reform incentives during the first part of the 21st century have placed more emphasis on not only maintaining academic eligibility but also making progress toward graduation.

Therefore, student-athletes may seek less academically challenging majors which may cause student-athletes to cluster toward particular majors. In that regard three dimensions were developed to investigate academic major choice. Perceived easiness is based on the notion that student-athletes will "choose the path of least resistance" (Scheinder, Ross, & Fisher, 2010, p. 64; Upton & Novak, 2008; Wolverton, 2007). The factor of Academic Advisor is derived from the fact that student-athletes may also be directed toward particular majors by academic advisors and counselors to maintain eligibility (Gurney, 1990; Gurney, 2009; Scheinder, Ross, & Fisher, 2010). Academic advisors are support or student services personnel who provide counsel for student-athletes to enhance their opportunities for academic and personnel success, and act as a liaison between the academic and athletic communities (What is N4A, 2012). Time is also an issue because of the athletic demands placed on student-athletes (Scheinder, Ross, & Fisher, 2010; Steeg, Upton, Bohn, & Berkowitz, 2008). Another factor that comes into play is Second Choice because student-athletes may not have the academic preparation in high school or the intellectual ability to major in their first choice of academic majors. There is also demands to remain academically eligible so student-athletes may not choose difficult majors (Gurney, 2009; Gurnery & Weber, 2007; Gurney & Weber, 2010; McGinn & O'Brien, 2004; Scheinder, Ross, & Fisher,

2010; Upton & Novalk, 2008; Wetzel, 2010).

A unique factor with this population is that English will most likely be a second language for many of the respondents. Major choice may be influenced because of language barriers, the ability to fully comprehend material, or cultural differences (Abedi & Herman, 2010; McCuen, Aka, Gifford, & Srikantaiah, 2009; Tange, 2010).

Twelve factors in all were used to explore why international student-athletes choose a particular major.

1. Course/Attribute—Characteristics about the major itself, such as reputation of the program, strength of the faculty, course availability, and opportunities for experiential learning (Cohen & Hanno, 1993)
2. Financial Reward—Likelihood of successfully completing the major will lead to a profession that provides financial success and/or financial security (McGill & O'Brien, 2004)
3. Professional Promise—Successfully completing your major requirements will lead to job availability, flexibility in job opportunities, and job security over the course of a career (Lowe & Simons, 1997; Newell, Titus & West, 1996)
4. Interests or Personal Strengths—How well the major and likely job prospects that will follow upon graduation match your own interests and/or personal strengths (Beggs, Bantham, & Taylor, 2008)
5. Psycho Benefits—Influences such as the probability of self-satisfaction, the likelihood of a sense of accomplishment in your eventual job, and/or how much life happiness will likely result from your selection of a major (Pike, 2006)
6. External Influence—This describes the advice you sought and received from your social network including family and friends in regards to major selection (Keillor, Bush & Bush, 1995; Newell, Titus & West 1996)
7. Information Search—Availability of information to assist in your search for a major. This also includes the level of personal experience with the major such as taking a course in the major, knowing someone in the field, or having work experience in it (Beggs, Bantham, & Taylor, 2008)
8. Academic Advisor—How influential your academic advisor was in you choosing the major (Gurney, 1990; Gurney, 2009; Scheinder, Ross, & Fisher, 2010)
9. Perceived Easiness—How easy you thought the major was going to be and the relative ease of work you would have to do in the courses (Scheinder, Ross, & Fisher, 2010)
10. Time—Class schedules and outside commitments such as studying and lab time do not conflict with practice and competition demands (Scheinder, Ross, & Fisher, 2010; Steeg, Upton, Bohn, & Berkowitz, 2008)

11. Second Choice—The inability to pursue the first choice of major due to a variety of reasons including not having the prerequisites, inability to pass required courses or inability to be admitted to it because of the competitiveness of the major (Gurney & Weber, 2007; Gurney & Weber 2010)
12. Language/Culture—Major selection was based on a language barrier in that instructors, class materials and concepts are difficult to understand. Also, lack of preexisting knowledge of American culture would make instructors, class materials and concepts difficult to comprehend (Abedi & Herman, 2010; McCuen, Aka, Gifford, & Srikantaiah, 2009; Tange, 2010)

Once the 12 dimensions were identified through the literature review, the next step was to generate items to measure the 12 dimensions (Cunningham, 2007). Statements were generated to measure each dimension with 65 total statements. The statements were reasons an international student-athlete may choose an academic major and the respondents were asked to indicate their level of agreement with the statement on a scale anchored by 1 = strongly disagree and 7 = strongly agree. The statements were developed based on studies used to identify the academic major choice dimensions. The statements were then distributed to stakeholders to provide feedback based on the 12 dimensions and the items being used to measure each dimension (Fraenkel & Wallen, 2000). The stakeholders were asked

to review the statements that measure the 12 dimensions for clarity and to ensure they were applicable for each dimension. Feedback was requested from 10 stakeholders: three collegiate academic counselors, two former Division I student-athletes, two former Division I international student-athletes and three sport management academicians with one at an institution not in the United States. Each person was given a description of the dimensions and the items proposed to measure them (Cunningham, 2007). Based on feedback from this panel, five statements were deleted and 23 statements were modified. The resulting instrument consisted of 60 statements.

Data Collection

Potential respondents were identified by examining the official athletic department Web sites of six conferences participating in NCAA Division I FBS that are classified as Bowl Championship Series conferences. Division I—FBS I is comprised of 11 conferences and six of those were chosen because the members of those conferences have the most financial resources to recruit internationally. They also have a higher number of student-athletes than members of other conferences and thus may be more likely to have international student-athletes (Fulks, 2011). Division I was also chosen because it has a higher percentage of international student-athletes than Division II or III (Zgonc, 2010). In all, 35 in-

Table 1
Exploratory Factor Analysis of Major Choice Factors

Factors (Variance Explained 70.70%)	1	2	3	4	5	6
Time (30.93)						
The class times of my major courses do conflict with my training schedule	.987					
Class times would not interfere with my practice time	.688					
Professional Promise (15.16)						
I will be able to accomplish my professional goals because of my major		.873				
I will have a job that is fulfilling because of my major		.859				
My major will give my professional opportunities that I want		.854				
I will be able to get a job I want with my major		.808				
My major will prepare me to enter the profession I want		.759				
I will be able to achieve self-satisfaction with me major		.728				
I will be happy with my job because of my major		.724				
I will have job security with my major		.679				
I will be able to have financial security because of my major		.588				
External Influence (9.20)						
Other family members wanted me to pick this major			.938			
My parents wanted me to pick this major			.801			
Perceived Easiness (6.30)						
My classes are not difficult				.902		
There is not much studying involved in this major				.900		
I was told it was an easy major				.708		
There are only a few assignments I have to do outside of class				.697		
My classes require little outside work which allows me to focus on my sport				.696		
The major requires fewer hours for graduation than other majors				.685		
Financial Reward (6.05)						
My major will help me get a well-paying job					.870	
I chose this major because I can get a high-paying job with it					.749	
The financial rewards in this major are better than in other majors					.728	
I will have job opportunities after graduating because of my major					.703	
Second Choice (5.06)						
My first choice of major was too academically demanding						.794
I could not major in my first choice of major						.750
I did not meet the academic requirements to major in what I really wanted						.665

stitutions of the six conferences were used to identify potential respondents. Information regarding home country of the student-athletes was then obtained by examining the rosters of the varsity teams at the institutions. The institutions were chosen because the rosters of all teams were available online and there was public access to the online directory to obtain contact information for the potential respondents. Once, international student-athletes were identified, contact information (e-mail address) was then obtained using the online directory found on the university home page. The result was 897 valid e-mail addresses of international student-athletes.

An e-mail explaining the purpose of the study and a link to online questionnaire were sent to the student-athletes requesting participation in the study. A reminder e-mail was sent seven days later followed by another reminder seven days after the first reminder. A third reminder e-mail was sent 23 days after the initial contact. Follow-up e-mails were sent to increase the response rate of the sample (Thomas, Nelson, & Silverman, 2005). The result was 133 valid responses for a response rate of 14.8%. The sample size is comparable to the sample size of other studies involving collegiate student-athletes (Barfield & McCallister, 1997; Corbillon, Crossman, & Jamieson, 2008; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2010; Watson, 2006).

Data Analysis

The data were analyzed using SPSS 15.0 (SPSS, Chicago, IL, 2004) to develop a scale assessing major choices of international collegiate student-athletes and to examine the relative importance of major choices extracted. First, an exploratory factor analysis (EFA) using maximum likelihood estimation was employed to identify the underlying structure of a relatively large set of motives of selecting a major (Hair, Black, Babin, Anderson, & Tatham 2006). The oblique rotation was used to simplify and clarify the data structure as researchers presume some correlation among major choices. Examining the relative importance may provide a better understanding of why international collegiate student-athletes select their majors while an EFA extracts the common factors.

RESULTS

The factor analysis revealed six of the 12 dimensions were present in the major decision-making process. Time, professional promise, external influence, perceived easiness, financial reward, and second choice combined to explain 70.70% of the variance (see Table 1). Reliability coefficients were computed to quantify the scale reliabilities of the factors identified. All of the reliability coefficients were larger than the minimum value of 0.70 recommended by Nunnally and Bernstein (1994), indicating an acceptable level of reliability of all of the six of the factors (see Table 2).

Table 2
Reliability Coefficients of Factors

Factor	Cronbach's α
Time	.784
Professional Promise	.923
External Influence	.842
Perceived Easiness	.894
Financial Reward	.842
Second Choice	.760

DISCUSSION

Both aspects (student and athlete) of being a student-athlete emerged in the exploratory factor analysis. The aspect of being a student was prevalent with professional promise and financial reward as factors and athlete was present with time and perceived easiness as factors. Therefore, it is important to understand that international student-athletes have an interest in developing skills and obtaining an education that will allow them to succeed professionally, so they should not be forced into majors for eligibility purposes. In addition, academic counselors must also be aware of the time demands of being a Division I student-athlete as well as the difference in cultures.

External influence was present as a factor but it was encouraging to see the statements that formed the factor involved family and not coaches or academic counselors. This is important because student-athletes may be steered toward a major by a coach or academic counselor strictly to help maintain academic eligibility and not take into con-

sideration what the student-athletes want to pursue as a major. The study examined the issue if coaches or academic counselors pressured or guided the respondents toward particular majors but results indicated that was not the case. This information is valuable to coaches, administrators and prospective student-athletes in that student-athletes are given the opportunity to select their academic major without undue influence from coaches or academic counselors. Coaches can use this information in recruiting as well so that prospective student-athletes will know they are free to choose whatever academic major they want. Student-athletes know they can choose any major they wish and not have to worry about pressure from coaches to choose a major that will only help them maintain eligibility.

Research has shown that academic clustering is an issue in collegiate athletics but based on the results of this study it does not appear to be an issue with international student-athletes. Student-athletes are often forced into a major that is more flexible with their academic demands (Scheinder, Ross, & Fisher, 2010; Steeg, Upton, Bohn, & Berkowitz, 2008). Many athletes reported that they choose their major because it had the potential of landing them a well-paying job, their major allowed them the best job after graduation, and their major allowed them better job opportunities. Interestingly, the results of this study showed international student-athletes

Athletes are competitive by nature and choosing majors that are going to

allow them to flourish financially is a possibly reason why athletes tend to be in similar majors (McGill & O'Brien, 2004). But this research indicated financial reward was only one of six factors that influence major choice. Many athletes changed their major to one that they were told was easy, did not require much in class or out of class assignments, and had less hours required for graduation. The lack of academically preparedness of student-athletes could have been a factor in athletes choosing to change their major (Busch, 2007; Gurney, 2009; Gurnery & Weber, 2007; Gurney & Weber, 2010; McGinn & O'Brien, 2004; Scheinder, Ross, & Fisher, 2010; Upton & Novak, 2008; Wetzels, 2010). The idea of pursuing an easy major could have been influenced by a former teammate (McGill & O'Brien, 2004). Lastly, the respondents in this study showed that their family had a significant influence on the academic major they chose.

Professional promise and financial reward were also important factors that emerged from an athletic administrator's viewpoint. The cost of recruiting an international student-athlete exceeds the cost of recruiting domestic student-athletes in terms of travel cost for the actual recruitment. Only 22 Division I athletic programs operated in the positive in 2010 with the difference coming from a combination of student fees and university support (Fulks, 2011). Knowing prospective student-athletes are interested in more than just playing a sport can somewhat justify the costs involved in recruiting. Sports which see large

percentages of international student-athletes are tennis and golf, and they are considered non-revenue sports, therefore ensuring not only athletic success of participants but academic success as well is imperative because of the costs involved (Zgonc, 2010). Success should be measured not only in terms of athletic accomplishments but also in terms of academic achievements and guiding student-athletes into a major they want to pursue would contribute to this. Thus, knowing why they choose a particular major is beneficial in providing the appropriate guidance. This will lead to an increased interest in achieving academic success and graduating.

One factor that does cause concern is Second Choice which is the case when the major of choice is not attainable because of the academic demands of it. Thus, international student-athletes must choose another major. This is not the ideal situation in that a student-athlete may be choosing a particular university because of a specific major but then realize he/she cannot pursue that major (Pauline, 2010). Everyone involved in the process, coaches, academic counselors, and student-athletes, must be aware of the academic demands and requirements of possible majors. There are often prerequisites to enter majors such as being competent at different levels of math, and prospective student-athletes should be made aware of this. Coaches should also be aware of this as well as they do not want to make promises or guarantees they cannot keep in regards to student-athletes' op-

tions of majors. This is also important for prospective student-athletes to know as they determine what university they will attend. Student-athletes may also choose to transfer or leave the university if they cannot have the major they prefer which would not be a good situation for anyone. Student-athletes may also be disappointed because they cannot pursue their major of choice, and this may lead to poor academic and athletic performance (Lane et. al, 2010).

It was encouraging to discover language/culture was not a factor in major choice. This perhaps demonstrates the welcoming environment of universities regardless of background and shows the preparedness of international student-athletes for the transition to life in another country. Inability to effectively assimilate into American culture can be a hindrance academically and socially, and is positive to see this was not a factor in determining the choice of major (McLachlan & Justice, 2010). It may also be indicative of the ability of academic counselors and other university personnel in assisting with the transition to the life in the United States (Mallinckrodt & Leong, 1992).

CONCLUSIONS

This study is a stepping-stone in determining why international student-athletes choose their academic major. The exploratory factor analysis identified six factors as to why they choose their field of study, but future research should explore the types of academic majors the student-athletes are choos-

ing. Future research should also explore the issue of time demands of student-athletes and how the demands of their sport hinder their ability to pursue the academic major of their first choice. Scholars should also explore the adjustment that international student-athletes make as well and how support staff can assist in this. They may choose to transfer from the initial university or not recommend the university to others if they are not satisfied. They may also perform better academically and athletically if they are satisfied with their experience. International student-athletes face the same challenges as other international students but they also have the extra pressure of athletic performance at a high level and the demands that come with that. Research should investigate the factor of Second Choice as well because it would not be fair to student-athletes to believe they can choose any major they want but then discover they are not academically prepared to pursue that major once on campus. The academic preparedness of international student-athletes needs to be examined to ensure they are properly equipped to succeed academically at the collegiate level in the United States. International student-athletes may have the intellectual ability to succeed in their first choice of major but the education systems vary from country to country so this may be a hindrance in them succeeding.

The current research not only identifies factors in why they choose their major but also provides insight into the challenges that academic counselors

must consider during academic advising throughout the student-athletes tenure on campus. This advising takes place prior to each semester and during the semester itself and it involves class selection and major choice. This will be beneficial as student-athletes can work with academic counselors to ensure their academic and professional goals are met regardless of their status as a student-athlete. The high number of respondents planning to pursue post-graduate degrees should be examined as well. Research has indicated that students who attend graduate school experience high levels of anxiety, decreased self-esteem, and feelings of insecurity so it is important to ensure they are prepared for graduate school (Grant-Valone & Ensher, 2000; Watkins, 1998). Add that to the possible transition to another university and different cultural assimilation and the stress could be even higher. Support staff personnel need to be aware of this and assist in this transition. Future research can also explore the decision-making process for international student-athletes to attend graduate school in the United States. More than 30% of international students stay in the United States upon graduation, and the opportunity to attend college in the United State provides many students with increased social mobility in their home country (Ball & Chik, 2001; Chin, 2004). It is important for academic counselors to understand post-graduation plans so that the necessary preparation can be made during the undergraduate career to prepare the student-athlete for graduate school.

LIMITATIONS

This study was the first to focus on academic major choice among international student-athletes. It provides some valuable information and expands the knowledge about not only international students, but also on student-athletes, but has its limitations as well. The study focused on Division I schools only and did not look at Division II or Division III. In addition, the study did not attempt to compare the difference (if any) between international student-athletes and domestic student-athletes, and the factors influencing their decision for academic major. There may have also been a language barrier in understanding all aspects of the questionnaire. Lastly, some member schools did not have on their Website all of the emails of the student-athletes or in some cases individual athletes chose not to have theirs available, therefore, limiting the original pool of potential participants.

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*Dr. Robin Hardin, Dr. Sylvia Trendafilova and Ms. Sarah Stokowsk
are affiliate with the University of Tennessee.*

Dr. Gi-Yong Koo is affiliated with the University of Arkansas.

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