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At-Risk Student-Athletes and Academic Achievement: Experiences of Successful and Unsuccessful First Year Collegiate Football Players

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At-Risk Student-Athletes and Academic Achievement: Experiences of

Successful and Unsuccessful First Year Collegiate Football Players

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Dissertation submitted to
the College of Physical Activity & Sport Sciences
at West Virginia University
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Kinesiology
with a specialization in
Sport and Exercise Psychology

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ABSTRACT

At-Risk Student-Athletes and Academic Achievement: Experiences of
Successful and Unsuccessful First Year Collegiate Football Players

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The academic development of collegiate football players has become a concern in higher education during recent years (Knight Commission, 2010; LaForge & Hodge, 2011; NCAA, 2009). The purpose of this qualitative study was to gain insight into the first semester experiences of academically "successful" and "unsuccessful" first year collegiate football players. In particular, this study attempted to identify the variables that academically "successful" and "unsuccessful" football players perceived to have impacted their academic performance during their first semester. An intensity sample of Division I freshman football players who performed well academically during the Fall 2010 semester (n=6) and a sample of Division I freshman football players who did not perform well academically during the Fall 2010 semester (n=6) were interviewed for this study. Emergent themes that arose from the data analysis for the "successful" student-athlete group included: academic motivation, facilitators of academic success, time management, academic preparation, limited involvement, and academic skills. For the academically "unsuccessful" student-athlete group the relevant themes included: academic motivation, barriers to academic success, time management, academic preparation, limited involvement, and lack of autonomy. The findings from this study provide insight into potential factors that may be useful in identifying student-athletes at risk for academic problems and for designing interventions to address academic performance.

DEDICATION

This project is dedicated to my grandparents…

who taught me the value of EDUCATION.

ACKNOWLEDGMENTS

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INTRODUCTION

In recent years, the academic achievement of student-athletes has become a topic of considerable interest in the world of intercollegiate athletics. The National Collegiate Athletic Association (NCAA) states in its core values that "collegiate athletics are meant to supplement the educational experience (NCAA.org)." However, there are concerns that a corporate culture has developed within intercollegiate athletics that has diverged from the educational mission of higher education (Eitzen & Sage, 2009; Knight Commission, 2010). This issue has been well documented since the late 1980's and 1990's when backlash erupted regarding low student-athlete graduate rates and potential student-athlete exploitation (Hill, Burch-Ragan, & Yates, 2002; LaForge & Hodge, 2011). Allegations of academic dishonesty, academic apathy and eligibility concerns still exist in the current system which have been compounded by the emphasis on big business and financial opportunity associated with athletics (Ridpath, 2008).

In response to these issues, the higher education community has taken an interest in the academic development of student-athletes (Hill et al., 2002). Universities have acknowledged that they have a responsibility for promoting the education of student-athletes and must: 1) ensure that admitted athletes are academically qualified; 2) facilitate student-athletes' academic development in addition to their athletic development; and 3) provide student-athletes with the opportunity to graduate at the same rate as non-athletes at the institution (Knight Commission, 1991; 2001).

The desire to minimize the "dumb jock" stereotype has led to institutional changes at the national level designed to encourage student-athletes' progress towards obtaining a degree. Academic reform instituted in NCAA programs such as the Academic Progress Rate (APR) and the Graduation Success Rate (GSR) track student-athletes' academic performance and progress

towards graduation through a numerical score that is published annually (LaForge & Hodge, 2011; LeCrom et al., 2009). This reform aims to make schools publicly accountable for successfully graduating their student-athletes. As a consequence to low achieving programs, schools with poor APR scores can be penalized with sanctions such as scholarship reductions or a ban on competition. Since the institution of APR in 2003, the average national academic progress rate has steadily improved, indicating that the academic development of student-athletes has become much more of a priority to those involved with collegiate athletics. However, the most recent data indicate that the national APR rates of men's football and basketball still lag significantly behind other sports and that the national average APR score for football in 2009-2010 has actually dropped since 2008-2009 (NCAA Research, 2011). This indicates that academics are and will remain a major concern in collegiate athletics, particularly in the revenue producing sport of football.

A call to action addressing this issue is necessary, both in research and in developing interventions. A 2006 report from the NCAA Presidential Task Force on the Future of Division I Intercollegiate Athletics suggested that efforts needed to be made to: 1) determine risk factors that lead student-athletes to be vulnerable for dropping out of school prior to graduation; 2) create a operational definition of the term "at-risk;" 3) develop a tool for institutions to use for evaluating the admission of "special admits;" 4) identify best practices in academic support services and life skills programming that are used as interventions with "at-risk" student-athletes; and 5) evaluate current academic and life skills services and make appropriate recommendations for modifications or enhancements (NCAA, 2009). The task force noted that academic performance is related to a combination of pre-admission characteristics, institutional factors, and situational issues that arise during the course of a student-athlete's collegiate career,

ultimately impacting retention at an institution. By further exploring the factors that put a student-athlete "at-risk" for academic and retention problems, institutions can potentially create "risk profiles" that can be used in identifying appropriate interventions based upon common risk-factors.

Who is at-risk?

The literature suggests that many subgroups are most "at-risk" for academic difficulty including freshmen, males, minority students, and student-athletes in revenue producing sports (NCAA Research Staff, 2010; Pascarella & Terenzini, 2005; Purdy, Litwin, & Baker, 1983; Sellers, 1992; Tracey & Corlett, 1995). Freshmen are a subgroup of college students who are at-risk for academic and retention problems. In fact, first-year students are noted to be the most vulnerable group for dropout among the general student population (Milem & Berger, 1997; Pascarella & Terenzini, 2005; Tinto, 1993). Freshmen are often faced with a number of new and unfamiliar experiences in a short period of time, both academically and socially. For many first year students, moving to college is the first time that they are living on their own and some may experience homesickness as they work on divesting from their home environment and investing into their new school environment (Medalie, 1981). Those who are academically unprepared or have weak academic goals may struggle with the academic expectations of the collegiate environment. As a result, approximately 25% of freshmen in general do not return for their sophomore year (ACT, 2010).

Student-athletes, who are managing athletic responsibilities alongside the responsibilities of a typical college student, may experience challenges that lead them to "trade off" their academic energy in order to address their other priorities (Potuto & O'Hanlon, 2007). The time demands of sport often put a strain on student-athletes' ability to fully engage in their academic

and personal lives, forcing them to make choices about how they prioritize their time and energy. This limitation can have an impact on their academic performance as well as lead to increased stress and a lack of adequate recovery (Ferrante & Etzel, 2009; Monda, 2008; Potuto & O'Hanlon, 2007). While the data suggest that student-athletes graduate at equal or even greater rates than non-athletes, some literature indicates that the quality of their academic experiences may suffer (McBride & Reed, 1998; Pascarella, Bohr, Nora, & Terenzini, 1995; Pascarella & Terenzini, 2005; Scott et al., 2008). Research shows that student-athletes have less developed critical thinking skills and lower career maturity than their non-athlete classmates (Kornspan & Etzel, 2003; McBride & Reed, 1998; Pascarella & Terenzini, 2005). In addition, a study conducted with student-athletes from over 325 Division I universities over a four year period found that student-athletes' grades while "in-season" are significantly lower than during the "off-season" (Scott et al., 2008).

Particular subgroups of student-athletes are also more at-risk for academic and retention problems. Male athletes have been demonstrated to have lower graduation rates (72%) compared to female athletes (87%) and are more likely to have professional sport aspirations (NCAA Research Staff, 2010; Pascarella & Terenzini, 2005). This may lead male student-athletes to prioritize athletic related responsibilities during their collegiate experience or drop out of school early for perceived athletic opportunities. Student-athletes in revenue producing sports such as football and men's basketball tend to lag behind other groups in graduation rates and academic performance (Etzel, 2009; NCAA Research Staff, 2010; Pascarella & Terenzini, 2005). For the 2000-2003 national cohort of student-athletes, men's basketball graduated student-athletes at 65%, football graduated student-athletes at 67%, and baseball and wrestling graduated student-athletes at 70% and 72% (NCAA Research Staff, 2010).

Disparities in academic outcomes have also been found among minority students. Minority students often have lower grade point averages than non-minority students and tend to have more athletically inclined motivations (Sellers, 1992; Snyder, 1996). With regard to graduation rates, for the cohort of student-athletes entering college in 2003 the NCAA GSR rate indicated that African-American male student-athletes graduated at a lower rate (59%) compared to white males (78%). The federal graduation rate indicated that this percentage for African-American male student-athletes was even lower at 44% (NCAA Research Staff, 2010). African-American student-athletes in the revenue producing sports of men's basketball and football graduated at the lowest rate out of all sport subgroups at 60 and 61% (43% and 49% according to the federal graduation rate) (NCAA Research Staff, 2010). These disparities between gender, race, and sport indicate that certain subgroups of the population are at high risk for academic and retention problems. However, it is unclear why these disparities are occurring. Identifying the unique experiences of individuals in these groups may help to determine why they are struggling in the collegiate environment and what can be done to support them.

Identifying Factors Related to Academic Success & Academic Risk

A theory relevant to the issue of academic performance and retention of student-athletes is Tinto's Interactionalist Theory of Student Retention (1993). (See Appendix A). This theory suggests that students' pre-entry characteristics (e.g., family background, skills and abilities, prior school) along with their academic and social integration into the college environment influence students' goals, intentions, and commitments to the university. In this model, students' pre-entry characteristics lead them to develop initial goals, intentions, and commitments to going to college and getting a degree. However, once in college, a students' academic experiences (i.e. academic performance, interactions with faculty and staff) and social experiences (i.e. extra-

curricular activities, peer group interactions) influence their perception of integration into the institution. From these experiences, students' initial intentions are adapted and their decisions to stay or leave the university are based upon their new goals, intentions, and commitment. This theory suggests that the characteristics of the individuals prior to coming to college as well as their experiences once they arrive on campus have an impact on retention.

Despite the theoretical support of the Tinto model, the bulk of previous literature on the academic performance and retention of students mostly addresses one aspect of the model, pre-entry characteristics. A number of studies in both the general retention literature and the student-athlete development literature have explored the factors that predict student-athlete academic success and retention (Babington, 1997; Garrett, 2000; House, 1992; Lang, Dunham, & Alpert, 1988; LeCrom et al., 2009; Maggard, 2007; Malmo, 2009; Morgan, 2005; NCAA, 2009; Niilampti, 2006; Petrie, 1993; Petrie & Stoever, 1997; Schwartz & Washington, 2002; Scogin, 2007; Sedlacek & Adams-Gaston, 1992; Sellers, 1989; Simon & Van Rheenen, 2000; Stupnisky et al., 2007; Ting, 2009; Tracey & Sedlacek, 1987; Young & Sowa, 1992).

Stemming from a need to identify variables that could be used as admissions criteria for entry to college, cognitive criteria such as standardized test scores have historically been used to determine who will be successful in the college environment. However, some researchers suggest that a student's past academic performance might not be the best or only predictor of future success, particularly for minority or non-traditional students (Tracey & Sedlacek, 1987). Subsequently, other studies have looked at alternative factors that may impact college academic performance. Demographic characteristics such as gender and race, non-cognitive and psychosocial variables such as life stress and self-concept, and sport related variables such as type of sport played have been examined with some success (LeCrom et al., 2009; Morgan,

2005; Petrie & Russell, 1995; Sedlacek & Adams-Gaston, 1992). However, there has not been a consistent trend or formula that is predictive across groups of students. Rather than developing a "one size fits all" risk profile, it appears that it may be more advantageous to examine subpopulations of student-athletes based on gender, year in school, and sport type (Braxton, 2000).

Most of the studies conducted in this area have used quantitative methodology and pre-selected variables to predict academic performance and success. While this type of research design has helped to identify relationships between particular variables and academic outcomes, these studies have produced mixed results and it is still unclear what predictors are relevant to student-athlete academic performance and retention. These studies have resulted in a list of potentially relevant predictors; however, they do not explain how or why these predictors are important. In addition, these studies have focused on pre-entry characteristics and do not take into account the impact of attitudes or institutional experiences during the time that students are in the college environment. As demonstrated by theory, academic performance and retention is a complex process that is impacted by multiple factors including attitudes and institutional experiences as well as pre-entry characteristics (Tinto, 1993).

In addition to pre-entry characteristics, student-athletes' academic performance and retention at an institution may also be impacted by their developmental readiness in all areas including academic, athletic, social, and personal experiences (Magolda, 2009). Developmentally, "learning" not only includes coursework and subject based knowledge but also means going through life experiences and developing life skills (Alghren-Bedics & Monda, 2009). To accurately understand the factors that impact "at-risk" students, students' developmental goals need to be taken into account.

From a developmental perspective, people attend to specific developmental tasks that correspond with the stage of life that they are experiencing (Erickson, 1950). Individuals ages 18-22 are in a stage of identity exploration, where they trying to figure out who they are and what they think they want to do with their lives. Goals of individuals this age are to develop an identity, achieve personal and professional competence, and attain autonomy (Chickering & Reisser, 1993). Higher education offers an environment where individuals have the opportunity to work on these developmental tasks (Torres, Jones, & Renn, 2009). Every aspect of the higher education experience, ranging from dealing with roommate conflict to managing an increased academic workload, can serve a purpose toward individuals' academic and personal development. It is important to consider these developmental factors when determining how to facilitate student-athlete academic success. Those who are unable or unwilling to address these tasks can experience adjustment problems, emotional distress, and behavioral consequences that can lead to academic underachievement or increased drug and alcohol use (Dyson & Renk, 2006; Petrie & Russell, 1995; Ting, 2009; Tinto, 1993).

In order to accurately understand these experiences, it is important to evaluate student-athletes' perceptions of their academic experiences in college to determine what factors may be most influential towards their academic progress. Qualitative methodology, which is known for its ability to examine complex processes from a holistic perspective, has been recognized as a potentially useful methodology for addressing these gaps (Patton, 2002). While quantitative studies can help us to identify relationships between variables and outcomes, qualitative research studies can help us to understand the process that led to the outcome (Strean, 1998). Considering that predictive variables often differ based on the subpopulation of student-athletes' and the type of institutional environment, it may be more useful to let the variables emerge from participant's

lived experiences rather than test pre-set factors. Gathering information about their importance from in-depth qualitative analysis may be able to provide an understanding that is currently missing in the literature base. Identifying how student-athletes' pre-entry characteristics interact with their attitudes towards academics and their institutional experiences may provide a more accurate picture of the process related to student-athlete academic outcomes. Taking into consideration the call for more qualitative research in the field of sport and exercise psychology, qualitative studies on this topic may be helpful in guiding future research and intervention development (Krane, Andersen, & Strean, 1997; Martens, 1987).

Overall, it appears that this topic is both empirically and practically important to continue studying. As noted in the college student development literature, there is a need for research that leads to the development of interventions (Brown, 2009). However, in order to develop efficacious interventions for student-athletes, we first need to have a better understanding of the problem. Ultimately, the goal of this study is to gain a better understanding of the academic performance and retention of student-athletes. By creating an understanding of the experiences of those who have experienced both positive and negative academic outcomes, we can begin to identify common factors and themes that lead student-athletes to be "at-risk." With this knowledge, we will be better equipped to address the academic goals set out by the NCAA and its member institutions and develop interventions that target key issues related to academic performance and retention.

Research Questions

The primary purpose of this study was to gain insight into the first semester experiences of academically "successful" and "unsuccessful" Division I (FBS) football student-athletes. In particular, this study attempted to identify the variables that academically "successful" and "unsuccessful" student-athletes' perceive to have impacted their academic performance. This information is useful towards future efforts to: 1) identify local factors that could be used to develop profiles for student-athletes "at-risk" for academic and retention problems; and 2) establish empirically based interventions for those identified as "at-risk." The following research questions were explored using qualitative research methodology:

1) What were the experiences of academically "successful" and "unsuccessful" student-athletes during their first term at college?

2) How did these experiences impact their academic performance?

3) What variables did student-athletes' perceive to be the most important regarding academic performance?

METHODS

Participants

This study was designed to explore the academic experiences of first year male collegiate football players (Division I, Football Bowl Subdivision) who were considered to be "academically successful" and "academically unsuccessful" during their first semester at college. The participants were selected using intensity sampling which is a sampling technique that includes individuals who have experienced a particular phenomenon intensely (Patton, 2002). A purposeful sample was selected for this study of male freshman Division I football players who performed well academically during the Fall 2010 semester ($n=6$) and freshman Division I football players who did not perform well academically during the Fall 2010 semester ($n=6$).

Student-athletes from the sport of football were selected because football players have been noted in the literature to be a high risk group for academic and retention issues (Etzel, 2009; NCAA Research Staff, 2010; Pascarella & Terenzini, 2005). Also, the number of athletes participating in this sport was large enough to obtain an adequate sample size consisting of members from the same team and institution within compromising identity and confidentiality. Eligible participants met the following criteria: "Academically successful" was defined as freshman student-athletes who achieved above a 2.75 GPA and did not have any failing grades during the Fall 2010 semester. This benchmark was chosen because a GPA of 2.75 is a university-wide standard for maintaining an academic scholarship at the university during their freshman year. "Academically unsuccessful" was defined as freshman student-athletes who earned a GPA of 2.0 or below during the Fall 2010 term. This criteria was developed based upon precedent set in previous studies as well as the expert opinion of support staff working at the university (Libutti, 2007).

A list of athletes who met the participation criteria was created based upon the NCAA eligibility information collected by the Athletic Department for the Fall 2010 semester and used for recruitment in the study. To maintain the confidentiality of student-athletes' academic records, this list was developed by an athletic department staff member who had permission to access student-athlete educational records. Only the names and contact information of those who agreed to participate were shared with the investigator.

Participants in the "academically successful" student-athlete group consisted of three scholarship athletes and three walk-ons with half of the participants coming from in-state and half of the participants coming from out of state. Four participants in this group were Caucasian

and two were African-American. Four of these participants reported that they had chosen a major and two participants noted that they had not decided yet on a major.

Participants in the "academically unsuccessful" student-athlete group consisted of four scholarship athletes and two walk-ons. All participants in this group were from out of state and included four African-American student-athletes and two Caucasian student-athletes. One participant noted that he was a 1st generation college student and one participant endorsed that he received an IEP (individualized education program) during high school. All student-athletes in this group indicated that they had not decided yet on a major. Participants in both groups were 18 years or older. See Table 1 for information on the demographics of the participants in both groups. See Table 2 for information related to the demographics and academic performance of the participants' high schools.

Research Design

Qualitative research methods were used to explore this phenomenon. The methodology for this study was based on a constructivist framework which assumes that obtaining and interpreting knowledge is a product of both the researcher and the participant (Hatch, 2002). Using this paradigm as a foundation for the study, a phenomenological method of inquiry was used. Phenomenology is a research approach in which the researcher is attempting to capture the experiences of a specific group of people from the participants' own perspective (Finlay, 2009; Patton, 2002). To capture the participants' experiences a one time in-depth interview was conducted with each participant.

Procedures

Prior to collecting data, approval was obtained from the West Virginia University Institutional Review Board (IRB) for the Protection of Human Subjects (See Appendix B) and

permission was granted by the athletic department to recruit student-athletes for the study (See Appendix C). Potential participants who qualified for the study were contacted by the athletic department staff member to inform them of their eligibility for participation. Eligible participants received a confidential cover letter and were informed about the purposes of the study (See Appendix D). Those who expressed interest in participating signed a consent form describing the nature of the study and informing the individual of their rights as a participant (See Appendix E). The potential participants were also informed that the investigator would know that they had met the academic criteria in order to qualify for the study but would not be privy to any specifics of their educational information.

After having provided written consent, the participants were contacted by the primary researcher by their preferred method of communication. Upon meeting with the investigator, the participants were briefed on the nature of the study, details regarding participation, confidentiality, and their right to end participation or edit or delete any portion of the contents of the interview. All interviews were conducted in a private office in an academic building on campus. The interviews lasted approximately 30 minutes and were audiotaped for transcribing purposes. At the conclusion of the interview, each participant was asked to complete a demographic form (See Appendix F).

Consistent with the phenomenological research approach, one over-arching interview question was asked to guide the interview; additional probe questions were generated based upon the direction of the conversation (Finlay, 2009; Dale, 1996; Hatch, 2002; Patton, 2002). The main guiding question was "Tell me about your experiences as a student and an athlete over the past semester at the University?" When discussion was exhausted using the phenomenological approach, the researcher asked questions from a semi-structured interview guide regarding topics

related to their experiences during their first semester at college (See Appendix G). The topics

for this interview guide were generated from the literature and were used as probes to generate

discussion on issues related to collegiate experiences. Each participant was asked specific

interview questions regarding topics that they had not spoken to in the phenomenological portion

of the interview. Throughout the data collection process, the researcher took notes regarding

participants' behavioral cues and non-verbal responses and used bracketing to identify the

researcher's thoughts and feelings regarding the phenomena (Ahern, 1999; Dale 1996; Hatch,

2002).

Pilot Research

Prior to data collection, two pilot interviews were conducted to assess the quality and the

appropriateness of the interview questions and practice the researcher's interviewing skills. The

purpose of this interview was to determine whether the interview questions were appropriate for

the developmental level of the participants and for participants coming from the sport culture of

football. One pilot participant was an upper-class football player who was academically

ineligible after his first semester at college. The second pilot interview was conducted with a

former college athlete for the purpose of practicing generating appropriate probes and developing

follow-up questions. Through the pilot interviews it was determined that the interview questions

were appropriate for the developmental level of the participants and that they provided useful

information regarding the inquired phenomena. The pilot interviews were then transcribed and

used to train the research team for data analysis.

Data Analysis

A three-person research team consisting of the investigator, a faculty member trained in

qualitative methodology, and a graduate student in sport and exercise psychology was assembled

to assist with the coding and analysis of the data. Prior to conducting the formal data analysis, the research team practiced independent review and analysis using the data collected in the pilot study. Analysis continued until the research team achieved consensus in interpretation and coding.

Upon the completion of each interview, the raw data was transcribed by the investigator. Formal data analysis co-occurred as the data was collected and followed the steps of interpretative analysis as outlined by Hatch (Hatch, 2002, pg. 181; Patton, 2002): 1) the data was reread for a sense of the whole; 2) impressions previously recorded in research journals and bracketed in protocols were recorded; 3) the data was read again and impressions were identified and recorded into memos; 4) the memos were studied for salient interpretations; 5) the data was reread and interpretations were coded. Interpretations that were supported or challenged were discussed amongst the research team; 6) a draft summary was written; 7) interpretations were reviewed with participants; and 8) a revised summary was written and excerpts from the data were used to support the researcher's interpretation and analysis. (See Appendix H for data analysis examples).

Investigator and data triangulation were established as a measure of trustworthiness and consistency in the study (Patton, 2002; Thurmond, 2001). Investigator triangulation was established through the use of the research team. This measure ensured that the interpretations and analysis were agreed upon and consistent among multiple researchers' perspectives. Data triangulation was achieved by comparing the responses and themes of the two different groups. Congruence in perspectives between both "successful" and "unsuccessful" groups gave credence that the outcome of the study was legitimate, considering that the findings were noted by sources with different points of view. Member checking was also used to triangulate the data.

Participants were recontacted via email after the interview to confirm the accuracy of the transcripts and the conclusions from the study. These measures of data and investigator triangulation were conducted carefully to ensure rigor and validity of the findings.

RESULTS

The central purpose of this study was to explore the experiences of a sample of academically "successful" and "unsuccessful" collegiate football players during their first semester at college and examine how these experiences impacted their academic performance. This study was also designed to identify variables that collegiate football players perceived to be most important regarding academic performance. Through the use of interpretative analysis, the following themes identified below were derived for each of the two groups: 1) academic motivation, facilitators of academic success, time management, academic preparation, limited involvement, and academic skills and 2) academic motivation, barriers to academic success, time management, academic preparation, limited involvement, and lack of autonomy. For each major theme, subthemes emerged to better explain how student-athletes' experiences impacted their academic performance. See Appendix A for an outline of the themes and subthemes by group. The subsequent sections address the findings for each group in greater detail. Themes and subthemes are presented and described for each group and quotations from the interviews have been used to support the emergent themes.

"Successful" Student-Athletes

The academically "successful" student-athlete group was comprised of individuals who earned a 2.75 GPA or above and did not have any failing grades during the Fall 2010 term. Six major themes emerged through the analysis of this group's interviews. These themes included: 1)

academic motivation; 2) facilitators of academic success; 3) time management; 4) academic preparation; 5) limited involvement; and 6) academic skills.

Academic Motivation

Academics as a high priority. All of the participants in this group reported that academics were a priority during their first semester at college. While it varied between participants how much of a role football played in their life, all indicated that school was their first priority. As evidenced in the example below, the participants indicated that academics were highly important to them.

> I was just busy with football and class first semester and socially I hung out with my friends when I could. It came school, football, social. That's the order of things for me. That's how I did it. [4B]

High academic standards for self. Being highly motivated academically was also reflected in the participants' expectations for themselves. All of the participants in this group spoke of having high personal academic standards and clear goals related to their academic performance.

> I actually had pretty high goals coming to school. I wanted to be an Academic All-American coming in. I wanted to finish over a 3.5 [GPA], like maybe a possible 4.0 [GPA]. I knew it was going to be tough to get a 4.0 but I mean, at least I wanted a 3.5 cumulative [GPA] and I had a lot of expectations coming in. [6B]

> I personally have a goal of what I want to be [orthopedic doctor] and I'm self-motivated to get there and I want academic performance over my athletic. [3B]

Intrinsic motivation. The data revealed that the participants appeared to display high levels of intrinsic motivation. Five of the six student-athletes in this group said that they were self-motivated to get good grades. The participants in the "successful" student-athlete group appeared to be driven to achieve and engaged in behaviors that led to academic success such as attending class, putting time into studying, and taking detailed notes.

I just have a lot of self-pride and want to do well. I really want to do well. As much as I hate rolling out of bed and going to class -it's like "It's pointless, the notes are online, why do I have to go to this class?" It's like, I just want to do well. It sounds weird to sound like I'm competing to who has the higher GPA – as geeky as that sounds. I want to have the like highest GPA, I want to do the best I possibly can and it doesn't really motivate me but its like if I ever tried to skip a class it would linger in my mind "maybe I am missing this. I have a test in this. Maybe I'll lose attendance points in this." It just lingers in my mind and I'm just like, "I have just two classes." It's not like high school where you have seven or eight in a day. "I just have two classes, I'll just go there, come home and sleep." And I basically say something to myself like, "look do these two classes come back and sleep. You will be back in bed in like four hours. You'll be fine." And that is what really makes me get up and go do it. [6B]

Delayed gratification. Five of the six student-athletes in this group also said that they were motivated to do well in school for more than just an immediate reward. Many of the student-athletes who were academically "successful" noted that they were motivated by future goals such as career aspirations of graduate/medical school and job stability. By investing into their academics early on they hoped to reap greater benefits in the future.

One day I want to become an orthopedic doctor so I know that the work I do now will pay off down the road and if I slack off now that hope and that dream will not come true. So that's what really keeps me driving because I know what it takes to even get into med school or even to be looked at so that's what my focus is now, to get at least the foundation of a good GPA and good recommendations now so that the future is fastly approaching, I'll be prepared for it. [3B]

Family emphasis on education and academics. Each of the participants indicated that their families emphasized the importance of education and academics while growing up. They reported that they were encouraged by their parents to go to college and get good grades in school. Some participants noted that there were consequences if academics were not put first.

My mother is a teacher so growing up I was always pressed to do good in school. The first thing I did when I got home before I would go outside or anything was I had to get my homework done. So that kinda prepared me for now. It taught me at a young age how important academics are and how to push yourself and not put it off. So that was big. And my dad was the same way. Academics came before anything in my family because my dad is a successful business person so he knew that if you don't take academics seriously-now when I was entering my teenage years and the economy wasn't doing well and people were getting laid off, he saw first hand that people at his company who don't have

the qualifications or the academics were the first to go. So to have a background based on a good foundation on a degree from college really helps you out in this world. [3B]

Facilitators of Academic Success

Strong family support.   All of the participants indicated that having support from their

family helped them to be academically successful during their first semester. They reported that

their families were supportive of their college decision and were helpful and encouraging. They

noted that their families kept them motivated and accountable for their academics.

> I guess supportive. It's [college] definitely something they wanted me to do, not necessarily through athletics - that was a late developing option- but both my parents went to college so I guess they just expected me to and now that I am here they are helpful and encouraging. [5B]

> My parents have played pretty big roles in my life. You know, I look up to them and stuff and – they kept me pretty motivated and made sure I kept my head on straight. [4B]

Created an academic support network. In addition to their families, five of the six

participants identified a variety of actual and perceived resources that they utilized to assist them

in school. These resources included academic support services that were offered through

athletics such as study hall, tutors, and mentors as well as other sources of support such as

teammates, friends, classmates, coaches, significant others, people who had taken certain classes

before them, study groups, and review sessions. Each of the participants identified multiple

resources in their support network that they knew that they could rely on when they needed help.

> The [academic support services through athletics] would help out whenever I needed it but like I said earlier, I didn't turn to them a whole lot because I didn't need it. Mainly I just relied on you know [my cousin], my study sessions with my bio, and the histories I could do by myself – I didn't need any help with that, and anthropology that was pretty easy, I just relied on other – my friends basically if I needed. Friends. [4B]

> Study hall actually helps out a lot. Cause that's set inside. Cause if I go home and I try studying sometimes I'll just be like "forget it" and study hall you have to do something in there. So being in there for an hour you are going to study for at least 20 minutes of the time so… [1B]

High academic self-efficacy. *"*Self-efficacy" refers to an individual's beliefs about his or her capability to achieve a desired goal and is related to domain specific self-confidence (Bandura, 1997). All of the participants in the "successful" student-athlete group consistently referred to the belief that they have the skills necessary to be academically successful in college. These skills ranged from general academic ability to study and time management skills. The young men in this group communicated self-awareness of their academic abilities and were able to identify aspects of learning that they had mastered in the past.

> For the most part I mean, for most classes once I see something or hear something I remember key words and I am able to remember stuff for the most part. So I mean I never really had trouble studying or memorizing things. [2B]

> Most of the subjects, they come easy to me but - I mean I don't want to make that sound bad but they kinda do. [3B]

Time Management

Despite their achievements, the successful participants reported that it was a challenge to balance the multiple responsibilities of school, sport, and personal lives during their first semester. They noted that their day typically consisted of early morning workouts, classes, afternoon practices, and study hall, leaving little time for recovery by the end of the day. All of the participants recognized that they had experience managing their time as a student-athlete during high school; however, they noted that they were expected to devote a greater amount of time to school and sport in college.

> Being a student-athlete back in high school and in college is very different. Much more time is put into athletics everyday so you really got to be able to balance that. When the season comes around you basically don't have time for anything so you gotta do things in advance so that you have time for yourself. [6B]

> I didn't really think much of it coming here but when you finally get here you find out what it is finally like. It's not really the best thing. It's nowhere near a normal college student life. They just go to class and then they can do whatever but you got a full day

ahead of you everyday so if you want to hang out with friends outside of football it's like after 9 o clock at night. It's just like a lot of time. [1B]

Effectively managed multiple responsibilities. Despite these challenges, all of the participants indicated that they successfully managed the demands of sport and school by developing effective time management strategies. Because their time was limited, the participants described planning ahead and devoting any free time to the responsibility that was their greatest priority. By planning how they were going to utilize their time and subsequently addressing their academic responsibilities, the participants successfully accomplished the demands placed upon them.

> One of the skills that I really picked up was not waiting last minute for something to be due. I used to always do that, just wait either a day or two before something was about to get it in and you really can't do that in college especially playing a sport. So now whenever I have any free day, which is very rare, even if I do not want to I'll just - if I have a paper I will just write one or two pages just try to do something to knock it out. And that's the biggest skill that I got, just time management. [6B]

In addition, the participants discussed sacrificing certain aspects of their life in order to effectively manage their time. One participant noted that sacrificing his social life enabled him to perform his best in school:

> I talk to my friends and they say "come out with us tonight, come out with us" and multiple times I say "you know what guys I would love to but I gotta – you know I got practice like the next afternoon. I'm swamped with schoolwork. I just gotta get this done." It – it took at a lot of self-sacrifices to be able to you know turn down an invite someplace, to balance the school work and the time and everything. And you get done with practice at 7 o'clock at night and I'd go home and grab a quick bite to eat and hit the books right there because I didn't want to be up until 1 or 2 in the morning. So I'd just try and break everything up so that I could work on it in small increments throughout the week and so it didn't build up. [3B]

Lack of Recovery. As a result of their demanding schedules, four of the six participants indicated that recovery time was limited. They noted that they were often tired after long days of class and practice which had an impact on their motivation to do academic work during their free

time. However, these individuals reported that they devoted time to their academic work despite

their fatigue. As one participant explained:

> Just gotta be ready to balance your work between football and school-during the season
> it's tough because you got class and you are at the stadium all day. And you gotta come
> home or go to study hall and really do your work even though you are going to be tired.
> But just pretty much staying on top of your work and getting things done even if – if you
> have a paper due next Monday, start it a few days ahead so you don't have to rush it in
> one day. [2B]

The participants in this group also recognized the importance of including recovery time

into their schedule. While the majority of their time was dedicated to school and sport

responsibilities, four of the six participants discussed choosing to use their free time to recover

rather than to socialize.

> Didn't go out that much. Was really worn down because it [football] was a lot more
> intense than my body ever had to undergo. Like I had fun. I went out sometimes but a lot
> of times I just chose to stay in and recover. [5B]

Academic Preparation

Felt academically prepared from high school. Five of the six student-athletes in the

academically "successful" group reported that they felt adequately prepared for the academic

workload that they faced in college. It emerged from the data that the participants' previous

academic experiences somehow contributed to their academic success during their first semester.

They noted that their high school curriculum had prepared them with the knowledge to be

successful and that they developed skills such as research paper writing, work ethic, and study

skills that enabled them to adapt to the academic expectations in the classroom.

> I was actually very prepared coming in academically and I knew - work ethic, studying
> taking notes, a lot of stuff that you have to do on your own I did when I was in high
> school and they didn't really spoon feed you too much... Like junior year we wrote a 15
> page research paper for no purpose- just to get you ready for college and [learn] how to
> cite and how to plan your time. It wasn't even graded it was like - just do that so I never
> really need things spoon fed in college, I was able to just get on top of it. Plus my mom's
> a teacher too so that really helped a lot with it. [6B]

Learned vicariously through others. Four of the six participants reported that they knew what to expect in college because they had learned from the past experiences of siblings, teammates, and friends. By observing others' experiences in college, the participants seemed to have a better understanding of the academic expectations. They noted that they were more aware of what they needed to do in order to be successful in the college environment and were able to plan for potential challenges than did their less successful peers.

> I felt prepared enough. I had an older brother go through already. I saw how he did and he told me how it was so I felt like I could do it. It wasn't that bad. If he could do it, I could. [1B]

> I pretty much knew what to expect for the most part cause my brother actually played at [college name]. He just finished up there so…I mean, a lot of other people from my school went on to play college ball so for the most part I understood what was expected of me and what things I really needed to do to be successful. So I mean, I did well in class. I had a good time on the weekends though. It was cool. [2B]

Limited Involvement

Teammates as friends. All of the participants noted that they were highly involved with the football team and football related activities during their first semester in college. They indicated that the majority of their academic and social interactions with people on campus were with teammates or individuals related to football. The participants reported that they developed strong social relationships with their teammates and could rely on them for both social and academic support. Because they lived, practiced, and took classes with their teammates, it emerged that the participants were highly involved in the football community.

> Academically, I just went to class and did my work and that's about it. Socially, basically most of the socializing I did was with teammates or people who were involved in the program. Didn't really stray too far from that. Like I said hardly went out, only went out a few times. Had a good time but like I said I chose not to do that excessively. [5B]

Lack of interaction in academic and social communities. Five of the six participants reported that they had limited interactions with people in the academic and social communities on campus such as professors, teaching assistants, and non-athlete classmates. When asked about their involvement on campus, the participants indicated that they were not involved in any extra-curricular activities beyond their athletic pursuits.

> Well I didn't get much involved after the class aspect. I didn't go to tutor sessions strictly because 1. I'm too tired and 2. I just don't really have motivation to go to things like that even though I really should. Like if there is an extra credit opportunity or something - unless I totally need it yeah, I'm really not going to go to it but um... it was strictly class things. I didn't go to more than that. There'd be openings but I didn't really want to go through that. [6B]

Academic Skills

Strong study skills. All of the participants in this group reported having specific skills related to learning that enabled them to be academically successfully. One of these skills, study skills, included behaviors such as paraphrasing and note taking, studying in small increments each day, retaining information, paying attention in class, reading the textbook, regularly checking email and messages online, and being aware of assignments and when they are due.

Individuals in this group indicated that they consistently engaged in these behaviors during their first semester which enabled them to do well in the classroom.

> I'd study like 3,4, days before the test, look over it maybe like 20 minutes a day maybe not even that much time like 20 minutes a day for like 3,4 days. By the end you'd know most of it of what I was studying. [1B]

> I remember learning taking notes in the 5th grade actually. I remember - actually in 6th grade - that was the biggest thing I learned in 6th grade - format it and how to take notes. Like I used to take notes like everybody else where it's just like teacher would say something and you would like write it like full sentence and not understand what it means but have it on the paper. And I really try now like - if my teachers says something I'll try and paraphrase it and like make it an example that is unique to me that I can understand or I can try and write it down in a way that- like if its like a certain phrase or something like that in a way that I can remember it. So taking notes really helps like me to be able to

study it which in turn makes me able to do better. So I think it is really the note taking part that I do well with. [6B]

Ability to take self-responsibility for learning. All of the participants in this group described examples of autonomous learning. They seemed to be aware that they needed to be responsible for their own learning and recognized that others were not going to do the work for them in college. They reported feeling capable of meeting the academic expectations of college and wanted to do schoolwork on their own without the help of academic support services.

> Well first semester I had to go through study hall and I actually rarely used the tutors because I wanted to do things by myself, I just was like that. I would check my [online classroom website], check homework- do it. And if I had a lot of free time I would do the next day's assignment. I didn't need really any person telling me I have to do this, this, this and this. I didn't really need that….When it came to trying to get prepared for work I didn't really need any of that so that's why after the first semester I had high enough GPA that I asked to get out of study hall because I could handle it myself. [6B]

Ability to develop strategies and adapt behavior. When the academic strategies they used in the past no longer worked in their new college environment, the successful student-athlete group described learning from mistakes and developing new strategies. By moving up to the front of the classroom, synthesizing information, proofreading their work, and developing better study habits, these individuals were able to adjust to the academic environment.

> Well the major difference that I would say between high school and college is that is that I mean you know in some classes in college you have 200-300 students so that was the uh, biggest adjustment. So at first I had to figure, I need to move up closer to the front just cause it's harder to hear and even though- for the most part in high school the teacher writes something on the board that is the main thing you need to know but here you need to really listen to what the teacher says. You need to write things down that aren't just on the board. You need to listen to what the teacher is really saying. [2B]

<div align="center">"Unsuccessful" Student-Athletes</div>

The academically "unsuccessful" student-athletes group was comprised of individuals who earned a 2.00 GPA or below during the Fall 2010 term. Six major themes emerged from the data analysis for this group. They included: 1) academic motivation 2) barriers to academic

success 3) time management 4) academic preparation 5) limited involvement and 6) lack of autonomy. As with the successful athletes, subthemes associated with each major theme also emerged from the interview data for this sample and helped to clarify how the student-athletes' experiences impacted their academic performance.

Academic Motivation

Sport prioritized over academics. It emerged from the data analysis that all of the student-athletes in the "unsuccessful" group emphasized their sport responsibilities over their academic responsibilities during their first semester at college. The following participants noted:

> I mean, if you pretty much just go to classes and do your work you will pass but with me I was trying- I was like leaning more on football trying to play than doing class. [4A]

> I just don't really find school interesting I should say. I find sports interesting so it's easier to like that than it is [to like] school. [2A]

When asked why they chose to attend college, all of the participants said that their primary motive was football-related. They perceived college as an opportunity to continue to play football and reported a strong desire to get playing time. The participants generally had unclear career goals. All six identified themselves as not decided on an academic major. When discussing their experiences in college, it became evident that sport was highly valued among their priorities. Many of the participants discussed sport as being a passion in their life since childhood, stating that they had a dream to play football and go to the NFL. The young men in this group also identified that sports were interesting to them and they felt more comfortable in the athletic environment than in the classroom. On the other hand, school was considered to be uninteresting and it emerged that many of the participants spent little time thinking about the role of school in their lives. College was perceived to be the means to an end and a necessary task to complete in order to play football.

Just as a kid I always wanted to play football. I mean, you don't pretty much think about degrees until you really have to go through high school and that's the only way that you gonna play sports if you go through school. [4A]

As a result of this mindset, many of the student-athletes in this group said that they focused their time and energy during their first semester on football. As one participant described:

Yeah, I'd say that I was more worried about football and stuff like that than my academics. I thought my academics would take care of themselves. Then you realize that you gotta do it yourself. You're the one that has to take charge and make sure you are getting the grades. No one is going to give them to you. [2A]

Low intrinsic motivation. Intrinsic motivation involves engaging in a task for the internal rewards of carrying out the task such as personal satisfaction (Deci & Ryan, 1985). However, five of the six participants in the academically "unsuccessful" group reported that they were unmotivated to complete their academic responsibilities. These individuals did not display interest in the learning process and had difficulty self-initiating work. They noted that they were not motivated to learn about things that were uninteresting, would prefer to sleep in rather than go to class, socialize rather than do homework, and lacked the desire to put in study time beyond what was required of them for study hall. As one participant explained:

I guess you want to go out on weekends. You should have been studying but you were a college student, you should have been studying but you like "ahhhhhhhhh" so you kinda push it to the side, brush it off to the side like "Ah I'll do it later" so I guess that kinda had an impact on my academics too. I guess you just say that "I can just wait till Sunday." If it is a Saturday, Friday, you probably have a test Monday you can be like "I can wait till Saturday" and then you kinda be like "well I can go out Saturday and I can wait till Sunday" and it's kinda like you'll look over it but you don't really feel like doing it so I mean- or you might go over it for awhile but you kinda brush it off when you could have been doing that Saturday and Sunday you know, getting you more prepared. [1A]

Motivated to stay eligible for sport. The participants reported that they were motivated academically primarily by the desire to stay eligible to play football. In order to participate in

collegiate sport, they were required to meet a minimum grade point average and number of credits per semester. The extrinsic reward of maintaining their eligibility for sport was described as the driving force in the participants' academic performance.

> Well, I know that you can't play football if you don't have the grades so I used both of them. I mean, as if, no grades no football and if I am passionate about football I know I need to get my grades so I can play the sport I love to play and do the thing that I love to do. So…football played a big role in the school… [3A]

Barriers to Academic Success

Low family support. All of the participants in the academically "unsuccessful" student-athlete group reported having low family support for various reasons. One participant was a first generation college student and felt as though his parents were unable to understand his experiences in college. Another participant's father had recently lost his job which impacted the family's ability to financially and emotionally support the participant during his first semester. A third participant's reported that neither of his parents was in his life. All of these participants in this group were from out of state and had limited access to their families during their first semester in college. In addition, each of the participants indicated that their parents were either divorced or deceased.

> My mother is deceased and I never knew my father. I have a stepdad but I don't really talk to him either. And I just started talking to my brother after my mother died and then I talked- I live – I live pretty much my aunt, godmother, and my brother but I didn't want to stay so… [4A]

Low academic self-efficacy. When discussing school related issues, all of the participants in this group displayed low academic self-efficacy. They used labels to describe themselves such as "someone who was never good at school," "not a good studier," "not really a test person" and as "someone who doesn't really excel at too many things, just kinda average at everything." These individuals lacked confidence in their academic abilities and did not believe that they had

the capability to excel in many of the academic related tasks that were expected of them during

their first semester.

> School is just not my thing, I mean I feel like that will always be a struggle for me because its just not one of my strongest – its just not an interest for me but football that's what I love to do. So I felt like football wasn't hard for me to catch up on. [3A]

> *Unfamiliarity.* All of the student-athletes in this group noted that many of the experiences

during their first semester such as balancing a difficult schedule, learning new systems in school

and sport, adjusting to a different environment, and adjusting to greater academic expectations

was difficult for them. Many of the experiences in college academically, athletically, and socially

were new to these individuals and different from what they had experienced prior to coming to

college. Unsuccessful athletes perceived that adjustment to the unfamiliarity of college impacted

their experiences during their first semester.

> I guess its just getting used to it for the first time so its not very – I mean – it's a new thing so I guess its – everything new to you isn't going to be easy the first time so I guess it was just being new to the college atmosphere and going to classes like and then going to practice right after that and then have a study hall right after that and then waking up and doing it all over again kinda..uhh..so it's seems like it was one thing after another. [1A]

> Since I've been here, I mean I thought it was a little easy but trying to do football and classes its kinda hard because you're really trying to learn both systems at the same time just because you're a freshman like- it's like you are learning both ways but then you are trying – it's like you are getting tested in both situations… [4A]

> *Limited personal responsibility for learning.* It emerged through the data analysis that

five of the six participants in this group had difficulty learning autonomously during their first

semester at college. They described challenges with being responsible for their own learning,

noting that they did not engage in the learning process or take initiative in starting their own

work.

> It affected it pretty bad because I was used to being lazy honestly, that's all it was honestly. Not having to do anything for myself, um, not having to sit down and study, not

having to sit down and do my homework, not having to sit down and write this essay, not sitting down to actually reread the book or reread the chapter before the test…umm, email the teacher with problems you know, you don't do that in high school. You didn't really – you didn't really talk to the teacher or if we had problems we'd raise our hand in class, even then you wouldn't raise you hand in class, you would be like "whatever." It wasn't that big of a deal… [5A]

Time Management

Difficulty managing multiple responsibilities. For five out of the six of these individuals, the expectations of college were perceived to be greater than in high school and required more of their attention to be devoted to time management. As a result, the participants reported that they felt unprepared to manage time well in college and perceived themselves to have very little free time. This lack of free time was distressing to the participants and in response, they often chose to use any unscheduled time for their own interests rather than for academics. As one participant stated:

I guess it was like you felt like you didn't have enough time in the day sometimes you had so much to do. Like you going to study hall you probably didn't get everything done but when you went home you didn't really feel like doing nothing cause you wanted that down time just to rest and kick back so it was kinda like you're a slacker a little bit in the part of being at home when you probably should have been studying a little more. [1A]

Lack of recovery. Perhaps as a result of their demanding schedules, five of the six participants indicated that a lack of recovery was one of the difficult aspects of their experiences in college. The participants perceived that a lack of time to allow their bodies and minds to recover from the demands of school and sport greatly impacted their academic performance during their first semester.

Everything was hard, like the studying time was hard, like we only had like an hour to do everything for the study cause after practice- that's when we had to study was after practice- so our body was wore out and we wasn't really into it. That's basically everything it was. We had to fit everything into a schedule. [6A]

Another participant indicated that the lack of recovery directly impacted his ability to think and perform his best academically:

> So my day didn't really end until about 9 o'clock starting at 6am in the morning so it took a toll on the body. Uh, brain slowed down and it wasn't quite thinking that much. [3A]

Academic Preparation

Academically unprepared from high school. The participants in this group reported that they felt academically unprepared for college. Five of the six participant reported that their high school curriculum did not prepare them for college. They noted that they rarely had to study, read textbooks, or work hard in high school leaving them feeling unprepared for the amount of work and level of difficulty in college.

> And as soon as I got here, it hit me. Like, all the classes I was taking I was like "wow, I've had a year off not doing anything in high school. Not doing – not picking up a book barely to read not even in English -My English class was cake. I haven't taken a math class since my junior year in high school so I was like "whoa." Having all the classes like back-to-back and I never had to study in my life. [5A]

In addition, four of the six participants described instances of entitlement in high school where they experienced special treatment in the classroom due to their athletic status. This practice left the participants feeling unprepared when they reached college.

> High school was pretty easy. I didn't really have to do much. I don't want to sound cocky but I was like a big name coming out of my school so – I mean I got decent grades in high school but I didn't really study for anything in high school…But it's a little different in college. College is a different step. Everything is on your own, you know what I mean? No one's there to help you pretty much. [2A]

Expectations of college different than reality. In addition to feeling unprepared from high school, the participants noted that the expectations in college were much different than they expected. Five of six participants were not expecting the academic challenges that they encountered and experienced difficulty adjusting to the change. As one participant explained:

Last semester it was rough. Coming in, I wasn't expecting the school to be this hard and on top of that you have to deal with sports. [3A]

He continued to further explain:

I never got so much school work like this and it just – it just overwhelmed me. I didn't have to stay on top of my schoolwork at high school. <snaps twice> It's done like that. Now I have to – really take time out and study my material. [3A]

Poor study skills. It also emerged from the data analysis that five of the six participants in the "unsuccessful" student-athlete group believed that they had poor study skills. They described not knowing what to study, consistently missed class, crammed, focused on the wrong study material, did not devote enough time to studying, did not read the book, and did not pay attention in class. The participants indicated that these behaviors impacted their academic performance during their first semester.

I didn't have good study skills like I didn't know what to study, I would just read or something and make a study guide and try to remember everything. [2A]

I had like – like classes that you had to take notes in. I mean if the notes aren't the same as the professor is really like talking about, I mean, you could get mixed up on the test like you don't know what to talk about the subject and stuff. Like I don't know what to study and stuff like that. [6A]

Difficulty asking for help. Individuals in this group reported having difficulty asking for help when they sensed they needed it. It emerged that the participants often did not recognize that they needed help, did not know who to ask for help, or felt that their pride got in the way of asking for assistance with academic related issues. Participants indicated that this task was difficult because they typically did not have to ask for help in high school. As one participant described, if he needed help someone would come to him prior to him having to seek out support.

It was very very detrimental. Probably because… I never really…. I was always kinda helped along in high school, like if I needed help, everyone was "oh go help [name] out

ya know if he needs help" "Go ask him if, you know" - everyone was kinda there to push me along, help me out. [5A]

He continued:

I really….I really never talked to anybody about... I never went up any single- not one of my teachers and asked them for help cause I've never had to do that in high school. Like I said it was kind of a confidence thing, I just didn't think I could go up in front of everybody or go after class and talk to him about "hey I'm not doing so good in this class, is there anyway you can help me out." My dad's like "it's just easy just go up there and talk to them" It's like it's not that easy, it's a lot harder than you think. [5A]

Limited Involvement

Lack of interaction in academic and social community. Five of the six participants reported that they were not very involved in the academic and social communities on campus and did not participate or interact with people such as professors, teaching assistants, or non-athlete classmates. The majority of the participants in the group reported that they had never spoken with a professor during their first semester despite having difficulty in the classroom. If the participants in this group did interact with others academically, they reported that it was usually with fellow football players.

I've never had a personal conversation with a professor…. I have never participated. Um, I don't really like talking in front of a crowd. I was always shy with that, so I didn't too much participate in class like that. [3A]

Socially, four of the six participants perceived that they also were not involved in the social community on campus outside of the football team. Many of the participants in this group seemed satisfied with their social relationships on the football team and did not see a benefit in developing social relationships outside of football players.

I mean it was good for me because I came here with someone I went to high school with so, it I mean, I wasn't really trying to make new friends. I didn't really care about that. [6A]

This participant continued to say:

> Last semester? I ain't meet nobody. I ain't want to meet nobody. Stayed in. Football. [6A]

> *Teammates as friends.* Although reporting that they had low involvement in the academic and social communities on campus, four of the six participants in this group noted that they were highly involved in the football community. They indicated that they had developed strong social relationships with their fellow teammates and spent most of their time interacting with people who were on the football team or people who they had met through football.

> The majority of my friends are on the football team. I don't too much talk to anyone else outside of the football team. I just keep a tight circle for some reason. [3A]

As one participant noted, he spent most of his time with his teammates and in activities related to football:

> I mean I feel more comfortable with them [football players] than outsiders just because you with them all the time. [4A]

Lack of Autonomy

> *Depending on others in high school.* Five of the six participants reported that they had a history of depending on others to complete their academic responsibilities during high school. This dependence on others' help negatively affected their academic performance once they came to college. Because they were not prepared with the appropriate skills to work autonomously, they described being unsure of how to problem solve for themselves.

> In school I mean I felt like I always had someone to do it for me so it impacted me hard cause when I first got up here I always looked for someone to help me with something and nobody was always there like there were in high school. [3A]

> I mean, there is so much more responsibility [in college]. Like in high school everyone is just going to help you through. But here, like the teachers don't care if you are in class. Like they are not going to go out and tell you that you need to come to class or email you… [2A]

Dependence on academic support. Four of the six participants described continuing to rely on academic support (e.g., tutors, mentors, study hall, study guides) through their first semester in college. While academic support services were available to the student-athletes and were designed to assist the athletes and supplement the learning process, the participants in this group described over-relying on these services. Participants indicated that they perceived that these personnel were available to prepare their work, manage their time, and remind them of their academic responsibilities.

> It was a lot helpful because I was always here and there with football and class so he [academic support personnel] always - when I came to study hall, he always had stuff there and then all I had to do was do it…. He helped you – he was like a calendar. He had everything set up so I – all you really had to do was do your work and get out. [4A]

In addition to academic support personnel, the participants described depending on academic resources such as study guides to compensate for poor study skills. One participant noted:

> I mean, if the teacher gives you a study guide, it's easy for me, but if she don't it's very difficult to study. I don't know what to study. [6A]

Summary

The results of this study revealed considerable differences between the two groups of student-athletes regarding their academic motivation, time management skills, academic preparation, academic skills, and autonomy. Student-athletes in the academically "successful" group reported prioritizing academics and being intrinsically motivated in school. They demonstrated effective time management, academic, and self-regulation skills and perceived that they were academically prepared for college coming from high school. It emerged that these individuals demonstrated facilitators of academic success such as strong family support, high academic self-efficacy, and an academic support network in college. In contrast, the student-

athletes in the academically "unsuccessful" group reported prioritizing sport over academics and exhibited low intrinsic motivation for school. It emerged that these individuals were more motivated to stay eligible to play sport and did not perceive themselves to be prepared for college coming from high school. They reported having barriers to academic success such as low family support, unfamiliarity to college, low academic self-efficacy, and poor self-regulation. They noted that they had difficulty with time management and tended to over depend on the academic support services provided through athletics. Both groups described limited involvement in the academic and social communities on campus and intensive involvement in the football community. The implications of these results will be discussed in the following section.

DISCUSSION

An examination of the experiences of an intensive sample of academically "successful" and "unsuccessful" collegiate football players during their first semester in college revealed a number of factors that reportedly impacted the participants' academic performance. For the academically "successful" sample, relevant factors included academic motivation, facilitators of academic success, time management, academic preparation, academic skills, and involvement. For academically "unsuccessful" student-athletes, relevant factors included academic motivation, barriers to academic success, time management, academic preparation, involvement, and autonomy. The data suggested that there were considerable differences in the experiences of the two groups in relation to these factors that may have contributed to the discrepancy in academic performance. The following section further identifies the significance of these findings in relationship to the literature and also discusses limitations, practical implications, and directions for future research.

Academic motivation was one of the strongest themes for both groups in this study. As Meeker, Stankovich, and Kayes (2000) reflected, "people tend to pursue the values that have meaning to them more vigorously than those with less importance (Sears & Gordon, 1998; pg. 43)." In this study, the "successful" student-athlete group discussed academics as being their primary priority and noted that they were intrinsically motivated to achieve academically. In contrast, "unsuccessful" student-athletes identified that they prioritized sport over academics and appear to exhibit lower intrinsic motivation for academics versus sport.

These differences between the two groups may be explained by the expectancy value theory of motivation (Atkinson, 1957; Eccles et al., 1983). This theory suggests that an individual's belief about how likely he or she is to successfully complete a task as well as the value that the individual places on the task will determine his or her level of motivation (Wigfield & Eccles, 2000). In the current study, the subthemes of academic self-efficacy and priorities appear to be representative of the two components described in expectancy value theory. Low academic self-efficacy emerged as a barrier to academic success for the "unsuccessful" student-athletes group while high academic self-efficacy emerged as a facilitator to academic success for "successful" student-athlete group. Expectancy value theory suggests a possible explanation for the levels of academic motivation that the participants in each group exhibited in this study. The participants' beliefs about their capability to be academically successful in college (as indicated by reported high or low self-efficacy), coupled with tendency for individuals in the high performing group to value academics more than individuals in the low performing group may have contributed to the discrepancy in academic motivation between the groups.

As observed in this study, the participants who performed well academically in college described having higher intrinsic motivation for academics than the individuals who did not perform well academically in college. This suggests that the existence of fostering intrinsic motivation may be influential with regards to the outcome of academic performance. As self-determination theory explains, an outcome focused perspective where student-athletes are completing academic responsibilities out of compliance and necessity to maintain athletic eligibility rather because of genuine interest, is likely to decrease motivation over time and subsequently inhibit performance (Deci & Ryan, 2000). This theory may help to explain why the more extrinsically motivated group did not perform as well academically.

A handful of studies have explored the predictive value of academic motivation and have demonstrated that this construct has considerable promise as a predictor variable of student-athlete academic performance (Gaston-Gayles, 2004; Gaston-Gayles, 2005; Lang, Dunham, & Alpert, 1988; NCAA, 2009; Simons, Van Rheenen, & Covington, 1999). Particularly relevant to the current study was Gaston-Gayle's (2004) examination of the impact of academic and athletic motivation on the academic performance of collegiate student-athletes. Using the Student Athletes' Motivation Towards Sports and Academics Questionnaire (SAMSAQ; Gaston-Gayles, 2005), she found that the combination of ACT scores, ethnicity, and academic motivation best predicted student-athlete academic performance. Athletic motivation did not emerge as a predictor in the model. This finding supports the results of the current study that indicated that participant's level of academic motivation was a valuable indicator of academic performance. Gaston-Gayles (2004) concluded that academic motivation, regardless of athletic motivation, is a significant predictor of academic performance. The findings from this study also reflected that strong athletic goals were not necessarily hurtful to the participants' academic performance.

Many of the participants in the "successful" student-athlete group noted that they were highly committed to sport and had the potential to be a starter; however, the most successful individuals tended to have an equal or greater orientation towards academics.

There is evidence in the literature supporting that pre-entry characteristics are salient factors in predicting the academic outcomes of college students (Tinto, 1993; NCAA, 2009). However, there is less agreement on what factors are most important. The results of this study indicate that family support and academic preparation were relevant pre-entry characteristics in the participants' experiences and academic performance. In the current study, a lack of family support emerged as a barrier to academic success and low family emphasis on education and academics was found to impact their level of academic motivation. This finding is not surprising considering the trends in the literature. Parental level of education has been reported to be predictive of the academic and athletic motivation of collegiate student-athletes (Althouse, 2010). In addition, previous research has demonstrated that individuals coming from a single parent home, having low socioeconomic status, coming from an academically disadvantaged background, who are a member of an underrepresented minority group, and who are a first generation college student are factors related to the academic performance of at-risk student-athletes and non-athletes (Chen & Kaufman, 1997; Heisserer & Parette, 2002; Horn & Choy, 2002). Tinto's (1993) Theory of Student Departure identifies family background, skills and abilities, and prior school to be significant variables in his model of college student retention. In addition, the NCAA (2009) recognizes in their model of academic risk that background factors such as first generation college student status, low financial resources, and homesickness as well as academic factors that reflect academic preparation such as high school GPA, standardized

testing scores, and history of low academic effort are relevant factors to consider when assessing for academic risk.

In addition to family support, academic preparation from high school emerged as a personal background theme related to academic performance. Student-athletes who were academically "successful" reported a history of high academic self-efficacy and academic success in high school. They indicated that they felt academically prepared coming from high school and perceived that the skills that they had developed provided them a good foundation for college. Student-athletes who were academically "unsuccessful" described feeling unprepared from high school and reported that they did not have the necessary skills to be successful during their first semester in college.

There are a number of reasons that these individuals may have perceived themselves to be unprepared. First, these individuals may have come from a disadvantaged background and attended a high school of poor quality. As noted in the literature, school quality and the level of rigor can impact skill development and educational attainment (Oates, 2009; Wolniak & Enberg, 2010). Second, perhaps the cycle of low academic motivation as explained by the expectancy value theory began prior to entering college. Those with a history of low academic motivation in high school or even elementary school may not have acquired the knowledge or skills necessary to be successful in the college environment. A third possibility may be related to grade inflation and the practice of enabling student-athletes who have high athletic talent. As noted in the findings, some of the student-athletes reported entitlement in high school as a result of their athletic status and reflected that they were often "given" grades. Pinkney and Tebbe (2009) recognized that grade inflation is a significant issue among the student-athlete population and

noted that while it may appear to be a harmless practice in the short term, as evidenced by the findings of this study, it may put student-athletes at an academic disadvantage in the long-term.

In addition to going through experiences in high school that led them to feel academically prepared for college, the participants in the "successful" student-athlete group also described feeling academically prepared as a result of learning vicariously through the experiences of siblings and former teammates. While the participants spoke of these vicarious experiences primarily in terms of academic preparation, their reports were also reflective of their level of self-efficacy. Social cognitive theory suggests that both mastery and vicarious experiences are influential sources of information that build self-efficacy (Bandura, 1997). Student-athletes coming from academically rigorous schools and who have learned from others who have experienced collegiate success are more likely to have developed high academic self-efficacy prior to coming to college. Student-athletes who have attended schools with low academic rigor or who are from families of low support may not have had the same opportunities to develop academic self-efficacy, putting them at a disadvantage prior to entering college (National Resource Center for the First-Year Experience & Students in Transition, 1999).

Additionally, time management emerged as a significant factor in the in the current study. Both the academically "successful" and "unsuccessful" student-athletes reported having limited time and a lack of recovery as a result of their dual roles as athletes and students. However, the "successful" student-athlete group reported effectively managing their time while the participants in the "unsuccessful" student-athlete group reported having difficulty managing time and balancing recovery. These findings are supported by the literature that suggests that the unique lifestyle of student-athletes puts this population at risk for a number of negative outcomes, including academic underachievement (Etzel, 2009; Pinkerton, Hinz, & Barrow, 1987).

Significant increases in the time commitment for both school and sport can be taxing, making student-athletes more likely to experience role conflict as they try to meet the demands of both school and sport (Blinde & Greendorfer, 1992). In order to manage this role conflict, the student-athletes in both groups reported having to make choices regarding how to prioritize their responsibilities. The results for both groups indicated that participants reported managing their time based upon their priorities and what was most important to them. Despite fatigue, the individuals who valued academics reported that they devoted their free time for academics. In contrast, the academically "unsuccessful" student-athletes reported to be impacted by the lack of recovery and subsequently devoted their free time to socializing and recovery rather than academics. These findings are supported by literature that suggests that student-athletes have to make "tradeoffs" with their time in order to participate in collegiate athletics (Potuto & O'Hanlon, 2007). The research suggests that many student-athletes choose to sacrifice academics, which has been demonstrated to have an impact on academic performance and career maturity (Adler & Adler, 1987; Miller & Kerr, 2002; Potuto & O'Hanlon, 2007).

The participants' academic behavior may have also been a product of aspects of the culture of intercollegiate football. As Tinto (1993) noted, extracurricular experiences can have an impact academic performance. The current culture of football is driven by winning and promotes an atmosphere of external control and limited autonomy (Eitzen & Sage, 2009). Student-athletes who are enmeshed in football may be more influenced by this culture. Those who highly value athletics may be more likely to submit to having limited control over their lives and perhaps prioritize activities that enable them to be successful on the field. Subsequently, the academic achievement of these individuals may have been reflective of what was being reinforced in the football milieu.

The literature suggests that involvement in the academic and campus communities on campus is a critical factor for persistence and retention, however, both "successful" and "unsuccessful" student-athletes reported little involvement in the academic and social communities on campus (Pascarella & Terenzini, 2005; Tinto, 1993). Neither group reported spending much time getting to know teachers and classmates or attending extra credit events and social activities. Similarly, both groups indicated that they were highly invested and involved in the football community. This pattern of behavior provokes interesting discussion on the impact of involvement on the academic performance of student-athletes. First, these findings support previous studies that suggest that student-athletes, particularly student-athletes in revenue producing sports, experience isolation from the rest of campus (Ferrante & Etzel, 2009; Lubker, 2006; Potuto & O'Hanlon, 2006). It is possible that this isolation may be: 1) a result of their unique lifestyle which restricts the amount of time and energy that student-athletes have to devote towards activities beyond school and sport; or 2) a result of the control that athletic departments have over student-athletes (Ferrante & Etzel, 2009; Monda, 2008; Sperber, 1990). Regardless of the cause, research suggests that interaction with peers in both an academic and social setting plays an important role in determining academic persistence (Pascarella & Terenzini, 2005). The beliefs and values of a group can have a normative influence in shaping an individual's priorities and values. As described in the seminal work by Adler and Adler (1987), if student-athletes are a part of a peer culture where athletics are promoted over academics, this normative influence may put a student-athlete at risk for low academic performance or even drop out. In addition, isolated student-athletes may be less likely to be aware of or utilize campus support services that might assist them if they had academic concerns.

As Ferrante and Etzel (2009) note, the restrictive environment of intercollegiate athletics may also have an impact on development of sound academic behaviors, such as self-regulation. Self-regulation is a construct related to motivation and is described as "the degree to which students are metacognitively, motivationally, and behaviorally active participants of their own learning process (Zimmerman, 1989, p. 329)." Self-regulation is similar in description to the subthemes related to personal responsibility in the current study. As noted in the findings of the study, the student-athletes in the academically "unsuccessful" group showed signs of poor self-regulation and a lack of autonomy. In addition, overdependence on others for academic support, both in high school and in college, were significant subthemes among this group. From a developmental perspective, this finding is concerning. One of the primary developmental purposes of college is to achieve competence and develop autonomy, however, restrictive environments and enabling behavior that limits exploration and the development of self-regulation may delay student-athletes in achieving this important developmental task (Chickering & Reisser, 1993; Ferrante & Etzel, 2009). Although it may come at a cost in terms of outcomes such as eligibility and APR, it is important to promote the development of an environment where skill development is possible. Intervention efforts should be made to encourage self-sufficiency and increase student-athletes' perception of internal locus of control.

Implications for interventions & support services

While many of the factors that emerged from this study have been discussed anecdotally among those working in support service roles, the results of this investigation seem to support that these variables are influential. Subsequently, the results of this study can be applied to develop ways of assessing the level of need for supportive academic intervention among collegiate football players. They may also be used to construct programming and support

services that facilitate growth and development. Currently, many of the programs and support services for student-athletes are educational in nature (e.g., CHAMPS/Lifeskills) or designed for skill development (e.g., study skills courses, learning specialists). While these programs and services may be somewhat effective, the "one size fits all" approach may not address all of student-athletes' needs. As reflected in this study, there is variation within the collegiate football population with regards to motivation, goals, preparation, and skill development. Therefore, it may be more efficacious to assess the individual needs of incoming football players and devise interventions based upon these needs. In particular, it may be beneficial to assess incoming student-athletes' level of academic motivation, academic self-efficacy, expectations about college, or their existing time management and study skills. By assessing what need is most important, a tailored intervention can be designed.

 As noted in the behavior change literature, tailored interventions are recommended as the standard for effectively changing behavior (Marcus et al., 2006). This type of intervention may be a useful model for addressing the academic behavior of collegiate student-athletes. As noted by the findings of this study, the student-athletes from each or the two groups revealed varying needs. For example, many of the student-athletes in the "unsuccessful" student-athlete group said that they may have benefited from career development programs, while those in the academically "unsuccessful" group may have most benefited from interventions that addressed their academic motivation.

Academic motivation is a variable that may be overlooked in current support service programs. As suggested by the findings in this study, academic motivation was one of the more influential factors that emerged as impacting academic achievement. Programs that focus primarily on skill development may not be as efficacious if a student-athlete does not have the

motivation to improve his academic skills. Therefore, interventions that aim to increase intrinsic motivation for academics and develop academic self-efficacy may be useful in conjunction with skill development.

Limitations

The qualitative nature of this study was a limitation of this study. A lack of generalizability and predictive value has been noted in the literature as two weaknesses of qualitative methodology (Johnson & Christensen, 2008). This study targeted a small number of individuals from a specific sport at a specific school. Considering the diversity in schools and athletic programs across the country, the generalizability of this data is limited. While this information can be useful to those working at similar institutions, the findings of this study should be applied with caution. Although the study provided thought-provoking findings, we cannot assume causation because of the qualitative nature of the study. The factors identified in this study warrant further investigation through quantitative research to confirm their significance before they can be assumed to be predictors.

In addition, the interviews with the participants were self-report interviews that were conducted retrospectively at varying points in their second semester. This research design lends itself to error because their self-reporting may have been influenced by the passing of time, life experiences, maturation, and memory (Epstein, 1979). Future studies would seem to benefit from the triangulation of additional, multiple data sources such as behavioral observations, analysis of historical records of academic performance and high school rigor, as well as interviews from coaches, professors, and support service personnel who work with these individuals on a regular basis. A greater number of perspectives confirming the findings of this study would enhance the validity and trustworthiness of the findings (Hatch, 2002). Since the primary investigator is

considered to be an instrument of measurement in qualitative research, there may also have been instrument bias as the researcher further developed her interviewing skills. Lastly, the phenomenological interview style was perhaps not as effective with the academically "unsuccessful" student-athlete group as it was with the academically "successful" student-athlete group. This group appeared to have difficulty discussing their experiences without prompts. It was unclear whether these participants were uninterested in talking about their academic experiences, had spent less time processing their time in college, or were less verbal than the other group.

Significance

The results of this study appear practically significant in determining who an institution might admit to college, how a school might assess who is most at-risk once they are admitted, and what supportive interventions can be provided to perhaps increase their chances of academic success. From this information those involved in student-athlete support services can begin to create a profile for student-athletes who are at-risk for low academic performance in college. When considering who should be admitted to college, the findings from this study suggest that it would be useful to investigate a potential recruit's attitude towards academics. Although it may not be realistic in the big business culture of intercollegiate athletics, it is recommended that an individual's academic motivation and historical and current orientation towards academics be genuinely evaluated.

When identifying at-risk student-athletes, particular attention should also be given to incoming student-athletes' level of academic preparation. Based upon the results of this study, student-athletes with marginal academic skills, low autonomy, and low social support are more likely to struggle in the academic atmosphere of college. Student-athletes who are highly

academically motivated but lack the skill set to succeed in college may benefit from a comprehensive skill development program prior to matriculation. Student-athletes who do not have the desire to commit to academics and lack the skill set to succeed in college may not be a good choice for admission regardless of their athletic ability.

Understanding what behaviors "successful" and "unsuccessful" student-athletes engage in can help us to target areas in which we can develop interventions. As Pascarella and Terenzini (2005) note, there is consistent support that academic intervention programs are effective in overcoming pre-entry disadvantages. The results of this study suggest that at-risk student-athletes may greatly benefit from interventions that teach academic skills such as autonomous learning, time management, and study skills. Interventions and support services that focus on building self-efficacy through skill development rather than performance outcomes could be useful in fostering intrinsic motivation (Deci & Ryan, 1985). Assisting at-risk student-athletes in developing a support network may also help to mediate the impact of background variables such as low family support and weak academic preparation. Helping at-risk student-athletes identify people and resources to use when they experience problems may help them build self-efficacy and autonomy as they begin to take personal responsibility for their own learning.

Future Directions for Research

This study was exploratory in nature and was designed to provide a better understanding of the factors involved with the academic achievement of freshmen collegiate football players. This information provides a basis for other prospective studies of this nature. Based upon the findings from this study, further quantitative investigation of collegiate football players' orientation towards academics is recommended. In particular, the Student-Athletes' Motivation Towards Sports and Academics Questionnaire (SAMSAQ; Gaston-Gayles, 2002) may be a

valuable instrument to use in the assessment of student-athletes' orientation towards academics. The SAMSAQ was designed to measure the academic and athletic motivation of college athletes and has demonstrated adequate validity and reliability (Gaston-Gayles, 2005).

In addition, the variables identified in this study would be useful towards developing a model to better understand the variables impacting the academic performance of student-athletes. While this study provided glimpses into the process by which the phenomenon of student-athlete academic performance occurs, it would be valuable to develop a model of the factors that help to understand and predict academic performance. Similar to the model associated with Tinto's (1993) Theory of Student Departure, structural equation modeling could be used to assess the strength of factors and determine causality between variables. Longitudinal qualitative studies where the participants are interviewed each consecutive year of their academic career would also be useful in providing information to develop a model of student-athlete academic performance. Longitudinal data could also be used to extend the model to include retention behaviors of this sub-population.

Ultimately, the findings from this study should be used to develop efficacious interventions. As mentioned earlier in this document, the results of this study could be used to develop comprehensive skill development programs for at-risk student-athletes to help develop self-regulation, time management skills, study skills, and autonomous behavior. The creation of programs and support services that use evidence-based methods to support the development of these skills are recommended as the next step in future research.

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Table 1. Participant demographic information according to group

Academically "Successful" Student-Athletes

Participant Code	Scholarship Status	Residency	Race	Major	1st Generation	IEP in HS
1B	Walk-on	In-State	Caucasian	Undecided	NO	NO
2B	Scholarship	Out of State	African-American	Business Marketing	NO	NO
3B	Walk-on	In-State	Caucasian	Exercise Physiology	NO	NO
4B	Walk-on	In-State	Caucasian	General Studies	NO	NO
5B	Scholarship	Out of State	Caucasian	Pre-Business	NO	NO
6B	Scholarship	Out of State	African-American	Exercise Physiology	NO	NO

Academically "Unsuccessful" Student-Athletes

Participant Code	Scholarship Status	Residency	Race	Major	1st Generation	IEP in HS
1A	Scholarship	Out of State	African-American	Undecided	NO	NO
2A	Walk-on	Out of State	Caucasian	Undecided	YES	NO
3A	Scholarship	Out of State	African-American	Undecided/ multidisciplinary studies	NO	YES
4A	Scholarship	Out of State	African-American	Undecided	NO	NO
5A	Walk-on	Out of State	Caucasian	Undecided	NO	NO
6A	Scholarship	Out of State	African-American	Undecided	N/A	N/A

Table 2. Demographic information for participants high schools by group*

Academically "Successful" Student-Athletes

Participant Code	Size	Ethnicity	% of Free Lunch (above or below state avg)	Grade/Rank (out of a score of 10)
1B	1500-2000	88% W	-11%	10/10
2B**	Private	N/A	N/A	blue ribbon school
3B	1000-1500	94% W	-10%	9/10
4B	300-500	100% W	19%	3/10
5B	500-1000	96% W	9%	7/10
6B**	Private college prep	N/A	N/A	N/A

Academically "Unsuccessful" Student-Athletes

Participant Code	Size	Ethnicity	% of Free Lunch (above or below state avg)	Grade/Rank (out of a score of 10)
1A	2000+	61% AA	-1%	4/10
2A	500-1000	98% W	30%	2/10
3A	3000+	71% AA	10%	5/10
4A	2000+	72% AA	55%	3/10
5A	2000+	76% W	Equal to state avg	6/10
6A	2000+	61% AA	Equal to state avg	4/10

* High school information was generated from public documents that are accessible on each state's department of education website. which tracks demographic and academic performance statistics for each school in the state. This information can be easily navigated via: http://www.publicschoolreview.com/

**Standardized tracking information is not readily available for private schools.

APPENDIX A

Tinto's (1993) Theory of Student Departure

| Pre-Entry Attributes | Goals/ Commitments | Institutional Experiences | Integration | Goals/ Commitments | Outcome |

Source: Tinto, 1993, p. 114. Copyright 1987, 1993 by the University of Chicago. Used by permission.

APPENDIX B

Approval from Institutional Review Board

Protocol approval for Expedited/Full Board Review status by the Institutional Review Board for the Protection of Human Subjects on 2/15/2011. Amendment approved on 5/9/2011.

IRB PROTOCOL - Details

Tracking #

H-22953

PI

Etzel, Edward

Title

Understanding Student-Athlete Retention: Academic Experiences of At-Risk Collegiate Football Players

Version

8

Status

Approved

Status Date

5/9/2011 9:12:54 AM

Board

Board Gold

Meeting Date

Approval Date

02/15/2011

Expiration Date

02/14/2012

APPENDIX C

Athletic Department Permission

Athletic Department approval not included in order
to protect the identity of the participants

APPENDIX D

Participant Cover Letter

Dear Student-Athlete,

My name is Samantha Monda and I am a Doctoral Student in Sport & Exercise Psychology within the College of Physical Activity and Sport Sciences at West Virginia University. As a part of my Doctoral Dissertation, I am examining the academic experiences of first year student-athletes in order to better help future classes of incoming student-athletes.

As a Division I student-athlete, we are inviting you to participate in this research study. The requirements and details of the study are described in this letter. Participating in the study entails that you participate in a one time 45 minute interview with the researcher regarding your academic experiences during your first semester at WVU. By participating in the interview you are agreeing to participate in the study. The interview will be audiotaped for transcribing purposes but all information will be kept completely confidential and will be only used for research purposes. Your personal information will be removed from the data and a code will be used to identify you. Your participation in this study is completely voluntary. You may choose to withdraw from the study at any point in time without penalty. You must be 18 or older to participate.

If you have any questions about the process or details of the study, please feel free to contact Samantha Monda at 412-965-1793 or smonda@mix.wvu.edu or Dr. Edward Etzel at 304-293-7062 or Edward.etzel@mail.wvu.edu.

Thank you for your time!

Samantha Monda, M.S., M.A.
Doctoral Student, Sport & Exercise Psychology
West Virginia University
College of Physical Activity and Sport Sciences

APPENDIX E

Participant Consent Form

West Virginia University.
Office of Research Compliance

CONSENT AND INFORMATION FORM

Athlete Consent Form

Principal Investigator: Etzel, Edward
Department: Other Location
Tracking Number: H-22953

Study Title:
Understanding Student-Athlete Retention: Academic Experiences of At-Risk Collegiate Football Players

Co-Investigator(s):
Monda, Samantha, Downey, V. Paul

Sponsor

Contact Persons

In the event you experience any side effects or injury related to this research, you should contact Dr. Edward Etzel at 304/293-7062. (After hours contact the Carruth Center After Hours Hotline at 304/293-4431.If you have any questions, concerns, or complaints about this research, you can contact Dr. Edward Etzel at 304/293-7062.

For information regarding your rights as a research subject, you may contact the Office of Research Compliance at 304/293-7073.

Introduction

In addition if you would like to discuss problems, concerns, have suggestions related to research, or would like to offer input about the research, contact the Office of Research Integrity and Compliance at 304-293-7073.

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Approved On:	02/15/2011	
Valid Through:	02/14/2012	
Last Amended:	N/A	

Initials _____ Date _____

Tracking #: H-22953

You, _____, have been asked to participate in this research study, which has been explained to you by Paul Downey, Ed.D. and Samantha Monda, M.S., M.A. This study is being conducted by Samantha Monda, Edward Etzel, Paul Downey, Vanessa Shannon, and Chelsea Butters in the Department of Sport Studies at West Virginia University. This research is being conducted to fulfill the requirements for a doctoral dissertation in Kinesiology with a specialization in Sport & Exercise Psychology in the Department of Sport Studies at West Virginia University, under the supervision of Dr. Edward Etzel, Ed.D.

Purposes of the Study

The purpose of this study is to learn more about the academic, athletic, and social experiences of freshman football players that are related to their academic performance. WVU expects to enroll approximately 8-10 participants.

Description of Procedures

This study entails that you participate in a one time 45 minute interview with the researcher, Samantha Monda, M.S., M.A. regarding your experiences during your first semester at WVU. Prior to agreeing to participate, you will be allowed to view the interview questions. You do not have to answer all of the questions if you choose not to. By completing the interview you are agreeing to participate in the study and allow their data to be used for research purposes.The interview will be audiotaped for transcription purposes. After the interview you will have the opportunity to review your interview transcript and made additional clarifications or deletions at any point.

Risks and Discomforts

There are no known or expected risks from participating in this study, however, you may feel uncomfortable answering some of the questions.

Alternatives

You do not have to participate in this study.

There are no other alternatives to participating at this time.

Benefits

You may not receive any direct benefit from this study. The knowledge gained from this study may eventually benefit future classes of in-coming student-athletes.

Financial Considerations

There are no special fees or payment for participating in this study.

Confidentiality

Any information about you that is obtained as a result of your participation in this research will be kept as confidential as legally possible. The researchers involved in the study will not have access to any of your educational records, however, by participating in the study the researchers will be aware that you have met the criteria for the study which includes individuals who were considered to be academically ineligible by the NCAA, failed two or more courses, or received a 2.0 GPA or lower during their first semester at school. All identifying information (names, sport, school, identifying experiences) will be removed from the data and code names will be used to protect your identity. Only the primary researcher and members of the research team will have access to the data. Audiotaping will only be used in order to transcribe the interview into written format. All audiotapes and written data will be kept locked up and will be deleted and destroyed as soon as possible after the research is finished. In any publications that result from this research, neither your name nor any information from which you might be identified will be published without your consent.We are dedicated to protecting the privacy of your educational records. Because of this promise, we must get your written authorization (permission) before we may use or disclose your protected health information or share it with others for research purposes.You can decide to sign or not to sign this authorization section. However, if you choose not to sign this authorization, you will not be able to take part in the research study. Your decision regarding participation in this study will not have an effect on your academic or athletic standing.

Voluntary Participation

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Approved On:	02/15/2011	
Valid Through:	02/14/2012	
Last Amended:	N/A	

Initials _____   Date _____

Tracking #:   H-22953

Participation in this study is voluntary. You are free to withdraw your consent to participate in this study at any time. Refusal to participate or withdrawal will not affect your academic or athletic status at West Virginia University and will involve no penalty to you. In the event new information becomes available that may affect your willingness to participate in this study, this information will be given to you so that you can make an informed decision about whether or not to continue your participation. You have been given the opportunity to ask questions about the research, and you have received answers concerning areas you did not understand.

Tracking #:   H-22953

Upon signing this form, you will receive a copy.

I willingly consent to participate in this research.

_____   _____   _____   _____
Signature of Subject or   Printed Name   Date   Time
Subjects Legal Representative

The participant has had the opportunity to have questions addressed. The participant willingly agrees to be in the study.

_____   _____   _____   _____
Signature of Investigator or   Printed Name   Date   Time
Co-Investigator

APPENDIX F

Demographic Form

Demographic Form

I began attending classes at college starting in (please circle below):

  Fall 2010   Summer 2010   Spring 2010   Other

Major:_____

Race: Caucasian   African-American   Latino/Hispanic   Asian/Pacific Islander

American Indian/Alaska Native   Biracial or Multiracial (please indicate) _____

Home City & State: _____

Position Played: _____

Have you ever been diagnosed with ADD, ADHD, or a learning disability? YES   NO

Have you ever been assigned an IEP in school *(individual educational program)?*

 YES   NO

Are you the first person in your family to attend college? YES   NO

APPENDIX G

Interview Guide

Guiding Interview Questions

Initial Question: Please tell me about your experiences as a student and athlete over the past semester at [college name]…

Probe: You have spoken to your athletic experiences….tell me a little about your academic experiences over the past semester.

Follow-up interview guide:

-What was your experience like participating in collegiate sport? What was it like to be a student AND an athlete?

-During your first semester, what was your academic performance like (i.e. grades, involvement in class)? What was particularly easy or challenging for you?

-What were your interactions like with your professors or other members of the academic community at [college name] (i.e. advisors, staff, TAs, mentors, etc)?

-What were your social experiences like during your first semester (i.e. who do you hang out with, how did you meet them, what is the quality of your social life and interactions with peers)?

-How involved did you feel in the academic and social communities at [college name]?

-What are your ultimate career goals?

-What were your reasons for coming to college?

-What was life like for you prior to coming to college (i.e., family background)?

-How academically prepared did you feel when you came to college?

APPENDIX H

Data Analysis Samples

Data analysis samples not included in order
to protect the confidentiality of the participants

Data analysis samples not included in order
to protect the confidentiality of the participants

Data analysis samples not included in order
to protect the confidentiality of the participants

Data analysis samples not included in order
to protect the confidentiality of the participants

APPENDIX I

Outlines of Results: Themes and Subthemes

Outline of Results: Themes and Subthemes for
Academically Successful and Unsuccessful Student-Athletes

Successful Student-Athletes	Unsuccessful Student-Athletes
- Academic Motivation - Academics as a high priority - High academic standards for self - Intrinsic motivation - Delayed gratification - Family emphasis on education & academics - Facilitators of Academic Success - Strong family support - Created an academic support network - High academic self-efficacy - Time Management - Effectively managed multiple responsibilities - Lack of recovery - Academic Preparation - Felt academically prepared from high school - Learned vicariously through others - Limited Involvement - Teammates as friends - Lack of interaction in academic & social communities - Academic Skills - Strong study skills - Ability to take self-responsibility for learning - Ability to develop strategies and adapt behavior	- Academic Motivation - Sport prioritized over academics - Low intrinsic motivation - Motivated to stay eligible for sport - Barriers to Academic Success - Low family support - Low academic self-efficacy - Unfamiliarity - Limited personal responsibility for learning - Time Management - Difficulty managing multiple responsibilities - Lack of recovery - Academic Preparation - Academically unprepared from high school - Expectations of college different than reality - Poor study skills - Difficulty asking for help - Limited Involvement - Lack of interaction in academic & social communities - Teammates as friends - Lack of Autonomy - Depending on others in high school - Dependence on academic support

APPENDIX J

Review of Literature

REVIEW OF LITERATURE

Introduction

Intercollegiate athletics is an extra-curricular activity that has the potential to be beneficial to student-athletes' development and well-being. Often called a "microcosm of the real world," sport is a supplement to the classroom and a place where student-athletes can work on achieving the developmental tasks of their age group (Eitzen & Sage, 2009). Through experiences such as being a member of a team and challenging oneself physically and mentally, student-athletes have the opportunity to address developmental tasks by setting goals, developing physical and social competence, learning how to manage conflict, and gaining experience handling success and failure. Participating in athletics can provide opportunities for student-athletes to develop life skills that are transferable to situations beyond the court or field such as leadership and time management (Alghren-Bedics & Monda, 2009). As a result, these experiences can help student-athletes to achieve the goal of higher education - to become future productive citizens.

However, the culture of intercollegiate athletics has shifted away from the developmental and educational mission of the university environment (Knight Commission, 2010). The "big business" atmosphere of collegiate athletics has left people wondering if the athletic world is more concerned about "going pro" than obtaining a college degree. As academic reform is being instituted to ensure that student-athletes have a fair chance to graduate with a degree, particular attention has focused upon understanding the characteristics and variables that impact student-athlete academic success. By identifying the factors that puts student-athletes "at-risk," schools can develop appropriate interventions and support services (NCAA, 2009).

The purpose of this literature review is to provide an overview of the literature related to student-athletes' academic performance and determine how this literature has been conceptualized, measured, and studied. In particular, it will address the current literature regarding the identification of risk factors for academic problems in the student-athlete population and the variables that have been shown to be related to this process.

History of Academic Reform in Collegiate Athletics

According to the mission of the NCAA, the main governing body of Division I intercollegiate athletics, the core purpose of their organization is to "govern competition in a fair, safe, equitable and sportsmanlike manner, and to integrate intercollegiate athletics into higher education so that the educational experience of the student-athlete is paramount (NCAA.org, 2010a)." This emphasis on education is addressed again in their core values which note that the NCAA is committed to "the collegiate model of athletics in which students participate as an avocation balancing their academic, social and athletic experiences; the pursuit of excellence in both academics and athletics; and the supporting role that intercollegiate athletics plays in the higher education mission (NCAA.org, 2010a)." While this educational mission supports that academics should be the primary concern of the student-athlete, there has been controversy in the past 20 years over whether the educational mission has become lost in the world of collegiate athletics. In 1991, the Knight Commission on Intercollegiate Athletics, a group committed to "ensuring that collegiate athletics operate within the educational mission of their institution," produced a report that examined the world of "big-time sport" and called into question the ethical standards and academic integrity of intercollegiate athletic programs (Knight Commission, 1991). A key finding of this report indicated that 67 men's basketball and football programs out of 106 Division I schools had below a 30% graduation rate (Knight Commission,

2001). As academic apathy and student-athlete exploitation was exposed, the NCAA and its member institutions determined that academic reform was necessary to bring intercollegiate sports closer to the educational mission of the university.

To combat reports that a portion of student-athletes were being specially admitted with lower than average admissions criteria and that many student-athletes were failing to complete their degree, the NCAA adopted legislation and benchmarks aimed at creating stricter academic standards. Proposition 48 was adopted in 1983 and Proposition 16 in 1992 which established specific admission criteria for prospective student-athletes regarding minimum high school GPA, SAT scores, and core course credits (NCAA.org, 2010b; Sellers, 1992; Stansbury, 2004). Currently, prospective student-athletes are required to have 16 high school core course credits and must meet the criteria for core course high school GPA/standardized test scores along a sliding scale in order to be eligible for Division I collegiate sport participation.

In 2002, under the leadership of NCAA President Myles Brand, a system of academic reform called Academic Progress Rate (APR) and Graduation Success Rate (GSR) was instituted at the Division I level (LeCrom et al, 2009; Pinkney & Tebbe, 2009). This method of measuring a team's academic performance from semester to semester is calculated as a total score compromised of one point for every student-athlete who remains eligible and another point for every student-athlete who is retained and then multiplied by one thousand. APR is commonly referred to as a team's "report card" and is compared to national benchmarks as well as other programs and institutions' scores. Teams and institutions are penalized when APR scores fall below the minimum score of 925, receiving sanctions that include scholarship cuts and competition restrictions. The Graduation Success Rate (GSR) is designed to track the percentage of student-athletes who earn a degree from an institution (LeCrom et al, 2009). This particular

system is designed to track student-athletes' graduation rates including individuals who have transferred into the institution and have earned a degree and excluding those who have transferred out but left in good academic standing.

Due to the high costs of falling below the APR benchmark, institutions and athletic departments have followed suit by investing extensive time, money, and energy into ensuring that student-athletes "make the grade." Academic support services including study halls hours, academic performance centers, educational counselors, and learning specialists are being made available to student-athletes to help them reach their academic potential. Almost 20 years after the Knight Commission's (1991) first call to action regarding academic standards in collegiate athletics, they acknowledged that efforts such as the ones described above have raised the academic expectations of student-athletes. However, in their 2010 report they indicated that the disparity between academics and athletics still exists. Considering that spending in athletics is twice as much as spending in academics, academics still might not be prioritized in the college environment (Knight Commission, 2010). With these disparities in mind, athletic administrators are becoming more interested in research that explores issues related to academics, particularly research that identifies factors that are related to academic success and failure at an institutional level. As noted by the NCAA (2009), continued emphasis on academic achievement is expected and future academic reform is likely.

Current Trends in College Student-Athlete Development

The current focus on the academic performance of student-athletes indicates that many people are beginning to look much more closely at the development of student-athletes from a multi-dimensional perspective (Etzel, 2009). The uni-dimensional belief that athletes are solely in college for their athletic talent is being shifted to a multi-dimensional view where student-

athletes are being recognized for their dual roles of student and athlete. Those in higher education are becoming more aware of the unique challenges and responsibilities that accompany the management of these dual roles. Research has begun to address how athletic participation impacts student-athletes' collegiate experiences (Gaston-Gayles, 2009; Pascarella & Terenzini, 2005).

Research exploring the impact of collegiate athletics has provided mixed results (Comeaux, 2007). Some studies shows that collegiate athletic participation can be beneficial to student-athlete development and educational attainment, noting that collegiate sport participation increased the probability of graduation and had an effect on increases in motivation to earn a degree (Long & Caudill, 1991; Ryan, 1989). The results of other studies make it difficult to interpret whether student-athletes are deriving benefits from their participation (Pascarella & Terenzini, 2005). As one large scale study demonstrates, student-athletes themselves reported that collegiate athletics was a positive part of their personal development but also felt as though it negatively affected their cumulative grade point average (Potuto & O'Hanlon, 2007). Studies like this suggest that student-athletes may make a tradeoff in other areas of their lives in order to have a satisfying experience in collegiate sports. This research has further expanded the multi-dimensional view of student-athletes, suggesting that the development of student-athletes should be addressed from a holistic approach. With support from models of general student development and wellness, those in higher education have been encouraged to develop student-athletes as well adjusted individuals who are prepared for life beyond collegiate sport and are productive members of the community.

In 1991, the NCAA recognized the important of developing the total person and instituted the Challenging Athletes Minds for Personal Success (CHAMPS/Lifeskills) program. This

program established a commitment to five areas of excellence: 1) academic excellence, 2) athletic excellence, 3) personal development (health & wellness, emotional well-being, leadership, personal growth), 4) career development, and 5) service to the campus and community. This program helped to legitimize the need for addressing the holistic development of student-athletes and provided resources and programming to help foster development in all areas. In the fall of 2010, the CHAMPS/Lifeskills program was restructured as Student-Athlete Affairs under the NCAA's Educational Affairs department (NCAA.org, 2010c). It is unclear at this time how these changes will affect the application of life skills or educational programming.

Although the current status of life skills development is unclear, there is continued development at the NCAA level for the commitment to academic excellence. Currently the NCAA is piloting the Facilitating Learning and Achieving Graduation Program (FLAG), in an effort to encourage retention and augment the efficiency and efficacy of existing support services (NCAA, 2009). This program is designed to identify student-athletes "at-risk" for academic problems and provide appropriate interventions based on research based evaluations of services.

This program was developed based on the NCAA Presidential Task Force on the Future of Intercollegiate Athletics' recommendations that research and interventions needs to be developed to address five main issues: 1) determine risk factors that lead student-athletes to be vulnerable for dropping out of school prior to graduation, 2) create a operational definition of the term "at-risk," 3) develop a tool for institutions to use for evaluating the admission of "special admits," 4) identify best practices in academic support services and life skills programming used as interventions with "at-risk" student-athletes, 5) evaluate current academic and life skills services and make appropriate recommendations for modifications or enhancements (NCAA, 2009). The Task Force noted that student-athletes' pre-entry characteristics alongside the

characteristics of the institution and the student-athletes' experiences during their college career have the potential to impact student-athletes' academic performance and retention at a university. They suggested that studying these factors can help identify who is most "at-risk" for academic and retention problems.

Through its three online modules, the FLAG program is designed to address the tasks identified in this report. These modules include: 1) Graduation Risk Overview (GRO), 2) Support Services, 3) Evaluation of Support Services & Programming. According to the 2009 NCAA report "Facilitating Learning and Achieving Graduation", the GRO is defined as a "research based method for quantifying risk factors predictive of a Division I student-athlete's failure to reach the goal of college graduation at his or her current institution." The NCAA has identified a number of academic, sport-related, and non-academic variables that are reportedly associated with academic failure. This method of calculating risk is conducted by assigning a certain amount of points for each risk factor that the student-athlete meets. Based upon the number of points that they have accrued through the formula, a risk profile is created for each student-athlete and they are categorized as low, moderate, or high risk.

Once "at-risk" student-athletes are identified, a list of suggested support services are recommended based upon the risk factors presented. The support services module provides institutions with information regarding interventions, programs, and services that are most appropriate for the risk factors presented. The third module, Evaluation, is designed to assist institutions measure outcomes and assess the efficacy of programming. Through reports, each institution can identify their current level of overall risk and determine what interventions and services are most needed.

Assessing Student-Athlete Academic Performance

Studies conducted on this topic have most commonly focused on predicting student-athlete academic performance and retention using either longitudinal research designs where historical academic data is gathered from the university or survey designs where academic information was collected from the university and additional information from current students was collected via questionnaire (Babington, 1997; Garrett, 2000; Lang et al., 1988; LeCrom et al., 2009; Maggard, 2007; Malmo, 2009; Morgan, 2005; NCAA, 2009; Niilampti, 2006; Petrie, 1993; Petrie & Stoever, 1997; Scogin, 2007; Sedlacek & Adams-Gaston, 1992; Sellers, 1989; Simon & Van Rheenen, 2000; Ting, 2009; Young & Sowa, 1992). Two of the sixteen most current studies found on this topic used mixed methodology with an additional qualitative component either in the form of follow-up interviews or follow-up focus groups (Morgan, 2005; Niilampti, 2006). These qualitative pieces were used to better understand the academic experiences of student-athletes and to validate the quantitative results of the studies.

Prediction of student-athlete academic performance has been studied with a number of criterion variables including retention, academic performance, academic success, and persistence. In studies related to retention (LeCrom et al, 2009; NCAA, 2009), specifically chosen independent variables have been tracked over time to determine whether a student-athlete has continued to stay enrolled at the school (YES/NO). Due to the longitudinal nature of these retention studies, independent variables have been related to cognitive and academic information about the student or demographic or basic sport type variables.

In studies exploring academic performance (Garrett, 2000; Morgan, 2005; Lang et al, 1988; Petrie, 1993; Petrie & Stoever, 1997; Simons & Van Rheenen, 2000; Ting, 2009), dependent variables have included either Fall grade point average (GPA), Fall and Spring grade

point average (GPA), or cumulative first year grade point average (GPA). While Garrett (2000)

used an archival research design, most of these studies used a mixed research design where

independent variables include data regarding academic information obtained from the university

and information regarding non-cognitive and sport related variables collected via surveys.

Studies using academic success as the criterion (Babington, 1997; Maggard, 2007;

Scogin, 2007; Sellers, 1989; Sedlacek & Adams-Gaston, 1992; Young & Sowa, 1992), used a

variety of research designs. In one study, information regarding cognitive and non-cognitive

variables was collected one time at the beginning of the semester at fall orientation using first

semester GPA as the criterion variable (Sedlacek & Adams-Gaston, 1992). In Maggard (2007),

academic information about student-athletes was historically collected and tracked for three

cohorts of student-athletes. This academic information was used to predict first semester GPA. In

Scogin (1997), first semester GPA was also used as the criterion but the predicted first semester

GPA's of student-athletes (as noted by the university's predictor model) was compared to their

actual performance. The research design in Babington (1997) is unclear, however, it was noted

that cognitive and non-cognitive information was collected from one cohort of first year student-

athletes and measured upon both first semester GPA and first year GPA. Finally, three studies

looked at student-athlete academic change in terms of persistence (Malmo, 2009; Niilampti,

2006; Ting, 2009). While it is unclear what criterion variable they used to define persistence in

two of the studies, one study used whether or not the student-athlete enrolled for their sophomore

year as the measure of persistence. Malmo (2009) used historical academic data from five years

of first year student-athletes to predict persistence while Niilampti (2006) and Ting (2009) used a

survey research design. In Niilampti (2006), surveys regarding non-cognitive variables were

administered at two different institutions comparing student-athletes and non-athletes at each

institution, although it is not clear at what point they were administered. In Ting (2009), non-cognitive data for the independent variables was collected during the course of the fall semester and registration status (enrolled? YES/NO) was collected at the end of the first year.

Academic Predictor Variables

Traditional academic variables such as high school GPA, SAT/ACT scores, high school rank, and repeated a year in high school have commonly been used as predictor variables in past studies (Babington, 1997; Maggard, 2007; Malmo, 2009; Morgan, 2005; NCAA, 2009; Petrie & Stoever, 1997; Scogin, 2007; Sedlacek & Adams-Gaston, 1992; Ting, 2009). These variables are most commonly used because academic data has been consistently collected and recorded by universities and they have been shown in the general student body retention literature to be successful predictors of academic change.

Non-Cognitive Predictor Variables

Another category of independent variables that have been consistently explored in the literature are non-cognitive variables (Babington, 1997; Morgan, 2005; NCAA, 2009; Niilampti, 2006; Petrie & Stoever, 1997; Sedlacek & Adams-Gaston, 1992; Simon & Van Rheenen, 2000; Ting, 2009). Non-cognitive or non-academic variables have been defined as psychosocial characteristics that may impact a student's success in the university environment (Sedlacek, 1977). Seven of thirteen studies exploring non-cognitive variables have used the Non-Cognitive Questionnaire (NCQ) to examine these factors (Babington, 1997; Garrett, 2000; Morgan, 2005; Niilampti 2006; Sedlacek & Adams-Gaston, 1992; Ting, 2009; Young & Sowa, 1992). The Non-Cognitive Questionnaire-Revised (NCQ-R; Tracey & Sedlacek, 1989) is a 44 item questionnaire that addresses the eight domains of: 1) positive self-concept, 2) realistic self-appraisal, 3) dealing with racism, 4) preference for long-term goals, 5) availability of strong social support person, 6)

leadership experience, 7) community service, and 8) knowledge acquired in field. Petrie (1993) used the Life Events Survey for Collegiate Athletes (LESCA) and the Social Support Inventory (also used in Petrie & Stoever, 1997). Niilampti (2006) used a measure of racial identity (MIBI) as a predictor of academic change. Sellers (1989) used motivational variables such as importance of getting a degree and hours spent studying. For Simon and Van Rheenen (2000), it is unclear what measures were used but motivation, exploitation, commitment, social status, self-handicapping, and relationship between academics and athletics were explored.

Sport-Related Predictor Variables

A third category of variables, sport related variables were used in four of the studies (Babington, 1997; Garrett, 2000; Lang et al, 1998; LeCrom et al, 2009; Morgan, 2005; NCAA, 2009). In these studies, sport type, amount of scholarship, time spent in sport, perceptions of whether they were "majoring in eligibility," and numbers of times disciplined by the head coach were used as predictors of academic change.

A particularly interesting study is the NCAA (2009) pilot study, which is reportedly based off of longitudinal data conducted by the NCAA. The model proposed in this study suggests that a combination of academic, non-academic, and sport type variables are related to the academic success and failure of student-athletes. In this model, academic variables include: 1) high school GPA, 2) ACT/SAT scores, 3) core number of units, 4) number of high schools attended, 5) transfer status and transfer GPA, 6) whether or not a student-athlete was an academic non-qualifier, 7) level of academic effort, and 8) educational disability diagnosed. Non-academic variables include: 1) identifies as an athlete not a student, 2) first generation college student, 3) low financial resources, 4) homesickness, and 5) health/family/mental health/substance abuse. Sport related variables include: 1)member of a high profile sport, 2) poor

coach attitude towards academics, 3) coach in first year, 4) coach change, 5) exhausted

eligibility, and 6) dissatisfaction with athletic experience. According to this model, a risk profile

for each student is created based upon these variables.

Research Design

The research designs used in these studies have both benefits and drawbacks.

Quantitative studies help us to identify common risk factors and allow us to predict who is most

at-risk for academic problems or retention issues. However, they do not provide us with

information beyond identifying the variables that are predictive of academic risk. Quantitative

studies do not identify "why" certain variables are predictive nor do they discern between

subgroups of student-athletes. It may be difficult to detect common risk factors when there is an

incredible amount of diversity within the student-athlete population.

Archival research designs help us to track trends over time, providing us with more

reliable results. This type of research design typically uses large numbers of participants which

increases statistical power and validity. However, because records have been collected over a

number of years, participants are no longer accessible to gather additional information. In these

cases, academic records have been most commonly used, excluding psychosocial factors that

may be influencing academic performance and retention.

Survey research designs compensate for the inability of archival research designs to

address psychosocial factors. By having access to participants, new information on a number of

variables can be collected. This research method allows the researcher to obtain specific

information that has been chosen based upon research based evidence rather than convenience

and accessibility. Because the research has been conducted in the most current culture of sport, it

is more valid and generalizable. However, most survey studies in this research area have been

conducted over one semester or one academic year. This lack of longitudinal data is a drawback because it is unclear whether a short amount of time is enough to see measurable differences in academic performance.

There appears to be a gap in the literature with regards to qualitative studies in this research area, however qualitative research designs could be useful in future studies. Qualitative research design can help us to look beyond the traditional academic variables that have been used to predict risk factors and explore psychosocial and situational factors that may not be captured in quantitative assessments. This design can help us to identify variables that are related to academic performance but also give us more information as to how and why these variables impact this process. In-depth analyses of experiences can help us to discern common themes and individual differences with subgroups of student-athletes. If designed correctly, qualitative research studies could provide information that has been lacking in quantitative studies and complement the existing literature.

<div align="center">Identifying Academic Risk in Student-Athletes</div>

Student-athletes, due to their unique dual roles on campus and their traditionally higher number of minority students compared to the campus demographic are considered to be a non-traditional population that may differ from the rest of campus. Mirroring the pattern in the college student retention literature, most studies examining the retention and academic performance of collegiate student-athletes have attempted to predict pre-entry characteristics that impact outcomes such as college GPA and continued enrollment. While a number of factors have been shown to be predictive of these outcomes, common risk factors among this population have been found to be inconsistent. Similar to Berger's (2000) perspective on the lack of common risk factors in the general student population, the great diversity and variation within the participants

of intercollegiate athletics as well as within the characteristics of the athletic programs at each institution may make it difficult to generate a "one size fits all" profile. Due to the lack of predictive validity of academic factors within certain subgroups of college students, non-cognitive, psychosocial, and sport related factors have been considered in subsequent studies.

The literature shows that a number of academic and non-academic variables have successfully predicted student-athlete academic success including: ACT composite scores, high school GPA, time spent in sport, gender, race class, amount of scholarship, sport type, SAT scores, social support, type of high school (private vs. public), feelings toward school, disciplinary status, mother's education, repeated a year of high school, family income, negative life stress, financial aid status, and non-cognitive variables (specifically: acquired knowledge in the field, community service, positive self-concept, preference for long-term goals). However, many of these predictors are only predictive for certain subgroups of the student-athlete population and can differ by institution.

Much of the early literature on this subject during the 1980's looked predominately at using traditional academic variables to predict student-athlete academic success (Walter et al, 1987). Even in the more recent literature, academic variables have been shown to be predictive of student-athlete academic performance. Among this subpopulation, Maggard (2005) and Malmo (2009) found that high school GPA was the best academic predictor of first semester and first year success compared to other academic variables such as SAT/ACT scores and high school rank. However, in 1987, amidst the legislative changes in the NCAA that created stricter academic standards, a study conducted by Walter et al. (1987) called into question whether academic variables such as SAT scores were valid predictors of academic achievement for groups such as non-white student-athletes. Using a population of 88 African-American and 106

non-black student-athletes who attended the University of Michigan, they found that SAT scores were not predictive of college GPA for African-American student-athletes and barely predictive of college GPA for non African American student-athletes. With regards to retention, HS GPA was the best predictor of retention for African-American student-athletes but not for non-black student-athletes. They concluded that the typical admissions criteria only accounts for 20% of the variance in college GPA and retention, making it important to explore other potential impacting factors.

Further looking into the restrictiveness of using academic factors as eligibility criteria, Lang, Dunham, and Alpert (1988) explored variables beyond SAT scores and GPAs to find that six specific variables accounted for 71% of academic failures and 67% of academic successes on a high profile collegiate football team. In this study academic success was defined as a current GPA of 2.0 or above and academic failure as a current GPA of less than 2.0. Conducted with the entire population of full scholarship athletes during one full academic year (N=94), they found that predictive factors included high school GPA, but also included whether or not an athlete repeated a year of high school, academic motivation ("feeling like I am majoring in eligibility"), history of trouble (number of times disciplined by head coach), mother's education level, and whether the athlete graduated from a private high school. This study indicates that factors beyond traditional academic measures have a predictive value among the student-athlete population.

Sellers (1992) continued the investigation on whether or not academic factors were good predictors of academic success in non-traditional populations. Using a population of 1326 male student-athletes in revenue producing sports (basketball and football) at 42 institutions, he demonstrated that there are differences in predictors of academic success between black student-

athletes and white student-athletes. He found that high school GPA and mother's education were significant predictors of college GPA for black athletes while high school GPA, SES, and SAT/ACT scores were significant predictors for white student-athletes. This study supports the view that traditional academic factors may not be the only predictors of academic success, particularly among minority groups.

Sedlacek and Tracy (1992) continued the support of using non-traditional variables to predict academic success among student-athletes. Sedlacek, one of the most vocal critics of using solely traditional variables as admissions criteria in the general college population, extended his argument to the student-athlete population. This study compares the predictive value of SAT scores against Sedlacek's measure of non-cognitive variables, the NCQ. Using a population of incoming freshman (N=105), they found that SAT math and SAT verbal scores were not correlated with first semester grades. However, they did find that the NCQ, particularly the factors of Strong Support Person, Positive Self-Concept, Realistic Self-Appraisal, and Community Involvement were significant predictors of first-semester grades.

As support for non-academic variables in the prediction of student-athlete success became more prolific, researchers began to explore other psychosocial factors that may impact this process. Petrie and Russell (1995) explored the impact of social support, competitive trait anxiety, and life stress on the academic performance of minority and non-minority collegiate football players (N=167). They found that among academically unsuccessful non-minority students, negative life stress and competitive trait anxiety was inversely related to fall GPA. Among minority students, social support, life stress, and trait anxiety were not related to academic performance.

Petrie and Stoever (1997) expanded these findings in a follow-up study that investigated the impact of these variables among different populations of student-athletes. Using a population comparing female freshman and female upperclassmen (45 freshman and 107 upperclassmen), they found that SAT scores were predictive of both fall and spring GPA for both freshman and upperclassmen. They also found that social support was the only non-academic variable that was predictive of academic success in the freshman sample. None of the non-academic variables were predictive for the upper-classmen over time.

Other studies have found that a combination of academic and non-academic variables best predict student-athlete academic performance among freshman student-athletes. In a study of 109 freshman student-athletes, Ting (2009) found that SAT math scores along with NCQ subscales of Acquired Knowledge in a Field and Demonstrated Community Service predicted 20% of the variance in fall GPAs. Over the course of the year, this study also found that SAT math scores along with the NCQ subscales of Positive Self-Concept and Preference for Long-Term Goals successfully predicted 26% of the variance for this group's Spring GPAs.

Babington (1997) also found that both cognitive and non-cognitive variables best predicted freshman student-athletes academic success, noting that support of academic plans was a consistent predictor of academic success. Within subgroups, she found that non-cognitive variables were most applicable to female student-athletes and student-athletes from revenue producing sports.

Simons and Van Rheenen (2000) continued to explore possible non-cognitive predictors of student-athlete academic performance, specifically achievement motivation and the academic-athletic relationship. Tested amongst 200 student-athletes, they found that athletic-academic commitment, academic self-worth, self-handicapping excuses, and exploitation were all

successful predictors of student-athletes current cumulative GPA. In particular, their study demonstrated some interesting trends. Revenue athletes tended to be more committed to athletics than academics and those with a stronger commitment to athletics had lower cumulative GPAs than students with a stronger commitment to academics. Those with higher levels of academic self-worth tended to have higher GPAs and those who tended to avoid failure and self-handicap were more likely to have lower GPAs.

Recognizing that academic, non-academic, and sport related factors may all be important in predicting student-athlete academic performance, Morgan (2005) conducted a study with 469 Division I student-athletes examining a variety of academic factors, non-cognitive variables of positive self-concept, support of academic plans, and community involvement (3 scales of the NCQ), and sport related factors of type of sport and time spent in sport. Their model of high school GPA, ACT composite scores, gender, and academic classification predicted 55% of the variance in student-athletes cumulative college GPA. Out of all of these predictor variables, high school GPA was the greatest predictor of student-athletes' college grade point average when looking at the total population. When broken down into subgroups, the non-academic factors became more important. For white student-athletes, males, and those from upper-class backgrounds, time spent in sport was a significant predictor. For African-American student athletes and those who are classified as freshmen, sport type (meaning whether they are in a revenue or non-revenue producing sport) was a significant predictor. Finally, for female and African-American student-athletes, support of academic plans was a significant predictor. These results suggest that predicting variables may vary within the diverse population of college student-athletes. Exploring these results further, Morgan (2005) conducted qualitative interviews

with twenty student-athletes in the sample and found that they perceived time constraints, fatigue, and financial concerns to be some of the greatest challenges of managing dual roles.

LeCrom et al (2009) also found differences in predictor variables within subgroups of student-athletes. In a longitudinal study examining the retention of student-athletes from eight schools within a conference (N=12,980), gender and sport type were found to predict whether a student-athlete returned for school. The results of this study suggest that female student-athletes and those who participate in individual sports have a higher rate of retention than male student-athletes and those in revenue producing sports.

James' (2010) study also supported that type of sport was relevant to predicting student-athlete academic performance. In this study, data was collected from 39 Division I student-athletes. He found that participation in a revenue producing sport was found to be a significantly related to self-reported GPA (James, 2010). When exploring other predictors of student-athlete academic success he found that HS core GPA, study hall requirement, academic classification and pre-college standardized test scores outweighed the non-academic variable of academic communication anxiety scores and a number of other demographic variables. Interestingly, an inverse relationship was found between study hall requirements and academic classification. As study hall hours and year in school increased, GPA decreased.

Among freshman, social support, academic support, sport type, positive self-concept, realistic self-appraisal, acquired knowledge in the field, community involvement, preference for long-term goals and SAT scores were found to be predictive of academic performance (Sedlacek & Adams-Gaston, 1992; Petrie & Stoever, 1997; Babington, 1997; Ting 2009). Specifically among male student-athletes, high school GPA, mother's education level, type of high school attended (public vs. private), disciplinary history, feelings toward school, repeated a year of high

school, socioeconomic status, negative life stress, competitive trait anxiety, time sport on sport, and sport type were shown to be related to academic performance or retention (LeCrom et al, 2009; Maggard, 2005; Morgan, 2005; Petrie & Russell, 1995; Sellers, 1992). For female student-athletes, SAT scores, social support, and support of academic plans were the best predictors (Morgan, 2005; Petrie & Stoever, 1997). These findings from the literature suggest that the diversity and variability within the collegiate student-athlete population may make it difficult to create an overall prediction model of student-athlete academic performance and retention. When looking from a general perspective, traditional academic factors may be the best predictors. However, it may be most accurate to study these factors among sub-groups of student-athletes. The findings from these studies show that non-cognitive variables tend to be more predictive of student-athlete academic performance and retention when they are explored among subgroups of student-athletes. This suggests that exploring a number of academic, psychosocial, and sport-related variables are important to examine when identifying risk-factors for student-athlete academic performance.

Theoretical Frameworks of College Student-Athlete Development and Retention

From a developmental perspective, one of the main purposes of college is to help students grow as individuals by identifying who they are and what they want to do in their lives. According to Erickson (1950), this is achieved by attending to specific developmental tasks. This theory suggests those in the teenage and young adult phase of life are addressing the life issue of identity versus role confusion. In this stage, students are exploring different roles and identities in order to determine where they fit in the world. Student-athletes coming into the higher education environment are actively going through this process. While they may already identify as an athlete, the college environment fosters identity exploration by giving students the

opportunity to shed old identities, try out different academic and social roles, and develop a multi-dimensional sense of self.

In addition, developmental theorists have established a list of developmental tasks that college aged students go through. Chickering & Reisser (1993) propose that students of college age are moving through seven vectors of development including: 1) developing intellectual, social, and physical competence; 2) managing emotions; 3) moving through autonomy through interdependence; 4) developing mature interpersonal relationships; 5) establishing identity; 6) developing purpose; and 7) developing integrity. Developmental tasks of this stage suggested by other theorists include: dealing with authority, dealing with ambiguity, developing security, adequacy/competence/self-esteem, developing a mature sense of sexuality, developing personal values and standards, developing socially responsible behavior, and preparing for the world of work (Havighurst, 1972). While most students successfully complete these tasks with little difficulty, those who do not are at risk for adjustment problems, poor grades, underachievement, and emotional distress (Chickering & Reisser, 1993; Etzel, 2009). Considering that working through these developmental tasks is a critical purpose of this age group, it is important that student services facilitate development in these areas through their institutional culture and subsequent programming. Within the subculture of intercollegiate athletics, it is important to recognize that the goal is to not only develop strong sports programs but to help each individual athlete achieve the different developmental tasks of adolescence and early adulthood.

Theories of College Student Retention and Persistence

One of the most commonly cited theories related to college student retention is Tinto's Theory of Student Departure (1993). See Appendix A. According to this integrative theory of student change, students' come into college with pre-entry characteristics such as family

background, skills and abilities, and prior educational background. These entry characteristics influence students to establish an initial commitment to their educational goals and the institution. As students interact with the formal and informal aspects of their academic and social experiences at the institution, they continually reformulate their commitment and future intentions about their educations goals. In the model, both formal and informal aspects of their academic and social experiences such as their academic performance, faculty/staff interactions, extracurricular activities, and peer group interactions determine the degree that students are academically and socially integrated into the university community. Tinto suggests that academic and social integration into the university plays a large role into whether or not a student maintains their commitment to earning a degree from the university. From their evolved intentions and commitments, students make the decision to stay or leave the institution that they are attending.

A more recent revision to this theory, proposed by Braxton, Sullivan, and Johnson (1997) suggests that social integration rather than academic integration is most related to persistence and retention. Braxton (2000) notes that the most recent empirical research supports four main postulations of the original theory: "1) student entry characteristics affect the level of institutional commitment, 2) students' initial level of institutional commitments also influence their degree of subsequent commitment to the institution, 3) students' subsequent commitment to the institution is positively affected by their degree of social integration, 4) the greater the degree of students' subsequent institutional commitment, the greater the likelihood of their persistence in college."

A related model of college student outcomes is Astin's "Inputs-Environment-Outcome (I-E-O) Model" (1993). In this model, Astin suggests that three elements of college - 1) inputs: 2)

environment: and 3) outcomes influence student's educational performance. His definition of inputs is similar to Tinto's concept of pre-entry characteristics and includes variables such as demographics, family background, and pre-college academics and social experiences. His second element of environment addresses the people, policies, and cultures that the student experiences at the institution. His third element of outcomes refers to the values, beliefs, skills, and characteristics that the student has developed post-college. He indicates that the interaction of these elements helps to explain how students change in college. According to this model, inputs can directly influence outcomes by themselves but they also can indirectly influence the way that the student interacts with the environment leading to the development of outcomes.

Astin's "Theory of Involvement" (1984) is a complementary concept to the I-E-O theory that suggests that involvement in the campus community via people, experiences, resources and ideas is a critical variable in determining student's experiences in college. His five basic postulates state that: 1) involvement involves investment of psychosocial and physical energy: 2) involvement is continuous and that students will invest different amounts of energy into different things: 3) involvement has both qualitative and quantitative aspects: 4) development is proportional to the quality and quantity of involvement: and 5) educational effectiveness is related to the level of student involvement (Pascarella & Terenzini, 2005; pg 53). According to this theory, the more that an individual becomes involved, the more that the individual learns, develops, and grows.

Pascarella's "General Model for Assessing Change" (1985) is a third model that is applicable to studying student outcomes. See Appendix K. In this model, students' pre-college traits, characteristics of the institution, the institutional environment, students' interactions with socializing agents, and their quality of effort are related to learning and cognitive development

through a number of direct and indirect relationships. Students' pre-college traits along with characteristics of the institution (such as enrollment, faculty/student ratio, and selectivity) determine the institutional environment of the university. In turn, the institutional environment, students' pre-college traits and characteristics of the institution impact students' interactions with socializing agents. Finally, the quality of student effort is impacted by students' pre-college traits, interactions with socializing agents, and the institutional environment. Directly, students' learning and cognitive development outcomes such as college GPA is directly affected by quality of student effort, interactions with agents of socialization, and students' pre-college characteristics.

Empirical Research on College Student Retention & the "At-Risk" Student

The retention of students is one of the most highly studied areas in higher education (Seidman, 2005;Tierney, 2000). Schools are motivated to study this issue because graduation rates reflect an institution's accountability towards providing an education to students. They are also commonly used to measure quality within school rankings. These reasons along with tight financial budgets encourage institutions to retain as much of their enrollment as possible.

There are a number of theories regarding the retention of students that have been developed and used to drive the empirical literature. Tinto's Interactionalist Theory of Student Retention has been the most widely used theory (Tinto, 1993). Using this model, a large portion of retention studies have sought to identify pre-entry characteristics that may lead an individual to be at-risk for dropout once they are enrolled. These risk factors have been examined in relation to both retention status and academic performance (college grade point average (GPA)) in hopes of creating a "risk profile." However, due to the amount of diversity between students and institutions, the results of these studies are inconsistent. Berger (2000) suggests that

searching for a one size fits all approach towards understanding student retention and performance may not be the best strategy for future research. Rather, he suggests exploring local factors specific to the institution among specific subgroups of student population.

Although there is diversity among the results in the literature, the research has provided us with some important pieces of information towards understanding this phenomenon. According to the most recent data, 25% of students at four year public universities do not return from their freshman year to their sophomore year and at some schools, this attrition rate has been demonstrated to be as high as 35% (ACT, 2010; Devarics & Roach, 2000). Of the students that drop out of school, 75% do so within their first two years of college (Tinto, 1993). This suggests that a substantial portion of the population is dropping out of school, particularly during the early years of their educational experience. Milem and Berger (1997) suggest that student involvement over the first six to seven weeks of college is most significantly related to student persistence. This is supported by Pascarella and Terenzini (2005) who report that the first semester and the first year at college are the most highly influential times on students with regards to dropout. Their review of the literature over the course of the 1990's suggests that first semester and first year academic performance has a strong and direct relationship to persistence. They note that despite the drawbacks of using grades as a measure of persistence and retention, first semester and first year grades are the best indicator of these outcomes even when controlled for pre-entry characteristics and college experiences (Adelman, 1999; Gifford, Briceño-Perriott, & Mianzo, 2006; Pascarella & Terenzini, 2005; McGrath & Braunstein, 1997). In fact, GPAs under 2.0 have been found to be predictive of freshman dropout (Horn, 1998). Based upon this knowledge, institutions have developed front-loaded interventions aimed at negotiating "risk" for students in the beginning of their academic careers.

"At-risk" has been defined as "someone who lacks skills in meeting the academic demands of post-secondary institutions (DeRoma, Bell, Zaremba, & Abee, 2005)." Traditionally, demographic characteristics such as having low socioeconomic status, being a member of an underrepresented minority group, and being a first generation college student have been found to be related to "at-risk" status (Berger & Lyon, 2005; Chen & Kaufman, 1997; Choy, 2002; Heisserer & Parette, 2002). For example, first generation college students are two times more likely than other students to leave college before their second year (Horn, 1998). It has been suggested that students from these backgrounds may not have had access to the appropriate educational preparation during their elementary and high school years, leaving them at a disadvantage when they reach higher education. Those with less rigorous high school curriculums have been shown to have higher rates of dropout and lower academic performance (Choy, 2002). Those at-risk for academic and retention problems have been characterized as being academically unprepared and having unrealistic goals that are driven from the wish for instant gratification (Bulger & Watson, 2006). Students coming from disadvantaged backgrounds or from families where they are the first to attend college may not know what to expect or how to prepare for the demands of college. They may chose areas of study based on financial payout rather than ones they are interested in or prepared for. Some may have difficulty investing the time, money, and energy it costs to obtain a degree when there are jobs available that pay now. In addition, academically at-risk students may have weaker academic self-concepts and lower expectations for themselves as a result of low academic self-efficacy (Kalsner, 1992). At-risk students may feel as though they do not belong in college or do not know why they are there or what they are interested in. This belief can lead to adjustment problems and academic underachievement.

Other demographic and pre-entry characteristics have been identified for students at risk for retention and academic performance problems. Chen and Kaufman (1997) indicate that variables such as coming from a single parent home, having an older sibling drop out of school, changing high school two or more times, having average grades of C or below during 6th-8th grade, and repeating a grade put a student at-risk for drop out. This suggests that the backgrounds and experiences of students even prior to high school can impact their experiences and performance once they attend the university. Heisserer and Parette (2002) note that students with one or more of these factors: 1) ethnic minorities: 2) academically disadvantaged backgrounds: 3) have disabilities: 4) come from low SES families: and 5) probationary students are at greater risk for dropout. Horn (1998) and Choy (2002) also add that students who delayed enrollment after high school or began school at a community college are at higher risk. These studies indicate a wide range of pre-existing variables may be influential towards whether or not a student is successful in the college environment.

In addition to understanding the context of the at-risk student, many studies in this research area have attempted to predict academic performance or retention status through the use of many of the factors mentioned above. Since academic variables such as standardized test scores (SAT/ACT) and high school GPA have traditionally been used as admissions criteria for entry to college and are generally thought to be indicative of academic preparedness, many studies have used these factors to predict academic performance and retention. The literature demonstrates that these academic variables are good predictors of academic performance (Bontekoe, 1992; Ott, 1988; Schmitt et al., 2009). However, other research shows that traditional academic variables are not good predictors of academic success and retention among non-traditional populations and minority groups (Sedlacek & Adams-Gaston, 1992). Researchers

argue that the lack of predictive value of academic factors in these populations may be happening because standardized tests such as the SAT and ACT are culturally biased assessment measures that do not accurately capture the academic capabilities of minority students (Schwartz & Washington, 2002).

A variety of non-cognitive and psychosocial factors have been explored in the literature including self-concept, self-appraisal, dealing with racism, preference for long-term goals, social support, leadership experience, community service, knowledge acquired in a field, self-esteem, and perceived control (Schwartz & Washington, 2002; Stupinsky et al, 2007; Tracey & Sedlacek, 1987). In particular, academic self-concept has been noted to be a particularly strong variable (House, 1992). These studies show that non-cognitive factors are slightly more predictive for minority and non-traditional groups of college students than for white students. However, the literature suggests that a combination of both academic, non-cognitive, and psychosocial variables may be the best predictor of academic success (House, 1992; Schwartz & Washington, 2002). These non-academic factors attempt to take both pre-entry characteristics and as well as college experiences into account when determining what is most predictive of collegiate academic performance.

<div align="center">The Student-Athlete Experience</div>

Student-athletes are often seen as a unique subset of college students as a result of their atypical lifestyles and their dual roles of athlete and student (Etzel, 2009). In addition to the typical responsibilities of the average college student, student-athletes are committed to 20+ hours a week of sport related activities. Equivalent to the time demand of a part time job, student-athletes are expected to train both physically and mentally, compete, travel, maintain eligibility, and stay fully committed to their academic pursuits (Ferrante & Etzel, 2009; Monda,

2008). As a result of this grueling lifestyle, student-athletes have been considered to be "at-risk" by professionals in the field (Pinkerton, Hinz, & Barrow, 1987).

From the time student-athletes enroll at a university their collegiate experiences differ from the average college student. Student-athletes are often recruited to a particular institution based on their athletic talent. When they arrive on campus they are welcomed to a ready made social support network of coaches, teammates, and support personnel. They are often paired with an athlete roommate and involved with team related activities prior to the start of school. While it is still unclear whether the degree of adjustment difficulty differs between student-athletes and non-athletes, it is clear that the experiences that student-athletes encounter differ from the average college student (Downey, 2005; Jackson & Krane, 1993; Mendelez, 2007; Monda, 2008; Purdy et al., 1983; Quarforth et al., 2003; Ridinger & Pastore, 2000; Tracy & Corlett, 1995).

Athletically, student-athletes are often faced with having to adjust to a higher level of play, increased training demands, changes in their status on the team, injuries, and media attention (Giacobbi & Werthington, 2004). Academically, they go through many of the same experiences as the average college student such as adjusting to the size of classes and increased workload, identifying a major, being responsible for their own learning, and adapting to a critical thinking environment but these experiences are confounded by isolation from the academic community, a lack of time to become involved in extra-curricular or academic related activities, stereotyping in the academic community, and an inability to pursue a career in certain majors due to conflicts with sport responsibilities (Howard –Hamilton & Sina, 2001). Socially, student-athletes have an instant social group within their team or within the athletic community but can have difficulty making social contacts outside of athletics due to their restrictive lifestyle (Adler & Adler, 1987; Jackson & Krane, 1993). Personally, student-athletes (particularly freshman)

may be under a significant amount of stress that can affect their physical and psychological well-being (Giacobbi & Werthington, 2004; Kimball & Freysinger, 2003; Petrie, 1992). To confound their stress, student-athletes' physical and psychological resources may not be enough to meet the demands placed upon then. An inadequate amount of recovery can put stress on the body and lead to serious issues such as depressive symptomatology, physical illness, fatigue, and sleeping problems (Kellman, 2002). Under-recovery has been considered to be a significant concern in the student-athlete population (Ferrante & Etzel, 2009). As a result of these experiences, student-athletes may be at-risk for complications in other areas of their lives, such as academics.

Academic Experiences of Student-Athletes

Overall, the majority of student-athletes appear to be doing well academically (Ferrante & Etzel, 2009). The NCAA notes that graduation rates, one of the most notable measures of academic success, indicate that the majority of student-athletes are graduating from college and are graduating at higher rates than non-athletes (NCAA Research Staff, 2010). For student-athletes who entered college in 2003, the NCAA reported a graduation rate of 79% while their non-athlete counterparts graduated at a rate of 63%. However, it is important to note that the same graduation rate of student-athletes tracked by the federal government was much lower than the one reported by the NCAA at 64% (NCAA Research Staff, 2010). It has been suggested that these rates differ because the NCAA includes individuals who have transferred in good standing while the federal rates do not include transfers. Regardless, it is important to take into account that these rates differ based on who is conducting the research. While these rates are seemingly positive, when examined closer there are disparities based upon gender, race, and sport (Gaston-Gayles, 2004). In Division I, the graduation rates for male student-athletes was 72% compared

to women who graduated at 87%. African-American males graduated at 64% compared to white males who graduated at a rate of 78%. African-American student-athletes graduated at the lowest rate at 59%. Between sports, men's basketball rated the lowest with 65%, football graduated student-athletes at 67% and baseball and wrestling graduated student-athletes with 70% and 72% (NCAA Research Staff, 2010). While it is promising that the majority student-athletes are achieving the goal of earning a degree, it appears that there is diversity within the overall group of student-athletes and the quality of their academic experiences is unclear.

According to experts in the higher education literature, student learning and personal development are the intended outcomes of post-secondary schooling (Gaston-Gayles, 2009). In particular, outcomes such as academic performance, cognitive development, attitudes and values, and psychosocial development (such as career maturity) are measurable ways of determining the quality of an individual's academic experience. However, over 65% of student-athletes surveyed in a multi-site study of 921 Division I student-athletes believed that their cumulative GPA would have been higher if they did not play an intercollegiate sport and two thirds noted that "they wished that they could have pursued more educational opportunities at their university (Potuto & O'Hanlon, 2007)." This perception of low academic quality is confirmed by the data regarding student-athletes' skills and development. Compared to their non-athlete counterparts, student-athletes have been shown to have less developed critical thinking skills such as open-mindedness, inquisitiveness, and maturity as well as lower math and reading comprehension skills (McBride & Reed, 1998; Pascarella, Bohr, Nora, & Terenzini, 1995; Pascarella & Terenzini, 2005). When it comes to developing plans for a future career, student-athletes score significantly lower on career maturity than non-athletes (Kennedy & Dimick, 1987; Kornspan & Etzel, 2003). Research also suggests student-athletes' grades in-season are lower than when they

are out of season (Scott et al., 2008). This data indicates that although student-athletes are graduating at the same rate or better than non-athletes, the quality of their academic experience might not be up to the appropriate standard. Even those working at the highest levels of collegiate sport are asking: "do those of us involved in athletics underestimate the impact that the demands of being a high level athlete have on college academic success? (Scott et al., 2008)."

Within the student-athlete population, the literature suggests that certain subpopulations may be more "at-risk" for academic problems more than others. Male student-athletes, those belonging to minority groups, and those and in revenue-producing sports such as men's basketball and football have had a history of low preparedness and academic performance compared to other student-athletes and tend to be at the highest risk (Ferrante & Etzel, 2009; LeCrom et al, 2009; Morgan, 2005; Pascarella & Terenzini, 2005). African-American student-athletes have been found to have lower GPAs and be more athletically motivated than academically motivated that their white counterparts (Sellers, 1992; Snyder, 1996). In addition, freshman student-athletes, who are considered to be retention risks in the general student population, may be less committed to earning a degree (Downey, 2005). Those with learning disabilities may be previously undiagnosed or struggle with academic expectations of college (Hamilton, 2009). Student-athletes also represent a high number of first generation college students on campus which can impact academic performance (Stevens & Scholefield, 2009).

There are a number of reasons why student-athletes may have academic difficulty, many of them relating back to their experiences of managing dual roles. It has been demonstrated that student-athletes experience role conflict when trying to meet the expectations of both athlete and student (Blinde & Greendorfer, 1992). While student-athletes often enter school with the expectation that they will contribute equally to academics and athletics, this becomes difficult

when the demands increase. Research shows that student-athletes often have a strong athletic identity and when role conflict emerges, academics become the tradeoff (Adler & Adler, 1987; Brewer, 1993; Miller & Kerr, 2002; Potuto & O'Hanlon, 2007). In one of the pivotal studies in the field, Adler and Adler (1987) established that once freshman basketball players began to experience role conflict and academic failure, they began to identify more with the athlete role. This perpetuated a cycle of academic failure in which each time lead to a greater commitment to the athletic role. Adler and Adler (1987) also noted that the structure of sport reinforced the abandonment of the academic role and by the time that the student-athletes were seniors they had relinquished the academic role entirely.

Role conflict among student-athletes has been shown to have a negative affect on academic outcomes such as identity development and career maturity. In a study conducted with fourth and fifth year Canadian student-athletes, Miller and Kerr (2002) found that student-athletes tend to over-identify with the athlete role during the first year and a half of college. This over identification was demonstrated by a commitment to focusing on the responsibilities and activities of the athlete role. By the final two years of college, student-athletes experienced a shift in which they began to explore different academic and social roles and activities. However, this second phase, labeled as "deferred role experimentation" may occur too late in a student-athlete's academic career. If a student-athlete has committed themselves to the athlete role early in their career and has not explored their interests or laid the foundational tracks necessary to pursue a future in a particular field of interest, they may be at risk for identity foreclosure and career immaturity.

Identity foreclosure is described as deciding on an identity at the expense of exploring possible alternative or co-existing identities (Marcia, 1986; Murphy, Petitpas, & Brewer, 1996).

The readiness to gather information, plan, and make decisions about a future career is referred to as career maturity (Kornspan & Etzel, 2003). Those who foreclose on a career, such as athletics, are at risk for not planning appropriately for their future. In fact, a study conducted by Murphy, Petitpas, and Brewer (1996) found that high levels of athletic identity and identity foreclosure were negatively correlated to career maturity. This study also found that male student-athletes are less career mature than female student-athletes. Unfortunately, less than 2% of student-athletes continue on to a career in professional sports despite a large percentage who identify "going pro" as their career goal (Bracken, 2007; Ferrante & Etzel, 2009).

Qualitative Research in Sport & Exercise Psychology

For the past 25 years, qualitative research design has been argued to be a viable alternative to quantitative research methodology (Biddle et al, 2001; Culver, Gilbert, & Trudel, 2003; Dale, 1996; Finlay, 2009; Hatch, 2002; Krane, Andersen, & Strean, 1997; Martens, 1987; Patton, 2002; Sparkes & Smith, 2009; Strean, 1998). Qualitative research methodology follows inductive reasoning, which examines phenomena using the specifics to make general assumptions. On the other hand, quantitative research methodology uses deductive reasoning where hypotheses are formed based upon prior research and facts (Patton, 2002). Qualitative research methodology is best suited for exploring topics that are understudied, complex, or misunderstood (Martens, 1987; Strean, 1998). The data that emerges from these types of studies can either be used on its own to understand the details of phenomena or to inform future quantitative studies.

Researchers in the field argue that qualitative research methodology is underutilized in the field and should be considered to be as valid as quantitative methodology (Krane, Andersen, & Strean, 1998; Martens, 1987). Since the call for more qualitative research in sport and exercise

psychology was announced, more qualitative research studies have been conducted but there is still resistance to publishing studies using this type of methodology (Culver, Gilbert, & Trudel, 2003). However, as can be seen in the stress and coping in sport literature, qualitative research methodology has been successfully used and accepted by the research community to identify sources of stress and to better understand the complex process of stress and coping (Anshel, 2001; Giacobbi, Foore, & Weinberg, 2004; Giacobbi & Werthington, 2004; Kimball & Freysinger 2003; Thatcher & Day, 2008).

Within the qualitative studies that have been conducted in Sport & Exercise Psychology, there is debate over what type of research design and data collection techniques are most appropriate. Many researchers argue that we need to diversify our understanding of the many possible qualitative research designs (Hardy, Jones, & Gould, 1996; Krane, Andersen, & Strean, 1998; Martens, 1987; Sparkes & Smith, 2009). Traditionally, semi-structured interviews have been used to gather information; however, critics note that semi-structured interviews and guides may provide too much structure that could take away from accurately capturing the participants' experiences (Biddle et al, 2001; Dale, 1996). Rather than grasping the unique and novel aspects of participant's experiences, they argue that structured interview questions force the participant to adhere to a list of pre-determined topics. While a semi-structured interview guide can help to provide security and confidence that issues related to the topic will be addressed, researchers argue that less structured interview questions can provide information rich data that can also meet the criteria for trustworthiness (Sparkes & Smith, 2009). Researchers note that the phenomenological perspective may provoke uncertainty to those in Sport and Exercise Psychology because guiding questions are developed during the course of the conversations rather than being developed prior to the start of the study. However, because it can provoke

information about aspects of the phenomena not previously studied, it has been suggested to have considerable promise for the discovery of novel research findings in the field.

Summary

The purpose of this review was to provide an overview of the literature related to student-athletes' academic performance and determine how it has been conceptualized, measured, and studied in relation to its theoretical frameworks. In particular, it addressed the current literature regarding the identification of risk factors for academic problems in the student-athlete population and the variables that have been shown to be related to this process.

Currently, academic reform in collegiate athletics is a topic of particular interest. With accusations that collegiate sports have deviated from the educational mission of higher education, specific attention has been placed on improving the retention and academic performance of Division I student-athletes. In particular, the NCAA Presidential Task Force noted that research needs to be conducted that helps to 1) identify risk factors for student-athlete dropout: 2) determine a definition of "at-risk" among student-athletes: 3) develop an evaluation tool for the admissions of academically marginal student-athletes: 4) identify best practices for academic support services and other interventions with "at-risk" student-athletes such as life skills programming: and 5) evaluate the efficacy of support services and programming and make appropriate adjustments.

When studying this topic and population, it is important to take developmental theory into consideration. Like other college students in their age group, student-athletes are going through a stage of identity development (Erickson, 1950). Their developmental purpose is to become autonomous, figure out who they are as a person, and identify their interests, values, and competencies (Chickering & Reisser, 1993). For those working with this population, it is

important to understand how student-athletes' period in development impacts their academic performance. Academic performance is not only impacted by what goes on in the classroom, but by all of the social, personal, and athletic experiences that student-athletes' encounter. These experiences, along with the characteristics of student-athletes prior to entry can determine whether a student-athlete succeeds academically or graduates from the institution.

With development in mind, Tinto's Interactionalist Theory of Student Departure (1993) looks at retention from a holistic perspective. This theory notes that students' pre-entry characteristics such as family background, skills and abilities, and prior schooling determine a student's initial goals and commitments to college. As students interact with formal and informal part of the academic and social systems at the university (i.e. faculty/staff interactions, academic performance, extra curricular activities, and peer group interactions) they become more or less academically and socially integration into the university. In particular, a student's level of social integration plays a major role in their reformulation of their initial goals and commitments, ultimately leading to the student's decision to stay or leave the university (Braxton, 2000). When researching variables that may impact student-athletes academic performance and retention, this model may be useful in developing appropriate research questions or understanding the general process in which students come to the decision to drop-out of college. However, because of student-athletes unique experiences, it is unclear whether this model is applicable to their situation. Therefore, exploratory studies may be needed to determine what variables student-athletes perceive to be most meaningful.

Most studies that have been conducted on the topic of student-athlete academic performance have been prediction studies aimed at identifying the predictive value of pre-selected variables (Babington, 1997; Garrett, 2000; Lang et al (1988); LeCrom et al, 2009;

Maggard, 2007; Malmo, 2009; Morgan 2005; NCAA, 2009; Niilampti, 2006; Petrie, 1993; Petrie & Stoever, 1997; Scogin, 2007; Sedlacek & Adams-Gaston, 1992; Sellers, 1989; Simon & Van Rheenen, 2000; Ting, 2009; Young & Sowa, 1992). These studies have been mostly quantitative in nature and have examined academic variables, non-cognitive variables, and sport related variables. However, these studies have produced mixed results. Because of the great diversity within the student-athlete population, there is little consensus over what variables predict student-athlete academic performance. A "one size fits all" profile does not appear to be applicable; however, there appears to be greater consensus among subpopulations of student-athletes categorized by gender, sport type, or race. This trend has been mirrored among the general college student literature as well (Berger, 2000; LeCrom et al, 2009).

Research suggests that student-athletes have a set of experiences and responsibilities that differ from the average college student (Etzel, 2009). As a result of their unique experiences and involvement in the corporate culture of athletics, the academic quality of student-athletes' educational careers are in question. Managing dual roles can impact student-athletes' academic achievement, particularly for those who identify more with the athlete role than the academic role (Adler & Adler, 1987). Those who identify more with the athlete role may be more likely to invest in athletics at the expense of academics. As graduation rates of student-athletes appear to be improving, there are still major discrepancies among certain subgroups of the population (NCAA Research Staff, 2010). Student-athletes who are male, minority students, freshman, first generation college students, and those with learning disabilities may still be considered to be more "at-risk" for academic problems.

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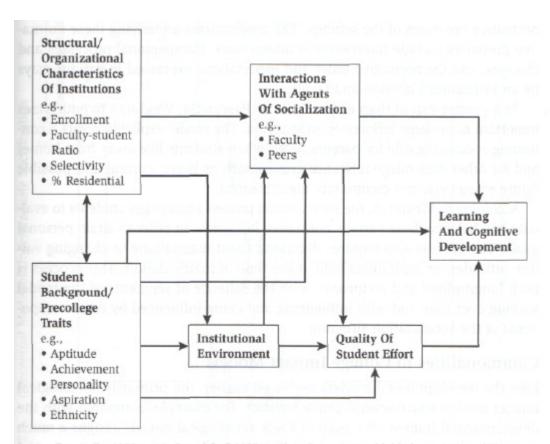
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APPENDIX K

Pascarella's Model for Assessing Change

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