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MEASURING THE LEVELS OF ATHLETIC IDENTITY AND IDENTITY FORECLOSURE OF NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS (NAIA) STUDENT-ATHLETES

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MEASURING THE LEVELS OF ATHLETIC IDENTITY AND IDENTITY FORECLOSURE
OF NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS (NAIA) STUDENT-
ATHLETES

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Education in the
College of Education at the University of Kentucky

By

Gavin Washington

Lexington, Kentucky

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of Educational Policy Studies and Evaluation
and Dr. Willis Jones, Assistant Professor of
Educational Policy Studies and Evaluation

Lexington, Kentucky

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ABSTRACT OF DISSERTATION

MEASURING THE LEVELS OF ATHLETIC IDENTITY AND IDENTITY FORECLOSURE OF NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS (NAIA) STUDENT-ATHLETES

During a person's college years they are beginning to form identities and develop a sense of self. One of the most salient identities that college student-athletes identify with is their athletic identity. Numerous research studies have been conducted on the saliency of a student-athlete's athletic identity, however the vast majority of those research studies examined student-athletes participating at the NCAA (National Collegiate Athletic Association) Division I level. This study was designed to extend the previous investigation of athletic identity and identity foreclosure among college students by focusing on athletes participating at the NAIA (National Association of Intercollegiate Athletics) level.

By utilizing previously developed scales: Athletic Identity Measurement Scale (AIMS) and the Extended Objective Measure of Ego-Identity Status (EOM-IS), this study assessed a sample of male and female college student-athletes' AIMS and EOM-IS levels in order to investigate their levels of athletic identity and identity foreclosure. Further, this study looks to determine if there is a significant variance in AIMS and EOM-IS levels based on selected independent variables: grade classification, sport, scholarship and non-scholarship athletes, revenue generating and non-revenue generating sports. Participants in this study were student-athletes at Asbury University located in Wilmore, KY which is a NAIA institution.

KEYWORDS: athletic identity, identity foreclosure, student-athletes, National Association of Intercollegiate Athletics (NAIA), and student affairs.

Gavin Washington

October 15, 2016

MEASURING THE LEVELS OF ATHLETIC IDENTITY AND IDENTITY FORECLOSURE
OF NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS (NAIA) STUDENT-
ATHLETES

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October 15th, 2016

I would like to dedicate this work to the Washington family who took in an orphaned child and gave him a sense of purpose. Your love, guidance and constant support has been the driving force in my life.

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I would like to take this opportunity to individually thank people who made this achievement possible. To my parents Don and Gloria Washington, you have showed me that family goes beyond blood, but a true family is one that loves, supports and sacrifices for one another no matter what the situation may be. I was very fortunate to be adopted into a family as supportive and caring as this one.

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CHAPTER 1

INTRODUCTION

An individual's transition from high school to college can be a very important time in that person's life for many reasons. One of those reasons is that during college, students begin developing a stronger sense of who they are due to their evolving identity. The formation of one's identity starts in childhood and progresses as that child grows through adolescence into adulthood. Identity formation has been defined as the development of an individual's distinct personality, which is regarded as a persisting entity in a particular stage of life by which a person is recognized or known (Erikson, 1968). This process of formulating an identity is a universal process and it defines individuals to others and themselves. Components of one's identity include a sense of continuity, a sense of uniqueness from others, and a sense of affiliation to a larger group or society. While the identity development processes occurs throughout life, research suggests that substantial strides in one's identity occur during the college years (Evans et al., 2009).

Identity Formation

Identity formation has typically been associated with the period of adolescence; however, it has been argued that most identity exploration takes place during emerging adulthood or the collegiate years (Arnett, 2000). Empirical research supports this claim, with results showing that progressive developmental trends in identity status are found to a greater extent in the college years than in adolescence, making this a particularly relevant population with which to conduct identity formation investigations (Waterman,

1993). The significance of studying identity formation during the collegiate years is that it provides insight into how students view themselves and that information is useful in academic advising and career counseling. According to the American Council on Education, one of the many roles of student affairs practitioners is to understand how students go about discovering their interests and abilities while assisting them in achieving their maximum effectiveness (Torres, Jones, & Renn, 2009). By having an understanding of how students develop their identities and which identities are the strongest amongst them, student affairs practitioners will be better suited to meet their students' needs.

Student affairs practice and student development theories have been around since the early twentieth century and they grew from a counseling and vocational psychology approach (Torres, Jones, & Renn 2009). Student affairs is rooted in the counseling and vocational training of students and it has often relied on the psychology behind identity development to properly meet the needs of the student population. Erik Erikson (1959) began researching this topic in the 1950s and he proposed that development is governed in part by the epigenetic principle, a combination of genetic and environmental influences that governs the direction and timing of one's identity development. As we move forward in history, other scholars and professionals began to research specific identity development theories such as racial, ethnic, and gender identities and how they play in the overall development of students. The knowledge and understanding gained from researching various student identity theories has been applied to academic, vocational, and general advising of college students (Torres, Jones, & Renn 2009).

Athletic Identity

As the research and literature surrounding identity development has grown, student-athletes is one of the subpopulations of college students that has garnered a lot of attention. In recent years, much empirical research has been conducted on the correlation between college student identity formation and participation in intercollegiate athletics. It has been suggested that participation in athletics while in college can provide a student with valuable life skills and psychological benefits that help facilitate identity development (Griffith & Johnson, 2002). Athletics can teach self-discipline, teamwork, confidence, leadership, social, and interpersonal skills (Aries & Richards, 1999). Competing in intercollegiate athletics can also give a student a strong sense of self as well as a means to fit in a social group such as a team (Brewer, Van Raalte, & Linder, 2012). Team members often share common traits that will make the overall college experience less stressful; knowing that other athletes have experienced similar hardships and yet succeeded. On the other hand, some view college athletics to be a detrimental to an individual's identity development. The student-athletes' attention may be drawn away from academics, as well as other social aspects of the college experience (Parham, 1993). The time, commitment and energy needed to compete in intercollegiate athletics may hinder the development of other important life roles and can have lasting negative implications. Research conducted by Parham (1993) suggests that intercollegiate athletic participation may be negatively associated with such outcomes as involvement and satisfaction with the overall college experience, career maturity, and clarity in educational and occupational plans, and principled moral judgment (Pascarella et al., 1999). Either way, research has suggested that athletics play a very important role in the

identity formation process and by understanding the athletic identity of these students we gain insight into their overall student development.

Brewer, Van Raatle, and Linder (2012) looked specifically at the identity of athletes and how they view themselves. This concept is referred to as athletic identity and it can be defined as the degree of strength and exclusivity to which a person identifies with the athletic role. An athletic identity is developed through acquisition of skills, confidence, and social interaction during sport participation. Hurst, Hale, Smith and Collins (2000) who have also conducted extensive research on the concept of athletic identity define it as the degree athletes identify with the athletic role (Hale & Stambulova, 1999); while Horton and Mack (2000) contend it represents the extent to which a person identifies with athletics and their specific athletic role. While these definitions provide solid foundations, this study utilizes Brewer, Van Raatle and Linder's (1993) definition of athletic identity because it focuses on the strength of athletic identity as well as its exclusivity of it. That definition is more closely aligned with the objectives of this research study which are focused on measuring levels of athletic identity and identity foreclosure. By using Brewer, Van Raatle and Linder's definition and the scale they developed to measure athletic identity, this study plans to examine the correlation between athletic identity and identity foreclosure.

Identity Foreclosure

Many scholars explaining athletic identity have explored the concept of identity foreclosure as well. James Marcia, a clinical and developmental psychologist, is best known for researching psychological development. Marcia posited that a person's

identity is formed over a lifespan, a majority of that identity being formed during adolescence (Markus & Nurius, 1986). Marcia theorized that individuals have four identity stages or statuses that they go through; Identity Diffusion, Identity Foreclosure, Identity Moratorium, and Identity Achievement, that describe this process of identity development. The core idea surrounding his theory is that one's sense of identity is determined primarily by the choices and commitments made regarding certain personal and social traits. Marcia suggests that a well-developed identity gives an individual a sense of their strengths, weaknesses, and individual uniqueness. A person with a less well-developed identity is not able to define his or her personal strengths and weaknesses, and does not have a well-articulated sense of self (Marcia, 2009).

Identity foreclosure happens when individuals prematurely make a firm commitment to an occupation or ideology (Marcia, 1966). People who are foreclosed have not allowed for exploration of their internal needs and values; instead they concede to the demands of their environment and adopted social role identity. It is possible that participation in athletics can facilitate identity foreclosure among student-athletes (Horton & Mack, 2000). Intercollegiate student-athletes are primarily focused on their athletic pursuits and they often shut down any possibilities to explore their other internal needs and values. Murphy and Petitpas (1996) note that many authors have suggested that the physical and psychological demands of collegiate athletics, coupled with the restrictiveness of the athletic system, may isolate athletes from mainstream college activities, restrict their opportunities for exploratory behavior, and promote identity foreclosure (Chartrand & Lent, 1987; Nelson, 1983; Petitpas & Champagne, 1988).

As a person's athletic identity grows they often begin the process of identity foreclosure, in which they dissociate with other important aspects of their social identity (Good et al., 1993). Athletic identity is often one of more dominant identities and the level of identity foreclosure increases with the level of sports participation. Students participating at highly competitive levels have a higher athletic identity and higher identity foreclosure levels than those that participate at less competitive levels (Brewer et al., 1993).

Athletic identity has been measured in numerous research studies; however the majority of those research studies have examined the levels of athletic identity displayed by student-athletes at highly competitive NCAA (National College Athletic Association) Division I institutions. NCAA Division I institutions are typically considered the highest level of intercollegiate athletic competition. Research also suggests that student-athletes that participate at highly competitive colleges display stronger levels of athletic identity (Brewer et al., 2012). Very little empirical research has been conducted exploring the athletic identity of student-athletes competing in lower level intercollegiate competition. More specifically, researchers have failed to investigate the athletic identity of student-athletes competing at institutions governed by National Association of Intercollegiate Athletics (NAIA). Due to the lack of research of research conducted on student-athletes at these types of smaller, less competitive institutions, this research study can fill an important void in the literature. Do students participating in athletics at NAIA level institutions display high levels of athletic identity?

Research Question

The purpose of this research study is to explore the relationship between a student-athlete's level of athletic identity and their level of identity foreclosure. This is accomplished by measuring the levels of athletic identity and identity foreclosure of student-athletes attending a NAIA level institution by administering The Athletic Identity Measurement Scale (AIMS) and the Extended Objective Measure of Ego-Identity Status (EOM-EIS). The second component of this study provides an assessment of differences in athletic identity and identity foreclosure levels based on selected independent variables.

There are several research questions that are guiding this study. The first question addresses the larger issue of determining the levels of athletic identity and identity foreclosure being displayed by NAIA student-athletes. Due to the lack of research that is conducted on student-athletes at the NAIA level, this study allows researchers to compare the levels of athletic identity and identity foreclosure for student-athletes at highly competitive NCAA Division I institutions with student-athletes at less competitive NAIA institutions like the sample used for this study.

The second questions that is guiding this study explores the correlation between athletic identity and identity foreclosure. During a person's collegiate years is when a majority of the identity formation process occurs (Evans et al., 2009). By understanding and researching the correlation between athletic identity and identity foreclosure of college students, institutions of higher learning are more informed on potential factors that may influence the identity formation process of the student-athletes they serve.

The third question that is guiding this study examines the differences in athletic identity and identity foreclosure based on specific variables such as a student's year in school, sport played, type of sport played and if they are on scholarship or not. By answering this question researchers will know if the aforementioned variables are factors in the levels of athletic identity and identity foreclosure displayed by student-athletes participating at the NAIA level.

Research Question 1: What are the levels of Athletic Identity and Identity Foreclosure for our sample?

Research Question 2: Is there a correlation between Athletic Identity and Identity foreclosure for our sample?

Research Question 3: Are there significant mean differences in athletic identity and identity foreclosure based on:

- a. Year in School
- b. Sport
- c. Revenue vs. Non-Revenue Generating Sport
- d. Scholarship vs. Non-Scholarship Athlete

Definition of Terms

For the purposes of this research, several keywords or phrases are regularly utilized and require operationalization. In addition to the key terms provided below, several concepts relative to the chosen methodology are also operationalized for further clarity. Please see below for terms and the definitions as they apply to this work:

- **Athletic Identity:** can be defined as the degree of strength and exclusivity to which a person identifies with the athletic role (Brewer, Van Raalte, & Linder, 1993).
- **Identity Foreclosure:** happens when individuals prematurely make a firm commitment to an occupation or ideology. Thus causing people who are foreclosed to not allow for exploration of their internal needs and values; instead they concede to the demands of their environment and adopted social role identity (Marcia, 1966).
- **Identity Formation** is also known as individuation, is the development of the distinct personality of an individual regarded as a persisting entity (known as personal continuity) in a particular stage of life in which individual characteristics are possessed and by which a person is recognized or known (such as the establishment of a reputation). This process defines individuals to others and themselves (Erikson, 1968).
- **Life Roles** are a set of connected behaviors, rights, obligations, beliefs, and norms as conceptualized by individuals due to their perceived place in society (Biddle, 1986).
- **NAIA** is an acronym that stands for the National Association of Intercollegiate Athletics and it serves as a governing body for its 260 membership institutions (“About the NAIA”, 2015).
- **NCAA** is an acronym that stands for the National Collegiate Athletics Association and it serves as a governing body for its 1100 membership institutions (“Who We Are”, 2015).

- **NCAA Division I** is one of three divisions of the NCAA. This division consists of nearly 300 institutions and schools in this division generally have the biggest student bodies, manage the largest athletics budgets and offer the most generous number of scholarships (“Who We Are”, 2015).
- **Non-Revenue Generating Sport** is a sport that does not generate revenue for the athletic department or university on a consistent basis (“Revenue and Expenses”, 2015).
- **Revenue Generating Sport** is a sport in which there is an expectation that the sport will operate at a gain and generate revenue of the university (“Revenue and Expenses”, 2015).
- **Self-concept** is a person’s self-concept is defined as how an individual’s evaluates his or her competence and worth (Richards, 1999).
- **Social Identity Theory** is the portion of an individual's self-concept derived from perceived membership in a relevant social group (Turner & Oakes, 1986).
- **Student Affairs Practitioner-** are professional who work in the department or division of services and support for students at institutions of higher education to enhance student growth and development (Torres, Jones, & Renn 2009).
- **Student-Athlete** refers to an individual that is a full-time student and participates in athletics (Ryan, 1989).

Assumptions

In the construction of this research study, several assumptions are being made. The first assumption is that completion of the survey is voluntary. It is also assumed that each respondent is a student-athlete at the time the survey is completed. Additionally, it is assumed that each participant understood each aspect of the questionnaire. Finally it is assumed that each respondent answered all questions objectively and honestly while completing the AIMS and EOM-EIS demographic survey.

Limitations

Although steps were taken to reduce potential limitations, this research study is still limited in certain areas. One of those areas is that this research study was conducted using a targeted sample with the respondents coming from a single university. This means the data does not provide the random sampling generally desired within quantitative research. Although the sample selected for this study is similar in many ways to the majority of NAIA institutions, if this survey was conducted at a different NAIA institution it may or may not bear the same results. Another limitation of this study is the number of student-athletes who participate in revenue generating sports is small due to Asbury University's lack of a collegiate football team. This leaves the study with only basketball players who can be counted as student-athletes participating in revenue generating sports.

The collection procedures and instrument used also posed potential limitations. The time constraints of this survey does not allow for each respondent to take the survey during their sport season. A person's level of athletic identity and identity foreclosure

may be influenced by their sport being in season or not. The measurement instruments that were utilized for this study both display high reliability and validity scores, however the AIMS and EOM-EIS scales are instruments of self-reporting. This creates the risk of participants responding to items with the most socially acceptable response according to them, rather than responding to the items honestly. Lastly, there are numerous factors that affect a person's identity and identity foreclosure and this research study was designed to only examine a few aspects of a student-athlete's identity.

Significance of the Study

The main purpose of this study is to examine the levels of Athletic Identity and Identity Foreclosure displayed by student-athletes at an NAIA institution. The secondary purpose of the study is to examine if there were significant differences in athletic identity and identity foreclosure levels based on the selected independent variables: year in school, sport, revenue vs. non-revenue generating sport, and scholarship vs. non-scholarship athlete. The study was created to be exploratory in its nature and to identify interesting relationships that could be used for future research analyses.

This study is significant in numerous ways; one of the primary contributions is that this study fills a void in athletic identity research by examining the levels displayed by student-athletes at the NAIA level. Going beyond just filling a void in athletic identity research, this study is exploring the relationship between athletic identity and identity foreclosure. Based on the research of Brewer, Van Raalte, and Linder (1993), a student-athlete's athletic identity goes up in accordance with the level of competition. Research predicts that NCAA Division I student-athletes will display high levels of

athletic identity and high levels of identity foreclosure and those high levels could effect a student-athletes development in a multitude of ways. By having a better understanding of the ways athletic identity and identity foreclosure can effect student-athletes then student affair practitioners can better meet their needs. Research on athletic identity and the identity formation of college students has been utilized by institutions of higher learning to help with the academic advising, mental health counseling, and career services provided to its students (Torres, Jones, & Renn 2009).

Although research suggest student-athletes graduate at higher rates than non-student-athletes there are still several issues that affect student-athletes in terms of their student development (Brewer, Van Raatle, & Linder, 2012). One of those issues is the lack of academic and career exploration that occurs for student-athletes. Being aware of a student-athlete's level of athletic identity and identity foreclosure can be useful to student affairs practitioners that are responsible for advising that student academically. Having the knowledge that student-athletes with high levels of athletic identity experience high levels of identity foreclosure, thus causing them to restrict their exploratory behavior, can be useful information for student affairs practitioners (Chartrand & Lent, 1987; Nelson, 1983; Petitpas & Champagne, 1988). That type of knowledge could cause a student affairs practitioner to challenge student-athletes to be more exploratory in their academic and career choices.

Student-athletes are also subject to extreme demands on their time due to practice time, game travel, study halls, and many other obligations. This in return can cause student-athletes to experience high levels of stress and create mental health concerns ("NAIA Health and Safety", 2016). Brewer et al. (1993) suggested that student-athletes

competing at high levels of competition also experience moderate to high levels of stress and anxiety because of the demands they face. If student affairs practitioners are educated on the effects of athletic identity and identity foreclosure levels and the role they play on student development, then they will be better suited to assist each student in their overall development. This study seeks to explore the levels of athletic identity and identity foreclosure of student-athletes at the NAIA level so that information can be obtained that could be utilized by institutions in their student development program planning.

Organization of the Study

Chapter 1 outlines the research question, which focuses on the level of athletic identity of student-athletes and the identity foreclosure that occurs. Chapter 2 serves as a review of the literature surrounding identity formation, identity foreclosure, athletic identity, and self-concept. The chapter provides examples of relevant peer reviewed journal articles that are specific to this research study, which in return provides a foundation for this study. Chapter 3 elaborates on how the research study was designed and the methodologies that were used for this research study. The chapter also discusses the instruments used for data collection and a detailed summary of the procedures used in collecting that data is given. In Chapter 4 the findings of the research study are reported and an interpretation of those findings is outlined. The final chapter (Chapter 5), discusses the importance and relevance of the survey results through summary, limitations, and suggestions of future studies.

Conclusion

This chapter set forth an introduction to the study, which began with an abbreviated background exploring the study's context. This background included the identity formation process as well as the practical applications of identity formation research. The discussion also presented information on the NAIA and the role of the student-athlete which was followed by study significance and methodology overview. The chapter concluded by discussing the limitations of the study and definitions relevant to the study, which provides foundation for a deeper exploration into existing literature related to this topic.

CHAPTER 2

LITERATURE REVIEW

The research questions for this study are centered primarily on two distinct topics. Those topics are athletic identity and identity foreclosure. Self-concept, identity development and the student-athlete's role are secondary topics connected to the research questions and are discussed in the review of literature as well. The population for this study is student-athletes participating at National Association of Intercollegiate Athletics (NAIA) institutions and due to the specificity of this population, research surrounding the NAIA is discussed in the review of literature as well. The theoretical framework and application of these topics is explored by examining published peer reviewed journals on athletic identity, self-concept, identity foreclosure and the student-athlete's role.

Statement of the Problem

Before examining the literature surround athletic identity and identity foreclosure, the problems or issues this research studies seeks to address should be highlighted. When reviewing the literature surrounding athletic identity and identity foreclosure several problems or issues have been brought up. One of those issues is that student-athletes with high levels of athletic identity and identity foreclosure are restrictive in their academic and career exploration (Chartrand & Lent, 1987; Nelson, 1983; Petitpas & Champagne, 1988). This issue has been discussed by the National Academic Advising Association's (NACADA) best practices manual. In NACADA's mission statement they express the belief that effective academic advising is at the core of student success. To accomplish their mission and vision NACADA examines the various subpopulations of

students such as adult learners, first generation, high achieving, and student-athletes. In their focus on student-athletes, NACADA created a commission that is solely focused on creating the best practices for advising student-athletes. One of the core questions that this commission addresses is whether student-athletes see themselves as students first or athletes first. NACADA suggest that if students identify with their athletic role more than their academic role, then they will be at risk for not reaching their full academic potential. This directly aligns with athletic identity research and how student-athletes view themselves. NACADA suggests student affairs practitioners develop a better understanding of the life roles student-athletes identify with so they can in return provide them with the best possible academic and career counseling (“Advising Student Athletes Commission”, 2016).

Another issue or problem that is often mentioned with athletic identity and identity foreclosure research is the mental health status of student-athletes. Research on this topic suggests that high levels of athletic identity can have both positive and negative effects on a student-athlete’s mental health. The time demands of student-athletes, retirement from sport, as well as dealing with an injury are a few topics that are often explored in this area. Werthner and Orlick (1986) found that student-athletes that are retiring experience moderate to extreme levels of difficulty in coping with retirement. Brewer, Cornelius, Stephan, and Van Raalte, (2010) found that a student-athlete’s level of athletic identity decreases significantly after an injury. Research has suggested that the increased demands on a student-athlete’s time can lead to higher levels of stress and anxiety among student-athletes (Brown, & Hartley, 1998).

This is why the National Association of Intercollegiate Athletics (NAIA) has chosen to address the issue of mental health among its members. The NAIA asserts that mental health problems in the college population typically emerge as anxiety-related conditions, body image disorders, and depression and that it is their obligation to protect the health and safety of its members (“NAIA Health and Safety”, 2016). The NAIA discusses identity research and identity exploration as a best practice model for its members. The organization suggest that student identity exploration can have a positive effect on a student-athlete’s mental health because of how it can expands a student’s identity beyond their athletic roles and expectations (“NAIA Health and Safety”, 2016). To summarize, this research study seeks to explore the levels of athletic identity and identity foreclosure among NAIA student-athletes, so that information can be utilized by student affairs practitioners to provide student programing and advising services that will better meet the needs of their student-athletes.

Identity Formation

The process of developing an identity begins at infancy, continues throughout childhood, and becomes the focus of adolescence. Erikson (1956) identified the importance of the goal of adolescence as achieving a coherent identity and avoiding identity confusion (Bullock, Merry, & Lukenhaus, 1990). A person’s identity is multidimensional and includes elements such as gender, ethnicity, religious, and sexual identity (Markus & Nurius, 1986). Whitbourne (1987) contends adolescents explore these dimensions and usually make commitments to a developed identity as they move into early adulthood. Erikson's (1956) contends that a person’s identity development can

viewed in terms of a life cycle that involves two primary components: (1) the proposition that psychosocial development involves an invariant sequence of stages or levels, each of which is distinguished by a specific task or issue, and (2) an individual's ability to deal with the challenge of any particular stage is mediated by his ability to achieve a positive outcome at previous stages. Erikson proposed that there are eight stages of development, as displayed in Table 2.1.

Identity Foreclosure

Although there are 8 stages in Erikson's model, it's the fifth stage (adolescence) that has garnered the attention of many identity foreclosure researchers. One of those researchers would be James Marcia (1966) who expanded on Erikson's work by focusing on the development stage of adolescence. He theorized that individuals have four identity stages that they go through during adolescence; Identity Diffusion, Identity Foreclosure, Identity Moratorium, and Identity Achievement (Marcia, 2009). In Marcia's research, he defines diffusion as people who have not explored their identities. They remain in identity isolation because they are unwilling to make commitments to possible identity roles. Identity foreclosure happens when individuals prematurely make a firm commitment to an occupation or ideology (Marcia, 1966). Moratorium occurs when there is a crisis and someone begins to actively explore other identities and life roles. If they choose to make a new commitment to an identity or life role while working through this crisis, then they have entered the final stage which is identity achievement (Marcia, 2009).

Marcia hypothesized that identity development involves two steps. First, an adolescent must break away from childhood beliefs to explore alternatives for identity in a particular area. Second, an adolescent makes a commitment to a chosen individual identity. The core idea of Marcia's work is that one's sense of identity is determined largely by the choices and commitments made regarding certain personal and social traits (Marcia, 2009). Marcia suggests that a well-developed identity gives one a sense of his or her strengths, weaknesses, and individual uniqueness. A person with a less well-developed identity is not able to define his or her personal strengths and weaknesses, and does not have a well-articulated sense of self (Marcia, 1966).

Of the four stages of identity development, identity foreclosure is the stage that this research study focused on. When examining research on identity foreclosure you will find that a lot of research is centered on adolescence. This is due to the work of Erik Erikson who created a model of psychological development which suggests that one's identity is created during the ages of 11-22. While in that adolescent stage, people begin to experience identity diffusion and foreclosure (Erikson, 1956).

Athletic Identity

The earlier works of Erikson and Marcia has led to current research on identity foreclosure that is directly related to the study of athletic identity. Tajfel and Turner (1979) shed insight on how students develop their social identities and this in return has shaped how athletics is studied and researched. Britton W. Brewer who is a Professor of Psychology at Springfield College and Brewer has conducted extensive research on identity development and how student-athletes identify with their athletic role. He

Table 2.1

Erikson's Developmental Stages

Stage	Age	Positive Outcome	Negative Outcome
Infancy	0 to 1	Trust	Mistrust
Early Childhood	2 to 3	Autonomy	Shame and Doubt
Play Age	4 to 5	Initiative	Guilt
School Age	6 to 10	Industry	Inferiority
Adolescence	11 to 22	Identity	Diffusion
Young Adulthood	22 to 40	Intimacy	Isolation
Adulthood	40 to 65	Generativity	Stagnation
Mature Age	65+	Integrity	Despair

defines athletic identity as the degree of strength and exclusivity to which a person identifies with the athletic role (Brewer, Van Raalte, & Linder, 1993).

Students developed their athletic identity through acquisition of skills, confidence, and social interaction during sports. That social interaction helps shape their cognitive and social roles. Cognitively, athletic identity helps students interpret information and learn how to cope with the stressors in life. Socially, athletic identity allows students to feel like they are a part of a larger group. Their athletic role also plays a part in how a person defines and evaluates their competence and worth (Brewer et al., 2012).

Brewer and Cornelius's (2002) study on the dimensionality and established norms of the Athletic Identity Measurement Scale (AIMS) provides a framework for interpreting a student-athlete's level of athletic identity. The purpose of their study was to examine the dimensionality of the AIMS and to establish norms for practitioners who work with athletes to identify and assist athletes based on their levels of athletic identity. They collected data from previous research and used a sample size of 2,856 participants which was grouped and analyzed by gender (n=1,755 males, n=974 females, and n=127 not reported) and athletic status (n=1607 varsity athletes, n=529 non-athletes, n=171 sport medicine patients, and n=720 not reported). Participants from these previous studies consisted of twenty sports (i.e., football, soccer, baseball, basketball, swimming, diving, and lacrosse) that competed at different levels (e.g., interscholastic, intercollegiate and elite) and various race/ethnicity (i.e., Euro-American, African-American, Latin-American, and Asian-American). The total sample was divided into derivation and validation samples and these samples were stratified to be consistent with sex (i.e., male

and female) and sport participation status (i.e., athlete and non-athlete) (Brewer & Cornelius, 2002).

There are some reported draw-backs associated with having moderate to high levels of athletic identity. According to Harter (1990) and Rosenburg (1989) a person's self-esteem and motivation are more likely to be impacted by performances in self-concept areas perceived to be highly important. This means that having a strong athletic identity could have negative consequences if someone does not perform well athletically (Brewer et al., 1993). It has been noted that individuals who possess a high athletic identity are more likely to experience difficulties in transitioning out of the sport role such as being cut from the team or suffering a career ending injury. Individuals may also have difficulty making career related decisions (Brewer, van Raalte, & Linder, 2012). Lalley and Kerr (2003) concluded strong exclusive commitment to an athletic role discourages college athletes from considering the possibility of investigating non-sport career possibilities.

Werthner and Orlick (1986) conducted in-depth interviews with 28 recently retired elite Canadian amateur athletes. The study revealed that 22 of the athletes expressed having experienced moderate to extreme difficulty in adjusting to retirement from their sport (Partridge, 1998). It should also be noted that of the six athletes who did not express problems in adjusting to retirement, five had remained involved in their sport in some capacity. Eldridge (1983) noted that individuals ascribe a great deal of psychological significance to their involvement in sport and thereby strongly identify with their athlete roles, seemingly unaware of the athletic role's heavy demands and

conflict with other roles and activities, such as peer relationships and social-development opportunities (Brown & Hartley, 1998).

Over a five-year period, Adler and Adler (1987) conducted a study of a major college basketball program at a medium-sized private Mid-South university. Players from this program were predominately black and ranged from lower to middle class. The population of the study was representative of what researchers Coakley (1986) and Frey (1982) would refer to as highly competitive student-athletes (Adler & Adler, 1987). They found these athletes' commitment to the athletic role grew beyond anything imagined or intended. Adler and Adler discovered the more the athletic role served as their primary identifier, the more difficult these athletes found it to conceive any other identity. The male basketball players invested so heavily in athletics and in their athletic identity, they failed to invest in other immediately available student or social roles (Adler & Adler, 1987).

Although a high athletic identity has been shown to have some negative effects, it has the potential to be advantageous to the student-athlete's life satisfaction or overall well-being (Williams, 2007). Empirical research has suggested that athletic performance might be improved through a strong, exclusive identification with the athletic role (Brewer, van Raalte, & Linder, 2012). Increased exposure to athletic experiences coupled with a desire to perform successfully in athletics is a likely motivator that will help one increase his or her athletic skills. Pearson and Petitpas (1990) noted that an individual with a high athletic identity is more likely to engage in sport and exercise behaviors, and is therefore more likely to benefit from the development of athletic skills,

increased and improved social interaction, opportunities to build confidence, and comparative skill assessment (Brewer et al., 2012).

Settles, Sellers, and Damas (2002), found a high athletic identity to be correlated with positive psychological well-being. Gatz and Hirt (2000) noted that athlete self-identities have helped student-athletes develop the appropriate behaviors and ways of expressing their attitudes and beliefs in other social areas. How athletes view themselves, what is important to them, and what they value all define an athlete's level of identity. Athletic performance is often a key factor in athletes' lives, especially in regards to their identity. This may be due to the perception that sports are a representation of who they are (Brewer et al., 2012). In accordance with this research, having a strong athletic identity is beneficial because it provides an overall positive psychological well-being.

Research on Athletic Identity and Identity Foreclosure

Good, Brewer, Petitpas, Van Raalte, and Mahar (1993) conducted a study that explored the relationship between athletic identity, sport participation, and identity foreclosure. Participants of this study included 202 males and 301 females from various colleges and universities in the northeast region of the United States. The sample included varsity athletes, intramural athletes and non-student-athletes. Sports participation had an influence on the degree of athletic identity and foreclosure. The study found that 19 non-athletes were significantly less foreclosed with their identity when compared to athletes. The researcher theorized that the demands of sports participation and the restrictive sheltered nature of the competitive sport environment discouraged student-athletes from exploring alternative identities (Good, Brewer,

Petitpas, Van Raatle & Mahar, 1993). The researchers also found no significant differences between male and female athletes in their athletic identity and identity foreclosure.

Murphy, Petitpas, and Brewer (1996) conducted a study involving 124 student-athletes, 99 males and 25 females, at a Division I institution to examine the relationship between identity foreclosure, athletic identity, and career maturity as a function of gender, playing statuses, and the chosen sport. The results of this study aligned with their hypothesis that identity foreclosure and athletic identity were both inversely related to career maturity (Murphy, Petitpas, & Brewer, 1996). There appears to be a negative relationship between high athletic identity, identity foreclosure and realistic career expectations. This indicates that the athlete role is assigned a high degree of importance compared to other activities and roles (Williams, 2007).

Another study that examines athletic identity and identity foreclosure was conducted by Miller and Kerr (2003). Their study used student-athletes at a Canadian university as their sample population. The primary focus of this study was to examine the role experimentation of student-athletes by using interviews. The researchers found that over-identification with the athlete role was temporary instead of coexisting or being a precursor to premature identity foreclosure, was succeeded by a period of deferred role experimentation (Miller & Kerr, 2003), meaning that the strong identification with the athletic role was temporary and eventually students would explore other aspects of their identity. The findings of their study were inconsistent with previous evidence of identity formation and identity foreclosure among student-athletes (Good et al., 1993). Miller and Kerr (2003) noted that identity foreclosure may be unique to varsity athletes participating

in high-profile programs such as men's basketball and men's football and not prevalent among the general population (Miller & Kerr, 2003).

Recently, Brewer, Van Raalte, and Linder (2012) conducted studies on the academic and athletic endeavors of intercollegiate athletes. The vast majority of the research that is being conducted is primarily focused on National Collegiate Athletic Association (NCAA) Division I athletes. Researchers have investigated numerous influences on college athletes' academic and athletic performances, looking for variations according to sex, race, socioeconomic status, sport played, and strength of athletic identity (Sack & Staurowsky, 1998). In accordance with the previously stated theory (Good et al., 1993) that the level of athletic identity and identity foreclosure increase with the level of competition, it is understandable why the majority of research in this field is focused on the highest level of intercollegiate athletic completion (NCAA Div. I).

Researchers have failed to investigate the athletic identity of student-athletes competing at institutions governed by the NAIA. Looking beyond scholarly research that is focused on athletic identity, you find that majority of NAIA research is conducted by comparing student-athletes at NAIA institutions with student-athletes at NCAA Division I institutions (Brewer et al., 2012). Although this type of comparative research can be useful to institutions of higher education, it doesn't provide insight into the NAIA as its own entity without drawing comparisons to NCAA Division I institutions.

An example of this type of research, is the work of Dr. Amanda Leigh Divin of Oklahoma State University. Divin has conducted extensive research on many psychological factors that affect student-athletes and her work often compares populations such as NCAA Division I athletes with athletes competing at less competitive

NCAA Division II, III and NAIA athletes. In 2009, Divin conducted a study on the perceived stress levels and health promoting behaviors among NAIA and NCAA Division I student-athletes. The findings of this research concluded that NAIA and NCAA Division I student-athletes displayed moderate levels of stress as well as they both were lacking in health promoting behaviors.

A similar example of this type of research, is the work of Katie Griffith and Kristine Johnson. Griffith and Johnson (2002) examined athletic identity and life roles among NCAA Division I and III collegiate athletes. The purpose of their study was to analyze how division affiliation may influence the many roles of collegiate athletes. The participants of their study included Track and Field athletes from a NCAA Division I and III colleges and each athlete completed measures of athletic identity, self-concept, and importance of life roles. The findings of this study found that Division I athletes ranked the athletic life role significantly higher than Division III athletes. However, both groups placed more emphasis on other roles in their lives, suggesting a decreased risk of psychological distress during sport transition periods.

Megan Rabe (2015) conducted research on gender equality in intercollegiate athletics based on the institutions association with an athletic governing body. The study used data from the Equity in Athletics Data Analysis Cutting Tool, concentrating on the 2012 school year. The U.S. Department of Education requires, under the Equity in Athletics Disclosure Act, that institutions of higher education that receive federal funding and have an athletic program submit information on athletic participation, staffing, revenues and expenses by men's and women's athletic teams. The information that is collected is then used to generate a report on gender equity that the U.S. Department of

Education will then submit to Congress. The findings of the study revealed that the NCAA and the National Christian College Athletic Association (NCCAA) were the most equitable organizations and the NAIA and National Junior College Athletic Association (NJCAA) were the least equitable. The researcher gave several possible reasons for these findings, with one being that the NAIA is made up of mostly private institutions who do not receive a lot of federal funds. This in return may cause them to be less compliant with Title IX and gender equity because there is less of a penalty to receive. Although this particular research study did not focus on athletic identity and identity foreclosure, it does illustrate the type of comparative research that typically occurs between the various governing bodies of athletics.

There are several research studies that examine less competitive athletic institutions without comparing them to others. For instance, Mignano, Brewer, Winter, and Van Raalte's (2006) research study on the athletic identity and student involvement levels of female athletes at NCAA Division III institutions is an example of research that focuses on less competitive athletic institutions. In their research study, they examined the levels of athletic identity and student involvement of 145 female athletes who participated in varsity athletics at four various NCAA Division III institutions. The results of their study found that there was no statistical difference in athletic identity and student involvement.

Another example of a research study that is only focused on the lesser competitive athletic institutions is Anthony Nichols and Yair Levy's (2009) study on the NAIA student-athletes academic persistence in e-learning courses. The premise of their research was that the scholastic performance of student-athletes, as measured by

academic achievement and retention, is an area of major concern for college and university administrators. As well as the fact that many colleges and universities are designing e-learning courses specifically to meet the needs of their student-athletes (Keim & Strickland, 2004). The participants in this study included 145 NAIA student-athletes who were being tested in several categories (attitude toward computers, intrinsic motivation, extrinsic motivation, satisfaction with e-learning systems, and previous academic performance measures) that were being used as predictors of e-learning success. The results of their study found that variables they were using as predictors of a student's athlete's success in e-learning courses were not statistically significant and that further research was needed (Nichols & Levy, 2009).

Susan Hernandez (2015) conducted a research study on NAIA student-athletes that focused participation in mandatory study hall programs and the NAIA Champions of Character program. Saint Andrews University, which is a small liberal arts university in which roughly 51% of the students participate in intercollegiate athletes, was utilized as the research site for this study. The university employs a mandatory study hall for all first-year student-athletes and any student-athlete with a cumulative grade point average at or below 2.6. Previously, the university had done no formal assessment of the effectiveness of the study hall model in raising student-athletes' cumulative GPAs or the impact of the NAIA Champions of Character initiative on fostering increased student engagement among student-athletes. The researcher found that the university's current mandatory study hall model is not effective in fostering academic success as evidenced by student-athletes' cumulative GPAs. Further, the researcher also found that mandatory study hall does not provide a supportive learning environment for student-athletes. The

researcher also pointed out that there was a discrepancy in the perception of the effect of the NAIA Champions of Character initiative in increasing campus engagement among student-athletes; the coaches and student-athletes perceived student-athletes to be more engaged than the rest of the student body because of the Champions of Character initiative while the faculty did not.

Jennifer Beller (1995) conducted a research study that examined whether religious education courses in the basic studies curriculum affected moral reasoning about competition among athletes and non-athletes in four NAIA colleges. The participants included 285 athletes and non-athletes who completed the Hahm-Beller Values Choice Inventory. The researcher found that non-athletes scored significantly higher than did athletes in team sports, but not significantly higher than those in individual sports. Student-athletes who competed in individual sports also scored significantly higher than student-athletes who competed in team sports. Females scored higher than males in all categories, with female student-athletes who compete in individual sports scoring significantly higher than both female student-athletes who complete in team sports, and males and non-athletes in all categories (Beller, 1995). Results suggest that whatever impact religious education courses may have does not seem to carry over to the sport environment. Although, this research study didn't provide conclusive results, it is an example of research that is being conducted on student-athletes who compete at level that are less competitive than NCAA Division I.

Student Affairs and the Use of Identity Research

Student affairs, student support, or student services is the department or division of services and support for students at institutions of higher education to enhance student growth and development (Evans et. al, 2009). The people who work in this field are often referred to as student affairs practitioners or student affairs professionals. These student affairs practitioners work to provide services and support for students at institutions of higher education that will aid in the overall development of the students at these institutions. The model for colleges and universities in the United States was derived from the Oxbridge Model which is a simulation of Oxford University and Cambridge University in England. The Oxbridge Model consists of creating a university that is primarily a boarding school or residential academic institution (Cowley, 1934).

Due to the nature of an institution that is primarily a residential university, activities beyond the classroom had to be created and this in returned created student affairs practitioners. Today colleges and universities have entire departments dedicated to student affairs, however in the 1700's and 1800's the task of creating student programing was completed by a single person. Some of the original student affairs practitioners were job titles such as; Dean of Men, Dean of Women, and Dean of Discipline (Cowley, 1934).

The primary goal of student affairs practitioners has long been to enhance the development of the students they serve. Identity development theories have often been used by practitioners to better understand how students discover their abilities, aptitudes, and objectives while assisting them to achieve their maximum effectiveness (Torres, Jones, & Renn, 2009). Within the student affairs literature, identity is commonly

understood as one's personally held beliefs about the self in relation to social groups (e.g., race, ethnicity, religion, sexual orientation) and the ways one expresses that relationship (Erikson, 1959). Identity is also commonly understood to be socially constructed; that is, one's sense of self and beliefs about one's own social group as well as others are constructed through interactions with the broader social context in which dominant values dictate norms and expectations (McEwen, 2003). Examples of these broader social contexts include both institutions of education and workplace environments (Anderson & Collins, 2007).

Within higher education, psychologist and sociologist have applied identity theories to the study of college students (Feldman & Newcomb, 1969). Sociologists often emphasize the role of higher education institutions in creating contexts for the development of situated felt identities (self-concept) which may endure or become more permanent identities. These felt identities, include those that encompass personal traits and life roles (e.g., race, intelligence, academic major, athletics). Higher education institutions that use psychological and sociological approaches to examine identity, develop an understanding of the influential factors that cause students to have a stronger association with one identity more than others. This in return provides valuable information to institutions of higher learning as they move forward in developing academic, vocational and advising programs for their students (Renn & Arnold, 2003). For instance, if a student-athlete strongly identifies with their athletic role to the extent that they do not explore non-sports careers or areas of interest, they are foreclosing on possible careers outside of the sports realm that may be more suited to their interests and specific skills (Linnemeyer & Brown, 2010). When this identity precludes development

of other areas of self-development, the student-athlete may face disappointment and an uncertain future.

When examining scholarly literature on this matter, you find that student-athletes do not invest much time or energy in career development and lag behind non-athletes on measures of career maturity (Brewer et al., 2012). Evidence from qualitative studies suggests that student-athletes are steered into majors or particular courses by advice givers (e.g., coaches, athletic directors, parents) that are the most conducive to their athletic pursuits (Renn & Arnold, 2003). Additionally, research suggest that due to conflicting class meeting times and demanding practice and competition schedules, student-athletes are left with little energy for academic challenges and pursuits beyond athletics that non-athletes often partake in (Renn & Arnold, 2003). When student affairs practitioners use identity formation theories in the development academic, vocational and advising programs, they have a better understanding of the students they serve and an understanding of the programs that will be successful for the specific population they serve (Evans et al., 2009).

An example of research that focuses on vocation and career planning is the work of Lally and Kerr (2005). In 2005, they conducted a study that was designed to examine the career planning of student-athletes and the relationship between their career planning and their athletic identity and student role identity. The participants underwent two retrospective in-depth interviews. The first interview occurred during their entrance to the university and the second interview occurred in the latter years of their college career. The findings of the research stated that participants entered the university with vague or nonexistent career objectives and invested heavily with their athletic role. In their later

years of college, the participants discarded their sport career ambitions and allowed the student role to become more prominent in their identity hierarchies. The findings of Lally and Kerr's research was in line with the previous research on the topic that suggested student-athletes may invest in both their athletic and student identities simultaneously but investing too much into their athletic identity will not allow for career exploration beyond sports (Brown & Hartley, 1998).

A similar research study on this topic is Brown, Glastetter-Fender, and Shelton's (2000) study on psychosocial identity and career control in student-athletes. Their study explored relations between career decision-making self-efficacy, career locus of control, identity foreclosure, and athletic identity among collegiate student-athletes. The participants of this study were 189 Division I collegiate student-athletes (117 males and 72 females) currently enrolled in three Midwestern universities representing the following sports: 31% football, 24% soccer, 16% track/cross country, 12% baseball, 11% swimming, and 6% volleyball. Student-athletes were also surveyed regarding the amount of time spent weekly participating in their sport and their expectations for professional sport careers. Results indicated that hours of sport participation, identity foreclosure, and career locus of control inversely related to career decision-making self-efficacy. These findings suggest that extensive hours in sport participation, failure to explore alternative roles, and the belief that one's career outcomes are unaffected by one's actions are associated with lower self-efficacy for career decision-making tasks (Brewer et al., 2012). In addition, student-athletes reported spending anywhere from 20 to 30 or more hours per week participating in their sport, yet few expressed an expectation to advance to the professional rank (Brown, Glastetter-Fender, & Shelton, 2000). This can be interpreted

as student-athletes are willing to dedicate more time to their athletic pursuits than planning for their potential career after college.

The aforementioned Lally (2007) also conducted extensive research on athletic identity and athletic retirement. The research study reexamined the relationship between athletic identity and athletic retirement by using a longitudinal and prospective research design. Lally conducted one-on-one in depth interviews at the onset of their last season of competition, 1 month after their retirement, and 1 year after their retirement. The findings revealed the participants committed themselves strongly to their athletic goals and anticipated disrupted identities upon retirement. As a result, they employed several coping strategies including the proactive diminishment of their athletic identities prior to retirement. Decreasing the prominence of their athletic identities precluded a major identity crisis or confusion upon and following athletic retirement. The study concluded that the redefinition of self before the termination of a sport career may protect one's identity during this transition process. (Good et al., 1993). The results of this study are in alignment with previously conducted research on athletic identity, career maturity and retirement. The researchers suggest that athletic identity is often one of more dominate identities and the level of identity foreclosure increases with the level of sports participation. The participants in the study were student-athletes from a large and athletically competitive Canadian University which would be in agreement with Brewer and his colleague's assertion that students participating at highly competitive levels have a higher athletic identity and higher identity foreclosure levels than those that participate at less competitive levels (Brewer et al., 1993).

When trying to apply identity research to practical uses in higher education the research of Torres, Jones, and Renn (2009) comes to mind. The researchers have examined how identity development theories can be implemented by student affairs practitioners. They believe that identity development theories help practitioners to understand how students go about discovering their abilities, aptitude and objectives while assisting them to achieve their maximum effectiveness. The tasks involved in discovering abilities, goals, and effectiveness are part of the process of creating a sense of identity. This knowledge of identity is useful because the more practitioners understand how students make meaning of their identities, the better they are able to assist in promoting student learning and development in higher education institutions (Evans et. al, 2009).

Baxter-Magolda (2003) wrote an article that examined student affairs role in transforming higher education. The article primarily focused how self-definition and identity play crucial roles in learning. The author makes the statement, “critical thinking, the most agreed-upon goal of higher education, identity and learning requires the ability to define one’s own beliefs in the context of existing knowledge (Baxter-Magolda, 2003, p.232). The author goes on to explain that if this struggle occurred during college, students would learn how to explore multiple perspectives, respect diverse views, think independently, and establish and defend their own informed views. They would also exhibit an interest and responsibility in learning. Thus students would meet college expectations effectively and be better prepared for life after college. The article goes on to discuss the ways in which self-definition and identity can be used by institutions of higher learning. For instance the author suggests that by transforming educational

practices to emphasize the sense of self and identity, then higher education programs, services, and policies could positively impact a students' success by preparing them for professional roles and productive citizenship after college. The author then goes into more detail and illustrates how knowledge of identity and self can be best utilized in career and decision making skills. The researcher thinks that academic advising is one service that could utilize identity information to better serve the students. The views expressed in this article are in alignment with the previously mentioned research that suggest institutions of higher learning can utilize identity as a way to help students succeed upon graduation.

Baxter-Magolda's research addresses the problems that were discussed earlier in this chapter. By utilizing identity research, student affairs practitioners will be aware of the levels of identity foreclosure that occur among student-athletes, which in return can cause them to be less exploratory in their collegiate experiences. If critical thinking is the true goal of higher education institutions, then having knowledge of identity foreclosure will help student affairs practitioners develop programs that create opportunities for student-athletes to be exploratory and utilize their critical thinking skills.

Conclusion

This chapter presented a review of the literature and research that has been conducted on athletic identity and identity foreclosure. Additionally, this chapter discussed the identity formation process as well as the research surrounding athletes who compete at less complete levels. Finally, this chapter discussed how identity formation research has been utilized by student affairs practitioners. The following chapter

addresses the research questions driving this study and the methodology being utilized to address each research question.

CHAPTER 3

METHODOLOGY

This chapter begins by discussing the purpose of the study and the research questions. This is followed by a discussion of the survey construction and data collection methods. The chapter then describes the analysis procedure and study sample. Finally, there is an explanation of how each research question is answered using the study results.

Purpose of Study

The main purpose of this study is to examine the levels of Athletic Identity and Identity Foreclosure displayed by student-athletes at a National Association of Intercollegiate Athletics (NAIA) institution. The secondary purpose of the study is to examine if there were significant differences in athletic identity and identity foreclosure levels based on the selected independent variables: year in school, sport, revenue vs. non-revenue generating sport, and scholarship vs. non-scholarship athlete. The study was created to be exploratory in its nature and to identify relationships that could be used for future research analyses.

This study is significant in numerous ways; one of the primary contributions is that this study strives to fill a void in athletic identity research by examining the levels displayed by student-athletes at the NAIA level. Going beyond just filling a void in athletic identity research, this study is exploring the relationship between athletic identity and identity foreclosure. Based on the research of Brewer, Van Raalte, and Linder (1993), a student-athlete's athletic identity goes up in accordance with the level of competition. Research predicts that NCAA Division I student-athletes will display high

levels of athletic identity and high levels of identity foreclosure. Previous research on athletic identity and the identity formation of college students has been utilized by institutions of higher learning to help with the academic advising and career services provided to its students (Torres, Jones, & Renn 2009). This study was designed to explore the levels of athletic identity and identity foreclosure of student-athletes at the NAIA level so that information can be obtained that could be utilized by institutions in their student development program planning.

Research Questions

There are several research questions that are guiding this study. The first research question is designed to be descriptive and the following questions are designed to explore possible relationships among variables.

1. What are the levels of Athletic Identity and Identity Foreclosure for our sample?
2. Is there a correlation between Athletic Identity and Identity foreclosure for our sample?
3. Are there significant differences in athletic identity and identity foreclosure based on:
 - Year in School
 - Sport
 - Revenue vs. Non-Revenue Generating Sport
 - Scholarship vs. Non-Scholarship Athlete

The first question addresses the larger question of determining the levels of athletic identity and identity foreclosure being displayed by NAIA student-athletes. Due

to the lack of research that is conducted on student-athletes at the NAIA level, this study provides information regarding the levels of athletic identity and identity foreclosure for student-athletes who are competing at the NAIA level. Currently there are numerous research studies that measure athletic identity and identity foreclosure for student-athletes who are competing at highly competitive NCAA Division I institutions.

The second questions that is guiding this study explores the correlation between athletic identity and identity foreclosure. During a person's collegiate years is when a majority of the identity formation process occurs (Evans et al., 2010). By understanding and researching the correlation between athletic identity and identity foreclosure of college students, institutions of higher learning are more informed on potential factors that may influence the identity formation process of the student-athletes they serve.

The third question that is guiding this study examines the differences in athletic identity and identity foreclosure based on specific variables such as a student's year in school, sport played, type of sport played and if they are on scholarship or not. These variables were selected because of the previous research on athletic identity and identity foreclosure suggest certain sports display higher levels of athletic identity and identity foreclosure (Brewer et al., 1993). Those sports typically are revenue generating sports such as football and basketball. This research also suggests that that underclassmen and student-athletes receiving scholarships typically display higher levels of athletic identity and identity foreclosure compare to upperclassmen and non-scholarship student-athletes. By answering this question researchers will know if the aforementioned variables are factors in the levels of athletic identity and identity foreclosure displayed by student-athletes participating at the NAIA level.

Data Collection

Instrumentation

This research study utilized two instruments entitled the Extended Objective Measure of Ego-Identity Status (EOM-EIS) and the Athletic Identity Measurement Scale (AIMS) and items designed to obtain demographic data on the respondents in a single survey administration. The EOM-EIS is a 64 item instrument that was designed to measure the four areas of identity development which are moratorium, diffusion, foreclosure, and achievement. AIMS is a 10 item instrument that was designed to measure a person's level of athletic identity.

Athletic Identity Measurement Scale

AIMS is a standardized, psychometrically sound measure that can facilitate the testing of Athletic Identity (AI). Brewer, Van Raalte, and Linder (1993) developed the AIMS, a measurement tool reflecting both the strength and the exclusivity of identification within the athletic role. Since the early development of the AIMS, researchers have been examining its validity to improve the measurement tool (Brewer & Cornelius, 2001; Hale et al., 1999; Martin, Eklund, & Mushett, 1997). The AIMS was originally written as an 11-item Likert scale instrument, though preliminary analysis of the items led to one of the questions being removed from the instrument, as it showed little variance across respondents (Brewer et al., 1993). Successive trials with the AIMS have led to the evolution of the scale to 10 item and 7 item versions. For this research study a 10 item version of the AIMS is used. The 10 items encompass social, cognitive, and affective elements of athletic identity (see Table 3.1). Each item was rated by the

participants on a 7-point scale (1 = Strongly Agree, 2 = Agree, 3 = Agree Somewhat, 4 = Neither Agree or Disagree, 5 = Disagree Somewhat, 6 = Disagree, 7 = Disagree Strongly). The items evaluated the thoughts and feelings from athletes' daily experiences.

AIMS was developed utilizing 124 female and 119 male undergraduate students in a psychology course at a public research university in the southwest. The 10 item AIMS scale was administered in the fall semester of 1992, along with the Perceived Importance Profile (PIP) which measures the perceived importance of sport (Brewer et al., 1993). According to Brewer et al., a principal components factor analysis was performed on the item responses to determine the factor structure of the AIMS. The researchers found that the corrected item-local correlations were above .45, with most above .70 which suggested that each of the 10 items tested contributed to the total AIMS score. The test-retest reliability coefficient was .89 ($r=.89$), and the Cronbach's alpha score was .93, which according to the researchers indicated the stability of the scores and provided support for the scale's psychometric integrity.

Validity and Reliability of AIMS

In previous research studies the convergent validity of AIMS was shown by moderate correlations with the Self-Role Scale (SRS; Curry & Weiss, 1989; $r = .61$), and the three subscales of the Sport Orientation Questionnaire (SOQ; Gill & Deeter, 1988; $r = .26$ to $.53$). Brewer, Van Raalte, and Linder (1993) suggested that the correlation between the AIMS and Self-Role Scale was moderate, but not sufficiently strong to state that they are measuring the same construct. For discriminant validity evidence, the AIMS was found not to correlate with the Rosenberg Self-Esteem Scale (Rosenberg, 1965; $r = -.01$)

Table 3.1

Athletic Identity Measurement Scale

Item
1. I consider myself an athlete.
2. I have many goals related to sport.
3. Most of my friends are athletes.
4. Sport is the most important part of my life.
5. I spend more time thinking about sport than anything else.
6. I need to participate in sport to feel good about myself.
7. Other people see me mainly as an athlete.
8. I feel bad about myself when I do poorly in sport.
9. Sport is the only important thing in my life.
10. I would be very depressed if I were injured and could not compete in sport.

and all five subscales of the Physical Self-Perception Profile (PSPP; Fox & Corbin, 1989; $r = -.03$ to $.19$). Moreover, among the four subscales of the Perceived Importance Profile (PIP; Brewer, Van Raalte, & Linder, 1993) only the PIP-sport subscale ($r = .42$), but not the PIP-fitness ($r = .06$), body ($r = .22$), and strength subscales ($r = .15$), was significantly correlated with the AIMS when controlling for the level of athletic involvement. The authors concluded that AI is different from physical self-esteem, perceived importance of fitness, body attractiveness, and strength. Although Brewer, Van Raalte, and Linder (1993) initially conceptualized and developed the AIMS to be unidimensional, factor analyses in subsequent studies revealed other dimensions (Hale et al., 1999; Martin et al., 1997). Brewer et al. (1993) suggested a 3-factor model with one item out of the ten being deleted. The three factors were named: (a) *social identity*, representing the extent to which the individual views him/herself as occupying the athlete role; (b) *exclusivity*, representing the extent to which an individual's self-worth is determined only by performance in the corresponding athlete role; and (c) *negative affectivity*, representing the extent to which an individual experiences negative affect in response to undesirable outcomes in athletic domains (Brewer & Cornelius, 2001; Hale et al., 1999).

In conclusion, the aforementioned tests of validity and reliability conducted by Brewer et al. (1993) demonstrated that the AIMS is a valid and reliable test. Although the Self-Role Scale and Sport Orientation Questionnaire have also be proven to be valid and reliable, AIMS has been selected as the measurement tool for this research study. This research study is using the definition of athletic identity that was established by Brewer et al. (1993) so it is logical to use the instrument created by those same researchers.

Extended Objective Measure of Ego-Identity Status (EOM-EIS)

The Objective Measure of Ego-Identity Status (OM-EIS) was created by Adams, Shea, and Fitch (1979) to be an easily administered scoring instrument that can be used for classification purposes or a general measure of individuality or self-differentiation ranging from a diffused to an achieved-identity individual state. The OM-EIS was originally comprised of 24 items with six items reflecting each of the four identity stages (Diffusion, Foreclosure, Moratorium, Identity Achievement) with responses made on a 6-point Likert type scale ranging from strongly agree to strongly disagree (Adams, 1998).

The scale was eventually updated to the Revised Extended Objective Measure of Ego Identity Status (EOM-EIS), which is a 64 item self-report scale measuring ego identity status in the ideological domains of occupation, politics, religion, and philosophical lifestyle as well as in the interpersonal domains of friendship, dating, sex roles and recreation. In each of the eight domains two questions reflect each of Marcia's (1966) identity statuses (i.e., achievement, moratorium, foreclosure, and diffusion). Participants were asked to indicate how much they agree or disagree with each statement using a 6 point Likert scale (1 = Strongly Agree, 2 = Agree, 3 = Slightly Agree, 4 = Slightly Disagree, 5 = Disagree, 6 = Strongly Disagree). A score for each ideological identity status or interpersonal identity status is obtained by summing the scores for the answer to that status' questions in each of the four relevant areas.

Although the EOM-EIS is designed to measure respondent's level of identity moratorium, diffusion, foreclosure and achievement, this research study only uses the 16

items that measure foreclosure. There is valuable information that can be obtained by utilizing all 64 items of the EOM-EIS, however the primary research focus of this study is to explore the relationship between athletic identity and identity foreclosure. With that in mind, this research study measures the respondent's level of identity foreclosure because that aligns with the objective of this research study.

Validity and Reliability of EOM-EIS

Beyond the basic 8 psychometric studies, the EOM-EIS has been used in numerous published studies. The majority of these studies provide further information on the reliability and validity of the instrument. According the reference manual for the EOM-EIS, Gerald Adams examined the reliability and validity of this instrument by looking at 20 research studies that utilized the EOM-EIS (Adams, 1998). All 20 studies tested the reliability of internal consistency. Three studies estimated test-retest reliability and one study investigated split half reliabilities. The internal consistency coefficients indicate the degree to which the test items intercorrelate or, in other words, estimates the strength of the internal structure of the test. The test-retest method entails administering the same instrument twice to the same group of individuals under equivalent conditions after a time interval has elapsed. The correlation coefficient is called the coefficient of stability and gives an estimate of how stable the results are over a given time period. Split-half reliability indicates the degree of correspondence between two halves of the test. The correlation between these two scores (the two halves) provides an estimation of the degree to which the two halves are equivalent. Internal Consistency Internal consistency is commonly measured by Cronbach alphas. Internal consistency estimates

from all 20 studies of the interpersonal and ideological subscales ranged from .30 to .91. The median alpha was .66.

Generally, the internal consistency of the ideological subscales tends to be higher than those of the interpersonal subscales. Montemayor, Brown, and Adams (1985) found no significant difference between scales means and standard deviations over four measurement times, indicating stability in test-retest context. Grotevant and Adams (1984) estimated the test-retest reliability on all domain subscales over a four-week period of time. Correlations of stability for the ideological and interpersonal subscales ranged from .59 to .82. Adams, Shea and Fitch (1979) found correlations of stability ranged from .71 to .93. Overall, available estimates of test-retest reliability have a median correlation of .76. Split-Half Grotevant and Adams (1984) found split-half correlations of the ideological and interpersonal subscales ranged from .10 to .68. Total identity score correlations with subscale scores ranged from .37 to .64.

In conclusion, all three different estimates of reliability show significant consistency for the EOM-EIS. Internal consistency and split-half reliability indicate moderate to strong consistency between items and the estimate of test-retest reliability provides evidence for consistency over time.

Demographic Data

Demographic data was collected from respondents. Students were asked to identify their gender, race, ethnicity, date of birth, sport, year in school, and scholarship status (see Table 3.3). The items used for race and ethnicity were chosen based on the

US Department of Education's policy guidelines for data collection (“Policy Questions”, 2008).

Research Site

The state of Kentucky is comprised of many institutions of higher learning. Some of these institutions are large public institutions but the majority of the colleges and universities in the state of Kentucky are small, private, liberal art colleges that have some type of religious affiliation. One of those small private colleges is Asbury University. In 1890, John Wesley Hughes founded Asbury University in Wilmore, Kentucky (“Welcome to Asbury University”, 2015).

Asbury University considers itself a four-year, multi-denominational institution that has 14 academic departments which offer 54 majors, along with an adult degree completion program called Adult Professional Studies. Asbury is also a member of the Christian College Consortium and the Council for Christian Colleges and Universities, which oversees the majority of Christian Higher Educational institutions in the United States (“Welcome to Asbury University”, 2015).

The athletic department at Asbury was created in 1971. Asbury offers 17 varsity athletic squads: baseball, softball, men's and women's basketball, cross country, men's and women's golf, men's and women's soccer, swimming and diving, men's and women's tennis, and volleyball. There are also five JV programs in men's and women's soccer, men's and women's basketball, and volleyball. Asbury is a member of the National Association of Intercollegiate Athletics (NAIA) Division II in basketball, Division I in all other sports. The school competes within the Kentucky Intercollegiate Athletic Conference (KIAC). In women's lacrosse the university compete in the National

Table 3.2

Revised Extended Objective Measure of Ego Identity Status

Item
1. My ideas about men's and women's roles are identical to my parents'. What has worked for them will obviously work for me.
2. I might have thought about a lot of different jobs, but there's never really any question since my parents said what they wanted.
3. My parents know what's best for me in terms of how to choose my friends.
4. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.
5. My ideas about men's and women's roles come right from my parents and family. I haven't seen any need to look further.
6. My own views on a desirable life style were taught to me by my parents and I don't see any need to question what they taught me.
7. I only pick friends my parents would approve of.
8. I've always liked doing the same recreational activities my parents do and haven't ever seriously considered anything else.
9. I only go out with the type of people my parents expect me to date.
10. My parents decided a long time ago what I should go into for employment and I'm following through on their plans.
11. My parents' views on life are good enough for me, I don't need anything else.
12. I attend the same church my family has always attended. I've never really questioned why.
13. I've never really questioned my religion. If it's right for my parents it must be right for me.
14. All of my recreational preferences I got from my parents and I haven't really tried anything else.
15. I date only people my parents would approve of.
16. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.

Table 3.3

Demographic Questions

Question	Response Option
1. Gender	Male Female
2. Ethnicity	Hispanic or Latino Not Hispanic or Latino
3. Race (please select all that apply)	White Black or African American Asian American Indian or Alaskan Native Native Hawaiian or Pacific Islander
4. Date of birth	__/__/____
5. What is your current academic classification?	Freshman Sophomore Junior Senior
6. What sport do you participate in (select all that apply)?	Baseball Basketball Cross Country Golf Lacrosse Soccer Swimming Tennis Softball Volleyball
7. Do you receive a scholarship for athletics?	No Yes, partial scholarship Yes, full scholarship

Women's Lacrosse League (NWLL) and the men are seeking acceptance into the Men's Collegiate Lacrosse Association (MCLA). Student-athletes at Asbury can be awarded an athletic scholarship but the amount awarded varies by sport (“About Asbury Athletics”, 2015).

One of the reasons Asbury University was selected for this research survey was due to its similarities with other NAIA institutions. As previously mentioned, Asbury University is a small private religiously affiliated liberal arts college that does not have an intercollegiate football team. For some this would make Asbury appear to be vastly different than the majority of intercollegiate athletic programs in the United States, however when you compare Asbury University with the other 250 members of the NAIA you see it is more of the norm than being an anomaly. Of the roughly 250 member institutions in the NAIA, the majority (163) of those institutions have some type of religious affiliation. There are nearly 750 colleges and university in the United States that have a designated religious affiliation and those colleges and universities compete primarily at the NCAA Division II, NCAA Division III and NAIA levels (“Colleges and Universities by Religious Affiliation”, 2015). Another similarity is that Asbury University does not have a football team. According the NAIA’s website, only 84 out of the nearly 250 members have a collegiate football program (“NAIA Football”, 2016). This means that the athletic and academic experience for the sample of students from Asbury University who participated in this research survey, have a shared or similar experience with other student-athletes who have competed at the NAIA level. This

demonstrates the transferability and applicability of this research study to other NAIA institutions.

Sample

The sample of participants for this research study is considered a targeted sample because of the geographic location of the institution as well as the researchers relationship to the institutions allows for access to the participants. All participants are student-athletes at Asbury University and student-athletes are defined as students attending Asbury University who participate in intercollegiate athletics. There are 153 male student-athletes and 140 female student-athletes at Asbury University. This combines for a total of 293 student-athletes. Of the 153 male athletes 34 participate in baseball, 23 in basketball, 11 in cross-country, 8 in golf, 21 in lacrosse, 32 in soccer, 14 in swimming, 10 in tennis (Asbury Eagle Sports, 2015). There are 10 male athletes that self-identify as Black, 2 self-identify as Hispanic, 1 self-identifies as Asian, and 3 student-athletes self-identify as Other. Of the 140 female athletes 16 participate in basketball, 11 in cross-country, 5 in golf, 18 in lacrosse, 23 in soccer, 17 in softball, 16 in swimming, 13 in tennis, and 21 in volleyball. There are 5 female athletes that self-identify as Black, 4 self-identify as Asian, 1 self-identifies as Hispanic, and 1 student-athlete self-identifies as Other. There are also 9 male international student-athletes and 4 female international student-athletes.

Recruitment Procedures

Participants were recruited through the Athletic Department of Asbury University by Mark Perdue who serves as the Director of Athletics. Student-athletes were sent an email requesting their participation in a research study. The email came from the Director of Athletics and it contained a link taking the participant first to an informed consent page, and if consent is given, to the proposed measurement scales. Students had 4 weeks to complete the survey and reminder emails were sent out each week by the Director of Athletics to complete the survey. If participants had questions regarding the research study they were provided the primary investigators contact information so that their questions or concerns can be addressed accordingly.

There was an expected response rate of 50% and this was calculated based on two primary factors. The first factor was that this is an internal survey that was sent out to the student-athletes from their athletic director and internal surveys have a 30-40% higher response rate than external surveys. The second factor was the demographics of the survey participants. Student-athletes on average have higher response rates than students who do not participate in athletics (Chandra, 2016). Porter and Umbach (2006) have conducted extensive research on the response rate among college students taking online surveys. They found that a typical response rate for an online survey is 27.9%. The expected response rate of this study was estimated by reviewing the research of Porter and Umbach (2006) and adjusting based on the aforementioned factors that typically raise your response rate.

Respondents anonymously completed an online survey through Qualtrics at their convenience, which was accessed via a hyperlink provided in the recruitment e-mail.

When participants click on the hyperlink they were directed to a web page that described the survey and they were asked if they wished to continue. Those who continued were asked to provide basic demographic information and birthdate, but no additional identifying information was collected because individuals can be reluctant to respond honestly if they think that their responses can be traced back to them (Dillman, Smyth, & Christian, 2009).

Pilot Study

Before the final form of a questionnaire is constructed, it is useful to conduct a pilot study or a feasibility study to see if the items are yielding the kind of information that the survey is designed to obtain (Polit, Beck, & Hungler, 2001). One of the advantages of conducting a pilot study is that it can provide advanced warning regarding weakness in a proposed study. These include: where research protocols might not be followed, or whether proposed instruments or methods are inappropriate or too complicated (De Vaus, 1993). Pilot testing ensures that a research instrument can be used properly and that the information obtained is consistent.

For this research study two pilot surveys were sent via email and text message to 80 people who currently play collegiate sports or have played collegiate sports in the past. Half of the participants were sent a survey that included the 10 item AIMS and the 64 items EOM-EIS, whereas the other 40 participants were sent a different survey that contained the 10 item AIMS and the 16 items of EOM-EIS that measure foreclosure. Of the 80 potential survey participants, 13 respondents completed the survey that included

the AIMS and the full version of the EOM-EIS, and 16 respondents completed the survey containing the AIMS and the 16 item version of the EOM-EIS.

The results of the pilot studies indicated that there was a lower response rate and completion rate for the pilot study that contained the full 64 items of the EOM-EIS. Of the 13 respondents who began the survey, only 8 completed the survey containing the full 64 item version of the EOM-EIS. Of the 16 respondents who began the shorter 16 item version of the EOM-EIS, all 16 respondents completed the survey. The mean and standard deviation of the pilot survey containing the full version AIMS and the full version of the EOM-EIS was $n = 7$, $m = 33.85714286$, and $sd = 15.43187795$ for the AIMS portion and $n = 6$, $m = 221.666667$, and $sd = 92.60165585$. The mean and standard deviation of the pilot study containing the full version of AIMS and the 16 item version of the EOM-EIS was $n = 16$, $m = 31.875$, and $sd = 14.76877336$ for the AIMS portion and $n = 16$, $m = 60.3125$, and $sd = 15.47780669$ for the EOM-EIS portion.

After analyzing the results of the two pilot studies, it was evident that using the 16 item version of the EOM-EIS that only measured identity foreclosure would yield a higher response rate and completion rate among survey participants. Due to the mean and the spread of the standard deviation of the survey containing the 16 item version, there is confidence in the ability of this version of the survey to capture a range of response for the sample.

Data Analysis

The survey data was collected through Qualtrics, a secure online survey platform. The data was converted into an SPSS file and analyzed using means testing methods.

Athletic Identity scores were analyzed as the predictor variable for Identity Foreclosure. Demographic data was entered into the analysis as control variables to see what impact they had on the results.

Research question 1. What are the levels of athletic identity and identity foreclosure for our sample? To answer these questions data was collected using the Athletic Identity Measurement scale (AIMS) and the Extended Objective Measure of Ego-Identity Status (EOM-EIS). The sample's descriptive statistics were reported including the means and the standard deviations of the respondent scores on the AIMS and EOM-EIS. The data was broken down by the self-reported demographic information and a report of the descriptive statistics of these varying subgroups was provided. The subgroups for this study are the student-athletes year in school, sport played, if the sport played is a revenue generating sport on non-revenue generating sport, and if that student-athlete receives an athletic scholarship or not.

Research question 2. Is there an association between athletic identity and identity foreclosure for our sample? To measure the correlation between athletic identity and identity foreclosure, a bivariate correlation using the AIMS scale and the EOM-EIS scale was utilized. Missing data was accounted for using pairwise deletion. A determination of the existence of a relationship between the two variables was tested by examining the Pearson correlation coefficient and determining the statistical significance at the $p < .05$ level (Field, 2009). If a statistical significance is identified, an examination of the direction of the relationship will occur that will determine effect size (strength of the relationship) using Cohen's guidelines which are small effect size is .10, a medium effect size is .30, and a large effect size is .50 (Rhea, 2004).

Research question 3. Are there significant differences in athletic identity and identity foreclosure based on: year in school, sport, revenue versus non-revenue generating sports, and scholarship versus non-scholarship athlete? Since this question has several variables a series of analyses that compare respondents' mean AIMS scale scores and EOM-EIS scale scores was conducted that compared the means of subgroups (Field, 2009). For the subgroups year in school and sport, a between groups one-way ANOVA with the AIMS and OMEIS foreclosure scale scores was conducted. These amounted to four tests, Test 1 the AIMS scale score is the dependent variable and year in school was the grouping factor being analyzed. For Test 2 EOM-EIS foreclosure scale score was the dependent variable and sport was the factor being examined. In Test 3 AIMS was the dependent variable and year was the factor being examined and for Test 4 EOM-EIS foreclosure scale score is the dependent variable and sport was the factor being examined. Missing data was accounted for by excluding cases analysis by analysis as to assure that data inclusion is maximized. This measure was performed because there are more than two groups whose means are being compared (Field, 2009).

An Analysis of Variance test (ANOVA) was utilized to determine if there are mean differences between groups by examining if the F-statistic is statistically significant at the $p < .05$ level. The assumption of homogeneity was tested by using the Levene's test (an inferential statistic test used to assess the equality of variances for a variable calculated for two or more groups) and that determined if it is statistically significant at the $p < .05$ level. If the assumption of homogeneity is violated then the Brown and Forsythe F-ratio statistics test is utilized to determine if it is statistically significant. For the statistically significant ANOVAs the Games-Howell post-hoc test was utilized and

the results were examined to determine which group mean differences are statistically significant. The Games-Howell test was chosen because it was uncertain if there was going to be equal sample sizes and if group variances would be equal (Field, 2009). For this research, the study is violating ANOVA's assumption of independence because the data is coming from a targeted sample. However, this is not a concern for this research study because this is exploratory research meant to be the foundation for additional work later on.

For the data where only two groups are being compared (e.g. male versus female) independent-sample t-tests were conducted. Once again there were four tests utilized and Test 5-AIMS scale score is the dependent variable and sport revenue status is the factor being examined. For Test 6-EOM-EIS foreclosure scale score is the dependent variable and sport revenue status was the factor being examined. In Test 7-AIMS was the dependent variable and scholarship status was the factor being examined and for Test 8-EOM-EIS foreclosure scale score was the dependent variable and scholarship status was the factor being examined. Missing data was accounted for by excluding cases analysis by analysis as to assure that data inclusion was maximized (Field, 2009). For each analysis it was determined if the Levene's Test of Equality of Variances was statistically significant at the $p < .05$ level. If Levene's test was not significant the assumption was that equal variances was present and an examination of the corresponding t-statistic for statistical significance occurred. If Levene's test was significant equal variance was not assumed and an examination of the corresponding t-statistic for statistical significance occurred. Due to the sample size of this study, it was assumed that normal distribution of

data occurred. Also, the study was violating the assumption of independence because the data was coming from a targeted sample.

Limitations

Although steps were taken to reduce potential limitations, this research study was still limited in a certain area. One of those areas is that this research study was conducted using a targeted sample with the respondents coming from a single university. This means the data does not provide the random sampling generally desired within quantitative research. Although the sample selected for this study is similar in many ways to the majority of NAIA institutions, if this survey was conducted at a different NAIA institution it may or may not bear the same results. Another limitation of this study was the number of student-athletes who participate in revenue generating sports was small due to Asbury University's lack of a collegiate football team. This leaves the study with only basketball players who can be counted as student-athletes participating in revenue generating sports.

The collection procedures and instruments used also posed potential limitations. The time constraints of this survey does not allow for each respondent to take the survey during their sport season. A person's level of athletic identity and identity foreclosure may be influenced by their sport being in season or not. The measurement instruments that were utilized for this study both display high reliability and validity scores, however the AIMS and EOM-EIS scales are instruments of self-reporting. This creates the risk of participants responding to items with the most socially acceptable response according to them, rather than responding to the items honestly. Lastly, there are numerous factors that

affect a person's identity and identity foreclosure and this research study was designed to only examine a few aspects of a student-athlete's identity.

Conclusion

This chapter presented an overview of the methods implemented in this study. Specifically, this chapter described the survey creation process and the data collection process in a sample NAIA student-athletes. Additionally, this chapter discussed the AIMS and EOM-EIS instruments that were utilized for this research study. Finally, this chapter discussed how the research questions guiding this study would be answered by the methodology. The following chapters includes the results of the data collected as well as a discussion of the research.

CHAPTER 4

RESULTS

This chapter details the results of the study. The chapter begins with a review of the purpose of the study and the analysis procedure used. The chapter then provides details about the relationship between athletic identity and identity foreclosure. Finally, the chapter provides the results and interpretation for each analysis.

Analysis Procedure

The main purpose of this study was to examine the levels of Athletic Identity and Identity Foreclosure displayed by student-athletes at a National Association of Intercollegiate Athletics (NAIA) institution. The secondary purpose of the study was to examine if there were significant differences in athletic identity and identity foreclosure levels based on the selected independent variables: year in school, sport, revenue vs. non-revenue generating sport, and scholarship vs. non-scholarship athlete. The study was created to be exploratory in its nature and to identify relationships that could be used for future research analyses.

Descriptive statistics were conducted to ascertain the demographic make-up of the sample. Bivariate correlation analysis were conducted to determine the relationship between the AIMS and EOM-EIS. Four between groups one-way ANOVA tests were run to determine if any relationship existed between a participant's score on the AIMS or EOM-EIS and the categories established in the primary analysis (class and sport). The between groups one-way ANOVA was chosen due to class and sport having several different participant options for each of those categories. Two *t*-tests were run by gender

for AIMS and EOM-EIS to determine if the male and females responses were significantly different from one another.

Sample

The sample included 112 total respondents with 95 of those respondents completing the entire survey. The response rate for this survey was roughly 40%. The descriptive statistics for this sample are reported in Table 4.1. The sex of the respondents included 45 males (40.2%) and 50 females (44.6%). Only 7 respondents (15.2%) chose not to identify their sex. Of the 112 total respondents, 68 (60.7%) self-identified as White, 21 (18.8%) self-identified as Black, 2 (1.8%) self-identified as Asian, and 4 (3.6%) self-identified as other. Leaving 7 (15.1%) respondents not self-identifying a race. A total of 90 (80.4%) respondents were Non-Hispanic and 4 (3.6%) respondents were Hispanic. Leaving 8 (16.0%) respondents not identifying an ethnicity. Respondents' academic classification was most commonly reported as being a sophomore 38 (33.9%). The remaining sample included 12 (10.7%) freshmen, 33 (29.5%) juniors, and 12 (10.7%) seniors and 7 (15.2%) respondents who did not select an academic classification. Lacrosse and Basketball tied for the most respondents with 13 (11.6%) and the remaining respondents were divided up among baseball 9 (8.0%), cross country 9 (8.0%), golf 3 (2.7%), soccer 9 (8%), tennis 2 (1.8%), softball 12 (10.7%) and volleyball 12 (10.7%). The majority of the respondents 70 (62.5%) received at least a partial athletic scholarship and 25 respondents (22.3%) received no athletic scholarship. Table 4.1 gives a detailed breakdown of the descriptive statistics for this sample.

Table 4.1
Sample Descriptive of AIMS and EOM-EIS Scores

<i>Variables</i>	<i>n</i>	<i>%</i>	<i>AIMS_M</i>	<i>AIMS_SD</i>	<i>EMS_M</i>	<i>EMS_SD</i>
Gender						
Male	45	40.2	28.73	9.91	55.95	13.94
Female	50	44.6	32.30	10.69	60.52	14.54
Race						
White	68	60.7	30.96	9.25	57.31	13.57
Black	21	18.8	30.10	14.46	58.79	15.28
Asian	2	1.8	30.00	4.24	66.50	17.68
Other	4	3.6	28.00	10.92	70.25	20.68
Ethnicity						
Non-Hispanic	90	80.4	30.89	10.42	58.37	14.40
Hispanic	4	3.6	24.75	10.34	59.50	15.80
Classification						
Freshman	12	10.7	34.42	8.99	62.08	11.17
Sophomore	38	33.9	31.29	12.20	58.31	13.82
Junior	33	29.5	29.91	8.98	59.50	15.96
Senior	12	10.7	26.67	8.75	51.82	14.32
Sport						
Baseball	9	8.0	29.44	8.37	62.63	11.15
Basketball	13	11.6	24.92	11.36	55.92	10.47
Cross Country	9	8.0	26.88	7.18	51.50	18.88
Golf	3	2.7	33.33	10.69	58.33	3.22
Lacrosse	13	11.6	29.92	13.56	56.09	20.18
Soccer	9	8.0	36.67	9.01	61.50	14.29
Swimming	11	9.8	36.18	12.38	54.91	12.70
Tennis	2	1.8	25.50	2.12	46.00	4.24
Softball	12	10.7	28.50	8.62	63.08	15.08
Volleyball	12	10.7	33.33	8.15	64.17	13.72
Scholarship						
No	25	22.3	30.32	11.94	51.96	15.00
Yes	70	62.5	30.74	9.93	60.94	13.40

Note. $N = 112$

Preliminary Analysis

The first analysis that was conducted was a bivariate correlation analysis to determine if there was a relationship between the Athletic Identity Measurement Scale (AIMS) scores and the Extended Objective Measure of Ego-Identity Status (EOM-EIS) scores (Table 4.2). The results of the analysis indicated there was a large positive relationship between AIMS scores and EOM-EIS scores, $r(87) = .52, p < .001$. This correlation would suggest that as a respondent's AIMS score increased, their EOM-EIS score would likely increase as well, and vice a versa. The .52 correlation coefficient being above the .50 level indicated that there was a large effect (Preacher & Kelley, 2011).

Secondary Analysis

Using the categories established in the primary analysis, the relationship between athletic identity and class designation was examined. Given that a relationship was found to exist between AIMS and EOM scores, analyses proceeded. A one-way ANOVA was conducted to address the research question, *What are the levels of Athletic Identity and Identity Foreclosure for our sample?* The results of the between groups one-way ANOVA examining AIMS scores by class designation indicated there was no statistically significant difference in AIMS scores across the four class designations, $F(3, 90) = 1.21, p = .309$ (Table 4.3). The Levene's test was not statistically significant ($p = .189$), indicating the assumption of homogeneity of variance was not violated.

The next secondary analysis that was conducted examined the relational impact of athletic identity and sport. A one-way ANOVA was conducted and the results of the between groups one-way ANOVA examining AIMS scores by sport designation

Table 4.2		
<i>Bivariate Correlation Analysis: AIMS and EOM-EIS</i>		
	AIMS Total	EMS Total
AIMS		
Pearson Correlation	1	.516*
Sig. (2-tailed)		.000
N	94	89
EMS		
Pearson Correlation	.516*	1
Sig. (2-tailed)	.000	
N	89	89
<i>Note.</i> Correlation is significant at the 0.01 level (2-tailed).		

Table 4.3					
<i>ANOVA: AIMS by Class</i>					
	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	393.850	3	131.283	1.214	.309
Within Groups	9734.118	90	108.157		
Total	10127.968	93			

indicated there was no statistically significant difference in AIMS scores across the ten sport designations, $F(9, 82) = 1.52, p = .156$ (Table 4.4). The Levene's test was not statistically significant ($p = .376$), indicating the assumption of homogeneity of variance was not violated.

Following the analysis of the relational impact of athletic identity and sport, an analysis was conducted on the relational impact of identity foreclosure and class designation examined. A one-way ANOVA was conducted and the results of the between groups one-way ANOVA examining EOM-EIS scores by class designation indicated there was no statistically significant difference in EOM-EIS scores across the four class designations, $F(3, 85) = 1.10, p = .356$ (Table 4.5). The Levene's test was not statistically significant ($p = .925$), indicating the assumption of homogeneity of variance was not violated.

The final one-way ANOVA was conducted to examine the relational impact of identity foreclosure and sport. The results of the between groups one-way ANOVA examining EOM-EIS scores by sport designation indicated there was no statistically significant difference in EOM-EIS scores across the ten sport designations, $F(9, 77) = 0.96, p = .476$ (Table 4.6). The Levene's test was not statistically significant ($p = .120$), indicating the assumption of homogeneity of variance was not violated.

During the process of analyzing the data, *t-tests* were conducted. The initial *t-test* of AIMS scores examined differences by gender. The results as shown in Table 4.7 indicated that there was not a statistically significant difference in the scores of males ($M = 28.72, SD = 9.91$) and the scores of females ($M = 32.30, SD = 10.69$), $t(92) = -1.67, p = .098$. The Levene's test was not statistically significant ($p = .862$) indicating the

Table 4.4					
<i>ANOVA: AIMS by Sport</i>					
	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	1438.891	9	159.877	1.517	.156
Within Groups	8641.413	82	105.383		
Total	10080.304	91			

Table 4.5					
<i>ANOVA: EOM_EIS by Class</i>					
	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	675.926	3	225.309	1.095	.356
Within Groups	17493.692	85	205.808		
Total	18169.618	88			

Table 4.6					
<i>ANOVA: EOM_EIS by Sport</i>					
	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	1835.864	9	203.985	.964	.476
Within Groups	16293.860	77	211.609		
Total	18129.724	86			

assumption of homogeneity of variance was not violated. The second *t*-test of AIMS scores examined differences by scholarship status. The results shown in Table 4.8 indicated that there was not a statistically significant difference in the scores of students without scholarships ($M = 30.32, SD = 11.94$) and the scores of students with scholarships ($M = 30.74, SD = 9.93$), $t(92) = -.171, p = .864$. The Levene's test was not statistically significant ($p = .821$) indicating the assumption of homogeneity of variance was not violated.

The initial *t*-test of EOM-EIS scores examined differences by gender. The results indicated that there was not a statistically significant difference in the scores of males ($M = 55.95, SD = 13.94$) and the scores of females ($M = 60.52, SD = 14.53$), $t(87) = -1.51, p = .136$. The Levene's test was not statistically significant ($p = .899$), indicating the assumption of homogeneity of variance was not violated (Table 4.9). The second *t*-test of EOM-EIS scores examined differences by scholarship status. The results indicated that there was a statistically significant difference in the scores of students without scholarships ($M = 51.96, SD = 15.00$) and the scores of students with scholarships ($M = 60.94, SD = 13.40$), $t(87) = -2.75, p < .01$. The Levene's test was not statistically significant ($p = .450$) indicating the assumption of homogeneity of variance was not violated (Table 4.10).

Conclusion

This chapter provided an in depth description of the results for the study, beginning with an overview of the analysis procedure. The chapter then described the descriptive statistics of the sample that was collected. Next, this chapter discussed the results of the preliminary analysis that was conducted to determine the relationship

Table 4.7 <i>T-Test: AIMS Total with Gender Groups</i>									
	Levene's Test		t-test for Equality of Means					95% Confidence Interval	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal Variances Assumed	.030	.862	-1.67	92	.098	-3.572	2.136	-7.816	.670
Equal Variances Not Assumed	.016	.899	-1.50	87	.136	-4.569	3.033	-10.599	1.460

Table 4.8									
<i>T-Test: AIMS Total with Scholarship Groups</i>									
	Levene's Test		t-test for Equality of Means					95% Confidence Interval	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal Variances Assumed	.052	.821	-.171	92	.864	-.4191	2.448	-5.28	4.44
Equal Variances Not Assumed	.577	.450	-.157	36.73	.876	-4.191	2.669	-5.83	4.99

Table 4.9 <i>T-Test: EOM-EIS Total with Gender Groups</i>									
	Levene's Test		t-test for Equality of Means					95% Confidence Interval	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal Variances Assumed	.016	.899	-1.50	87	.136	-4.569	3.033	-10.599	1.460
Equal Variances Not Assumed	.		-1.51	85.807	.134	-4.569	3.023	-10.581	1.441

Table 4.10									
<i>T-Test: EOM-EIS Total with Scholarship Groups</i>									
	Levene's Test		t-test for Equality of Means					95% Confidence Interval	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal Variances Assumed	.577	.450	-2.74	87	.007	-8.977	3.269	-15.476	-2.478
Equal Variances Not Assumed	.		-2.61	39.82	.013	-8.977	3.436	-15.924	-2.030

between AIMS and EOM-EIS. Finally, the chapter discussed the secondary analysis outcomes that included the ANOVA and *t-test* results. The next chapter answers the research questions of this study using these results, and discusses the possible implications of this study.

CHAPTER 5

DISCUSSION

The purpose of this research study was to explore the relationship between a student-athlete's level of athletic identity and their level of identity foreclosure. This study began by discussing what athletic identity and identity foreclosure are as well as how an understanding of those concepts can be useful in an academic setting. The study then explained the research questions that are guiding this study, followed by a detailed review of literature. The review of literature focused on how an identity is formed, how athletic identity and identity foreclosure are measured, the student-athlete's role, the National Association of Intercollegiate Athletics (NAIA), and the role of student affairs practitioners. Following the review of literature, the process and procedures used to construct this study were described. The Athletic Identity Measurement Scale (AIMS) was used to measure athletic identity and the Extend Objective Measure of Ego Identity Status (EOM-EIS) was used to measure identity foreclosure. After the research methods and study design were discussed, the results and findings of those analyses were reported. This chapter includes a listing of each research question and a discussion of the answer for each research question based on the findings from the analysis performed. The chapter concludes with a discussion of the implications of this study.

Research Question 1

1. What are the levels of Athletic Identity and Identity Foreclosure for our sample?

The Athletic Identity Measurement Scale (AIMS) measures a person's level of athletic identity by having participants rate themselves on a 10-item instrument with

responses ranging from “strongly disagree” to “strongly agree” on a 7-point scale which yields a potential score ranging from 10-70 (Brewer, Van Raalte, & Linder, 1993). These items are summed to produce a single self-evaluation score that represents their athletic identity. The results of study yielded 44 males and 40 females who completed the AIMS. The mean score for males was a 28.72 and the mean score for females was a 32.30. The mean score for the total 94 respondents was 30.62 with a standard deviation of 10.43.

The Extended Objective Measure of Ego Identity Status (EOM-EIS) measures a person’s level of identity foreclosure by having participants rate themselves on a 64-item instrument (Adams, 1998). A 16-item instrument (the subscale measuring foreclosure) was adapted for this research study and respondents answered questions on a 6-point Likert scale which yields a potential score ranging from 16-96. These items are tallied to produce a single self-evaluation score that represents their level of identity foreclosure. The results of the study yielded 41 males and 48 females who completed the EOM-EIS. The mean score for males was a 55.95 and the mean score for females was a 60.52. The mean score for the total 89 respondents was 58.41 with a standard deviation of 14.36.

Having a mean score for males at 28.72 and mean score for females at 32.30 on the AIMS can be interpreted as the scores for this sample are moderate to slightly below moderate (Brewer et al., 1993). In accordance with the EOM-EIS reference manual, having a mean score for males at 55.95 and the mean score for females at 60.52 on the EOM-EIS indicates that the results for this sample are moderate to moderately high (Adams & Huh, 1989).

Research Question 2

2. Is there a correlation between Athletic Identity and Identity Foreclosure for our sample?

This research question was designed to explore the correlation between a student-athlete's level of athletic and identity and their level of identity foreclosure. Based on the results of the bivariate correlation analysis that was conducted, there was a large positive relationship between AIMS scores and EOM-EIS scores, $r(87) = .52, p < .001$. This correlation would suggest that as a respondent's AIMS score increased, their EOM-EIS score would likely increase as well, and vice-versa. The .52 correlation coefficient being above the .50 level indicated that there was a large effect (Nakagawa & Cuthill, 2007).

Examining effect size is a simple way of quantifying the size of the difference between two groups. Effect size is the degree to which one variable effects another. It is also independent of the sample size; if there is a large effect we can be more confident that this relationship exists no matter how many individuals were tested. The bivariate correlation yielded a result that indicated there was a large effect size. This allows us to predict that a respondent that who scores high on the AIMS would score high on the EOM-EIS due to the strong relationship between scores (Nakagawa & Cuthill, 2007).

Research Question 3

3. Are there significant mean differences in athletic identity and identity foreclosure based on:

- a. Year in School
- b. Sport

- c. Revenue vs. Non-Revenue Generating Sport
- d. Scholarship vs. Non-Scholarship Athlete

One way ANOVA tests were conducted on the selected variables (sport, year in school, revenue vs. non-revenue, and scholarship vs. non-scholarship) and each test indicated there was no statistically significant difference in AIMS scores or EOM-EIS across the various designations of year in school, sport, revenue versus non-revenue generating sports, and scholarship versus non-scholarship athletes.

Several *t*-tests were conducted to examine the differences by gender and scholarship status for the AIMS and EOM-EIS scores. The initial *t*-test for gender (AIMS) indicated that there was not a statistically significant difference in the scores of males ($M = 28.72, SD = 9.91$) and the scores of females ($M = 32.30, SD = 10.69$), $t(92) = -1.67, p = .098$. The second *t*-test of AIMS scores examined differences by scholarship status. The results indicated that there was not a statistically significant difference in the scores of students without scholarships ($M = 30.32, SD = 11.94$) and the scores of students with scholarships ($M = 30.74, SD = 9.93$), $t(92) = -.171, p = .864$.

When examining the *t*-test results for gender and scholarship status for the EOM-EIS, the results indicated that there was not a statistically significant difference in the scores of males ($M = 55.95, SD = 13.94$) and the scores of females ($M = 60.52, SD = 14.53$), $t(87) = -1.51, p = .136$. However, the *t*-test for scholarship status indicated that there was a statistically significant difference in the scores of students without scholarships ($M = 51.96, SD = 15.00$) and the scores of students with scholarships ($M = 60.94, SD = 13.40$), $t(87) = -2.75, p < .01$. This suggest that student-athletes without

athletic scholarships has significantly lower levels of identity foreclosure relative to student-athletes on scholarship.

Discussion

When examining the results of this study, it is important to note that the results describe the population specific to this study. Comparisons to previous research conducted on athletic identity and identity foreclosure should be made, however with the understanding that the results of this study are specific to the sample that was utilized. One of the previously researched studies on athletic identity is Brewer and Cornelius's (2002) study on the dimensionality and established norms of AIMS. When we compare the results of this study to Brewer and Cornelius's, a few things stand out. The purpose of their study was to examine the dimensionality of the AIMS and to establish norms for practitioners who work with athletes to identify and assist athletes based on their levels of athletic identity. One of the primary findings from Brewer and Cornelius's (2002) study was that males had higher athletic identifier scores than females, supporting previous research that males have higher AIMS scores than females and display higher levels of athletic identity than females. The results from this study are in contradiction to the norms established by previous research. The scores for males and females in this study were very similar, with female scores being just slightly higher than the male scores. Although the scores for females were slightly higher than the scores for males, they were found not to have a statistically significant difference among them. There could be numerous reasons for this occurrence. The sports in which the female respondents for this study participated in could be a factor. The majority of the female respondents participated in Softball, Volleyball, and Basketball which are three of the most successful

programs at the institutions used for this study. Mills and Christensen (2006) conducted research on the relationship between athletic identity and the level of sport participation and they found that athletes who competed at high levels as well as athletes who achieved success in athletics displayed higher levels of athletic identity. Therefore, it could be that the female student-athletes in this study were more successful than the female student-athletes in previous research resulting in their higher levels of athletic identity.

Since AIMS is a 10 item instrument that uses a 7-point Likert Scale, scores can range from 10-70. The mean score for this sample was a 30.62 which is a moderate score on this instrument. There could be numerous reasons for this, one being that the student-athletes for this sample participate at the National Association of Intercollegiate Athletics (NAIA) level, which is considered to be less competitive than the National Collegiate Athletic Association (NCAA). As previously stated, a student-athlete's level of athletic identity increases as does the level in which they participate does (Good et al., 2012). In accordance with the research conducted by Good et al. (1993), student-athletes who compete at the NCAA Division I level display the highest levels of athletic identity.

Another reason for this sample having a moderate score on the AIMS could be due to the sample coming from an institution that is a religiously affiliated institution of higher learning. In the field of identity research, religious identity is often measured and examined. Religious identity is the set of beliefs and practices generally held by an individual, involving adherence to codified beliefs and rituals and the study of ancestral or cultural traditions, writings, history, and mythology, as well as faith and mystic experience (Arnett, 1999). Religious identity is often one of the most salient identities (Holland et al., 2001). This would allow someone to conclude that a student-athlete at a

religious affiliated institution would identify with their religious identity more than other aspects of their identity such as their athletic identity.

To measure the levels of identity foreclosure for this sample, the Extended Objective Measure of Ego Identity Status (EOM-EIS) was utilized. The EOM-EIS is a 64 item instrument that is designed to measure the four areas of identity development which are moratorium, diffusion, foreclosure, and achievement with responses made on a 6-point Likert type scale ranging from strongly agree to strongly disagree (Adams, 1998). For the purposes of this research study, the 64 item measure was revised into a 16 item instrument that only measured foreclosure and not the other aspects of identity. The mean score on the EOM-EIS was 58.41 and when you break that down by gender, the mean score for females was 60.52 and the mean score for males was 55.95. The 16 item version of the EOM-EIS that uses a 6-point Likert type scale yields a range of scores from 16-96. The mean EOM-EIS score for this sample was a 58.41 which is considered an above moderate score indicating that the sample displays above moderate levels of identity foreclosure.

When the results of this study are compared with previous research on identity foreclosure you can see a few connections. Researchers in the field of identity foreclosure have found evidence of identity foreclosure among college athletes to be high, causing athletes to be less autonomous, focus less time on moral development and career planning (Blann, 1985). Murphy and Petitpas (1996) suggested that the physical and psychological demands of collegiate athletics, coupled with the restrictiveness of the athletic system, may isolate athletes from mainstream college activities, restrict their opportunities for exploratory behavior, and promote identify foreclosure.

Good et al. (1993) conducted a study that explored the relationship between athletic identity, sport participation, and identity foreclosure. Participants of this study included 202 males and 301 females from various colleges and universities in United States. Their sample included intercollegiate student-athletes, non-athletes and students who participated at a recreational level. The results of their study found that the level of sports participation did have an effect on the level of identity foreclosure. The study found that non-athletes were significantly less foreclosed than athletes.

The previously stated research on identity foreclosure is concurrent with the findings from this research study which was that the student-athletes had moderate levels of foreclosure. The time and devotion that participating in collegiate sports involves, limits the free time student-athletes have to explore other aspects of their identity.

Research studies on the correlation between athletic identity and identity foreclosure have been conducted by Good et al. (1993). In their work they found that there is a correlation between athletic identity and identity foreclosure. However, the research focused on student-athletes competing at highly competitive NCAA Division I institutions. Since this research study is focused on student-athletes who compete at a lesser competitive NAIA institution, it should be compared to research studies that were conducted on similar respondents.

Katherine Whipple (2009) investigated the relationship between athletic identity, identity foreclose and career maturity. For her research study questionnaire data was collected from 367 male and female student-athletes from nine colleges in a nationally competitive NCAA Division III athletic conference in the Midwest. Students were given the AIMS, EOM-EIS, and the Attitude Scale of the Career Maturity Inventory. The

results of Whipple's research study found that among the NCAA Division III athletes studied, only a modest relationship exists between the two independent variables identity foreclosure and athletic identity, and the dependent variable career maturity. Although the relationships found Whipple's study were in alignment with previous research among NCAA Division I student-athletes, the relationships among Whipple's sample of NCAA Division III student-athletes were much weaker. The data suggested that NCAA Division III student-athletes may negotiate their identity hierarchies differently than student-athletes competing at the NCAA Division I level.

When examining the reasons why Whipple's (2009) research study revealed a weaker relationship than the previous research conducted on NCAA Division I student-athletes, a few things come to mind. The study used NCAA Division III respondents and this study used NAIA respondents. Although these two levels of competition are very similar, there is one major difference. NAIA institutions do award athletic scholarships and NCAA Division III institutions do not. Nearly 62 percent of the respondents in this research study received some type of athletic scholarship. As it will be discussed later in this chapter, students who receive an athletic scholarship display higher levels of athletic identity than those who do not receive an athletic scholarship. This would explain why the results of this research study displayed a stronger relationship between athletic identity and identity foreclosure than the results from the Whipple (2009) research study.

Evelyn Montcal Oregon's (2010) research study examined the levels of athletic identity and identity foreclosure among college athletes at a NCAA Division I institution. Her research study was developed utilizing previously developed scales; Athletic Identity Measurement Scale (AIMS) and the Extended Objective Measure of Ego Identity Status

(EOM-EIS). Further, the study sought to determine if there is significant variance in athletic identity and identity-foreclosure levels, based on selected independent variables (Oregon, 2010). The variables selected for her research study included: ethnicity, academic classification, sport, parents' socioeconomic class, educational attainment and one's professional aspirations. Although the variables for Oregon's study don't exactly match the variables in this study, they are similar enough to draw some conclusions.

Both research studies examined the mean differences for grade classification and both studies found that regarding athletic identity, identity foreclosure and year in school, there are no significant differences. These findings contradict prior research conducted by Adler and Adler (1991). In the research study they found the athletic role in collegiate student-athletes became stronger and more exclusive with age. In their research they did note that the majority of their participants did enter college with high preexisting levels of athletic identity.

Although the results of this study are in contradiction with Adler and Adler's (1991) research, they do align with the research of Brewer, Van Raalte, and Linder (1993). Brewer et al. found an inverse relationship as the AIMS score correlated negatively with age in college athletes. They suggested, that as college students mature and become exposed to a variety of activities and influences, their exclusive identification with the athlete role decreases (Brewer et al. 1993). There doesn't appear to be definitive research findings to suggest there is significant statistical relationship between athletic identity, identity foreclosure and academic classification. Some research such as Miller and Kerr (2003) found the athletic role among college student-athletes was the most important of the student-athlete's identities during their early university years.

Meaning that as student-athletes progressed academically, the significance of the correlation between athletic identity, identity foreclosure and academic classification decreased and became statistically insignificant.

The findings for the previously mentioned research studies provide support that there are mixed findings on the statistical significance of relationship between athletic identity, identity foreclosure and academic classification. The findings from this study could be interpreted in several ways, however the main take away is that academic classification doesn't affect your level of athletic identity or identity foreclosure.

When examining the other selected variables of this research study (sport, revenue vs. non-revenue generating, and scholarship vs. non-scholarship) the one-way ANOVA test found there to be no statistically significant difference in AIMS and EOM-EIS scores across the selected variables. These findings are in contradiction with the previously mentioned research of Oregon (2010), Miller and Kerr (2003), and Adler and Adler (1991). Oregon (2010) found there was statistical significance based on the type of sport played and whether that sport was revenue generating or non-revenue generating (Oregon, 2010). In terms of scholarship versus non-scholarship student-athletes, a direct comparison cannot be made because the participants in Oregon's research study were NCAA Division I student-athletes and the almost all received some form of athletic scholarship.

There are several possible reasons for this study to contradict the previously mentioned literature. One being that this study was conducted on NAIA student-athletes and not highly competitive NCAA Division I student-athletes. Nearly 3 percent of NCAA Division I athletes will get professional contracts in the 6 major sports (men's

basketball, women's basketball, football, baseball, men's soccer, and hockey). Although 3.0 % sounds rather low, when you compare that to National Basketball Association (NBA) and National Football League (NFL) players drafted from the NAIA in 2015, that percentage does not seem as small. The NAIA has sent roughly 80 players total to the NBA in the last 50 years and the majority of those player were drafted in the late 1970's and early 1980's ("NAIA Honors", 2015). The NCAA sends roughly 50-60 student-athletes each year to the NBA ("NBA Draft", 2015). This would illustrate that there is a much greater chance of student-athlete becoming a professional athlete when competing at the NCAA Division I level then the NAIA level. According to Brewer, Van Raatle, and Linder (2012), student-athletes who participate in sports that have a higher probability of professional careers afterwards, tend to have higher levels of athletic identity and identity foreclosure. Since the student-athletes in this study are competing at the NAIA level, theoretically they should have lower levels of athletic identity and identity foreclosure.

Implications

One of the main implications of this research study is that there is statistical evidence that supports there is a correlation between athletic identity and identity foreclosure for student-athletes who compete at the NAIA level. Research has suggested that there is a correlation between a person's athletic identity and their levels of identity foreclosure, however the majority of those studies were conducted on highly competitive NCAA Division I student-athletes. It is not hard to believe that student-athletes at that higher competition level strongly identify with the athletic role, thus causing them to not

explore other facets of their identity. This research study is implying that the same can be said among student-athletes who complete at a lesser competitive NAIA level.

The knowledge of the athletic identity levels of student-athletes could be very useful for NAIA institutions because they could then use that information to better develop academic advising, career counseling and other student service programs to meet the needs of their student-athletes. This type of practice is already being done at highly competitive NCAA Division I institutions. The NCAA operates its own career center that is designed to help a student-athlete transition from a student-athlete to an employable college graduate (“NCAA After The Game”, 2016). Numerous competitive NCAA Division I institutions have opened their own career centers within their own athletic department to serve the same purpose. An example of this type of program can be found at the University of Kentucky, which has a department that is solely dedicated to the academic advising and career counseling of its student-athletes. The Center for Academic and Tutorial Services (CATS) was the first academic advising center in the county that was solely dedicated to meeting the needs of student-athletes. The CATS was created in 1981 and it currently employs 10 fulltime academic advisors and 12 graduate assistant academic advisors who examine each student-athlete’s individual needs, set goals and develop strategies to attain those goals. The goal and mission of the CATS program is to show that the university cares about the student as well as the athlete (“CATS-First of Its Kind”, 2016). The reasoning behind this type of academic and career counseling program is that student-athletes often face additional challenges that non-student-athletes don’t encounter such as the stress levels and time demands they deal with. Those various challenges and obstacles can contribute to the high levels of identity

foreclosure that athletes typically experience. Those levels of foreclosure cause student-athletes not to see beyond their playing career and they often don't explore all of their career possibilities (Brewer et al., 2012). Although most NAIA institutions may not be in a position financially to have a program of that magnitude, creating a smaller scale version of the CATS program for NAIA student-athletes could serve the same purpose.

For many NAIA and NCAA Division III institutions, creating a smaller scale version of the CATS program may not be possible either. For institutions such as those, they can receive online support in the area of student planning and programing. Van Raatle, Cornelius, Brewer, Petitpas and Andrews have created an online support system for institutions to receive online trainings, access resources, and received education on student-athlete focused programing. These researchers were awarded the NCAA Innovations in Research and Practice Grant to create a website were institutions can access information about academic advising, career counseling, and mental health awareness. This website serves as a great alternative for institutions who cannot afford to replicate the CATS program.

Going beyond career counseling, a knowledge of athletic identity and identity foreclosure can be useful to student affairs practitioners because they often rely on the psychology behind identity development to develop academic advising, career counseling and retention programs (Torres, Jones, & Renn 2009). If students are displaying high levels of athletic identity and high levels of identity foreclosure that can be taken into account when students are choosing academic majors and selecting potential vocations. Even if student affairs practitioners are not aware of an individual student's level of athletic identity and identity foreclosure; the findings from this study provide insight and

awareness to variables or factors that might contribute to higher levels of athletic identity and identity foreclosure. Previous research in this field has suggested that gender, competition level, scholarship status, and sport participated in are all variables or factors in athletic identity (Brewer et al., 2012). This research study offers student affairs practitioners information on the variables and factors that contribute to the levels of athletic identity and identity foreclosure of student-athletes by providing peer-reviewed research on the topic. This information can then be utilized by student affairs practitioners to develop a baseline knowledge of the factors contributing to high levels of athletic identity and identity foreclosure and then institutions of higher learning can develop programs that are more equipped to meet the needs of their student-athletes.

Student-athletes are also subject to extreme demands on their time due to practice time, game travel, study halls, and many other obligations. This in return can cause student-athletes to experience high levels of stress and create mental health concerns (“NAIA Health and Safety, 2016). Brewer et al. (1993) suggested that student-athletes competing at high levels of competition also experience moderate to high levels of stress and anxiety because of the demands they face. The aforementioned University of Kentucky CATS program addresses the mental health concerns of its student-athletes by having its advisors work with each individual student-athlete to create a personal development plan. One of the main focuses of the personal development plan is to identify the stressors that create mental health issues amongst student-athletes, and then to develop a personal plan to address those stressors. Creating a plan such as this, essentially forces student-athletes to acknowledge the various stressors they will be exposed to as well as it gives them an opportunity to create an action plan to deal with

those stressors. These mental health concerns are not something that only elite NCAA Division I athletes are susceptible to, the NAIA has also addressed this issue as well. In the NAIA's health and safety manual there is an entire section dedicated to the mental health concerns of its student-athletes. The manual states that college populations typically deal with mental health issues such as anxiety-related conditions, body image disorders, and depression ("NAIA Health and Safety", 2016). If student affairs practitioners are aware of the connections between athletic identity, identity foreclosure and mental health then those practitioners can create programs and safeguards to help student-athletes who are experiencing mental health issues. If NAIA institutions do not have the resources to create programs to address the mental health concerns of its student-athletes, the knowledge of connection between athletic identity, identity foreclosure, and mental health can be utilized to refer student-athletes to providers who can assist them.

If creating new student-athlete centered programs is not a viable option for an institution, then they can still utilize the findings from this research study by focusing on the relationship between coaches and student-athletes. Bloom, Durand-Bush, Schinke, and Salmela (1998) conducted a research study that examined the relationship between coaches and their players. Their study focused on the mentoring process that occurs between coaches and players. The results of their study found that the majority of college coaches were mentored during their athletic or coaching careers (Bloom, Durand-Bush, Schinke, & Salmela, 1998). Providing coaches with information about athletic identity and identity foreclosure, could assist coaches in their mentorship of student-athletes. Coaches could apply the knowledge gained from learning about athletic identity and

identity foreclosure by providing academic, career, and mental health support throughout the mentorship process.

Another important implication of this research study is that it expands the literature surrounding athletic identity and identity foreclosure to included student-athletes who do not compete at the NCAA Division I level. There are roughly 350 NCAA Division I, 300 NCAA Division II, 450 NCAA Division III, and 260 NAIA institutions in the United States (“About the NCAA”, 2016). However, the majority of athletic research is conducted on the 350 NCAA Division I institutions, leaving out over 1000 other institutions. Considering the majority of student-athletes do not participate at the NCAA Division I level, athletic research and the literature surrounding it should be more encompassing of non-NCAA Division I institutions. This research study aides in that process by conducting a study on student-athletes at a NAIA institutions and broadening the literature in the field of athlete research.

Limitations

Although actions were taken to reduce potential limitations, this study’s results should be viewed in the context. Most notably, the sample consisted of current male and female student-athletes at a select NAIA institution in the Southeast region of the United States. The sample for this research study was a targeted sample and therefore may cause limitations in applying these findings to student-athletes who come from other parts of the country as well as different levels of competition. This sample is less representative of the actual NAIA and NCAA population of student-athletes in terms of racial, ethnic, and revenue to non-revenue comparisons. Finally, this sample reflected a greater number

of sophomores and juniors, with a smaller portion of freshman and seniors being represented in this research study.

The collection procedures also created potential limitations. Respondents were sent an email with a link to the survey that came from research site's Athletic Director. If students do not regularly check their school email account they may not have been aware of the survey. Due to the time constraints of the academic calendar, the survey was sent out at the end of the spring semester and students may have been overwhelmed with preparing for final examinations and not have been able to respond to the survey. Another limitation to the timing of when the survey was distributed is that the majority of the institutions athletic teams were out of season. This could limit the research study in that student-athletes who are not in season may not feel obligated to participate in a research study that was being emailed to them from their athletic director.

Since this research study was focused on identity foreclosure and not the other aspects of identity, a modified version of the 64-item EOM-EIS instrument was used. This could be considered a limitation because the full version of the instrument wasn't utilized. The EOM-EIS is broken into four 16-item sections that address identity diffusion, identity foreclosure, identity moratorium, and identity achievement. Each of the four part sections of EOM-EIS can be utilized as their own instrument to measure their specific aspect of identity. However the EOM-EIS was initially created to be utilized as a tool to measure all four aspects of identity. The EOM-EIS is also limited in that it measures identity foreclosure without providing information on why someone is foreclosed.

One of the final limitations of this research study is that respondents were expected to answer questions honestly. Although subjects were instructed to respond honestly to each item, there is no way of monitoring if the respondents truly answered each question truthfully. There was no way of controlling the outside events or possible influential factors that could have affected how participants responded to the measurement tools. The AIMS and EOM-EIS are instruments with reported high reliability and validity, they are still self-reporting instruments which leaves room for error. This creates the risk of participants responding to items with the most socially acceptable response according to them, rather than responding to the items truthfully.

Recommendations for Future Research

Despite the aforementioned limitations, this study has added to literature discussing athletic identity and identity foreclosure among NAIA student-athletes. Due to the fact that this study was conducted at a single institution, similar research studies should be conducted at wide variety of institutions in order to increase the number of participants with different levels of playing experiences and demographic backgrounds. Future research should consider doing in-depth qualitative studies focusing on identity foreclosure among the college athlete (Miller & Kerr, 2003). Research investigating athletic identity and identity foreclosure may benefit from longitudinal, qualitative analyses that may better specify the relationships among athletic identity and identity foreclosure among student-athletes. Researchers should also consider examining the reliability and validity of AIMS and the EOM-EIS instrument to assess if they truly measure what they are designed to measure. Along those lines, researchers should also

examine what are the additional ways in which athletic identity and identity foreclosure can be measured. Additional research should consider a larger sample size to potentially increase discovery of significant relationships between the variables given in this study. Testing the validity and reliability of each of the EOM-EIS subscales would give greater specificity to the research about identity by giving specific, stand-alone tools for measurement.

References

2004-2014 Revenue and Expenses (2015). Retrieved from

<http://www.ncaa.org/sites/default/files/2015%20Division%20I%20RE%20report.pdf>

2014-2015 High School Athletics Participation Survey (2015). Retrieved from

http://nfhs.org/participationstatistics/PDF/20142015_Participation_Survey_Results.pdf

2015-2016 NAIA Football Participating Schools (2015). Retrieved from

http://naia.org/ViewArticle.dbml?DB_OEM_ID=27900&ATCLID=205323224

About Asbury Athletics (2015). Retrieved from

http://www.asburyeagles.com/f/About_Asbury_Athletics.php

About the NAIA (2015). Retrieved from

http://www.naia.org/ViewArticle.dbml?DB_OEM_ID=27900&ATCLID=205323019

Adams, G. R., Bennion, L., & Huh, K. (1989). Objective measure of ego-identity status: A reference manual.

Adams, G. R., Shea, J., & Fitch, S. A. (1979). Toward the development of an objective assessment of ego-identity status. *Journal of Youth and Adolescence*, 8(2), 223-237.

Adler, P. A., & Adler, P. (1987) Role Conflict and Identity Salience: College Athletics and Academic Role. *Social Science Journal*, 27(4), 443-455.

- Advising Student Athletes Commission (2016). Retrieved from <http://www.nacada.ksu.edu/Community/Commission-Interest-Groups/Advising-Specific-Populations-I/Advising-Student-Athletes-Commission.aspx>
- Altemeyer, B. (1988). *Economics of freedom*. San Francisco: Jossey-Bass.
- Anderson, C. B. (2004). Athletic identity and its relation to exercise behavior: Scale development and initial validation. *Journal of Sport & Exercise Psychology*, 26, 39-56.
- Anderson, D. F., & Cychosz, C. M. (1994). Development of an exercise identity scale. *Perceptual and Motor Skills*, 78, 747-751
- Anderson, M. L., & Collins, P. H. (2007). Systems of power and inequality. In M. L. Anderson & P. H. Collins (Eds.), *Race, class & gender: An anthropology* (6th ed.; pp. 61-90). Belmont, CA: Thomson Wadsworth
- Aries, E., & Richards, S. (1999). The Division III student athlete: Academic performance, campus involvement, and growth. *The Journal of College Student Development*, 3, 211-217.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480
- Arnett, J. J. (1999). Adolescent storm and stress, reconsidered. *American psychologist*, 54(5), 317.
- Asbury Eagles Sports (2015). Retrieved from <http://www.asburyeagles.com/index.php>
- Barnes, L. L., Plotnikoff, G. A., Fox, K., & Pendleton, S. (2000). Spirituality, religion, and pediatrics: Intersecting worlds of healing. *Pediatrics*, 106, 899-900.

- Baxter-Magolda, M. B. (2003). Identity and learning: Student affairs' role in transforming higher education. *Journal of College Student Development, 44*(2), 231-247.
- Beller, J. M. (1995). The Relationship of Competition and a Christian Liberal Arts Education on Moral Reasoning of College Student-athletes.
- Bennion, L. D., & Adams, G. R. (1986). A revision of the Extended Version of the Objective Measure of Ego-identity Status: An identity instrument for use with late adolescents. *Journal of Adolescent Research, 1*, 183-198
- Benjamin, Ludy (2007). *A Brief History of Modern Psychology* (pp.63-68). Massachusetts: Blackwell Publishing.
- Berzonsky, M. D. (1990). Self-construction over the life-span: A process perspective on identity formation. *Advances in Personal Construct Psychology, 1*, 155-186.
- Biddle, B. (1986). Recent developments in role theory. *Annual Review of Sociology, 67-92*.
- Blann, F. W. (1985). Intercollegiate athletic competition and students' educational and career plans. *Journal of College Student Personnel*.
- Bloom, G. A., Durand-Bush, N., Schinke, R. J., & Salmela, J. H. (1998). The importance of mentoring in the development of coaches and athletes. *International Journal of Sport Psychology, 29*, 267-281.
- Bogdan, R., & Biklen, S. (1992). *Qualitative research for education: An introduction to theory and practice* (2nd ed.). Boston: Allyn & Bacon.
- Boundless. "Identity Formation." Boundless Sociology. Boundless, 03 Jul. 2014. Retrieved 17 Mar. 2015 from <https://www.boundless.com/sociology/textbooks/boundless-sociology->

textbook/culture-and-socialization-3/childhood-socialization-41/identity-formation-262-8260.

Brewer, B. W. (1993). Self-identity and specific vulnerability to depressed mood. *Journal of Personality, 61*, 343-364.

Brewer, B. W., Boin, P. D., Petitpas, A. J., Van Raalte, J. L., & Mahar, M. T. (1993, August). *Dimensions of athletic identity*. Paper presented at the annual meeting of the American Psychological Association, Toronto, Canada.

Brewer, B. W., & Cornelius, A. E. (2001). Norms and factorial invariance of the Athletic Identity Measurement Scale (AIMS). *Academic Athletic Journal, 16*, 103-113.

Brewer, B., Van Raalte, J., & Linder, D. (2012). Athletic Identity Measurement Scale. *PsycTESTS Dataset*.

Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology, 24*, 237-254.

Brewer, B. W., Van Raalte, J. L., & Petitpas, A. J. (2000). Self-identity issues in sport career transitions. In D. Lavallee & P. Wylleman (Eds.), *Career transitions in sport: International perspectives* (pp. 29-43). Morgantown, WV: Fitness Information Technology.

Brown, C., Glastetter-Fender, C., & Shelton, M. (2000). Psychosocial identity and career control in college student-athletes. *Journal of Vocational Behavior, 56*(1), 53-62.

Brown, C., & Hartley, D. L. (1998). Athletic identity and career maturity of male college student-athletes. *International Journal of Sport Psychology, 29*, 17-26.

- Bullock, Merry, & Lukenhaus, P. (1990). Who am I? The development of self-understanding in toddlers. *Merrill-Palmer Quarterly*, 36, 217-238.
- CATS First of Its Kind (2016). Retrieved from <http://catsacademics.com/about/>
- Chandra, P. (2016). Improving Survey Response and Completion Rate with User Experience.
- Chartrand, J. M., & Lent, R. W. (1987). Sports counseling: Enhancing the development of the student-athlete. *Journal of Counseling and Development*, 66, 164-167.
- Christian, M. D., & Barbarin, O. A. (2001). Cultural resources and psychological adjustment of African American children: Effects of spirituality and racial attribution. *Journal of Black Psychology*, 27, 43-63.
- Cieslak T.J., (2004). Describing and measuring the athletic identity construct: Scale development and validation. (Doctoral dissertation). The Ohio State University.
- Colleges and University by Religious Affiliation (2015). Retrieved from <http://campusconrner.com/religious-affiliations.html>
- Cowley, W. J. (1934). *The History of Student Residential Housing, School and Society* (pp. 705–712), 758–764.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). New York: Pearson.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks: Sage Publications, Inc.
- Curry, T. J., & Weaner, J. S. (1987). Sport identity salience, commitment, and the involvement of self in role: Measurement issues. *Sociology of Sport Journal*, 4, 280-288.

- Curry, T. J., & Weiss, O. (1989). Sport identity and motivation for sport participation: A comparison between American college athletes and Austrian student sport club members. *Sociology of Sport Journal*, 6, 257-268.
- Daleman, T. P. & Frey, B. B. (2004). The Spirituality Index of Well-Being: A new instrument for health-related quality of life research. *Annals of Family Medicine*, 2, 499-503.
- De Vaus, D. (1993). Research design in social research.
- Divin, A. L. (2009). Perceived stress levels and health promoting behaviors among NAIA and NCAA division I student-athletes (Unpublished doctoral dissertation).
- Duda, J. L. (1999). *Advances in Sport and Exercise Psychology Measurement*. Morgontown, WV: Fitness International Technology.
- Ellison, C. W., & Paloutzian, R. F. (1983). Spiritual Well Being Scale. *Journal of Psychology and Theology*, 11, 330-340.
- Emmons, R. A. & Paloutzian, R. F. (2003). The psychology of religion. *Annual Review of Psychology*, 54, 377-402.
- Erikson, E. H. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association*.
- Erikson, E. H. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student development in college: Theory, research, and practice*. San Francisco: Wiley.
- Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students*. San Francisco: Jossey-Bass.

- Field, A. P. (2009). *Discovering statistics using SPSS: (and sex and drugs and rock 'n' roll)*. Los Angeles, Calif.: SAGE Publications.
- Gaston, G. (2004). Examining academic and athletic motivation among student-athletes at a Division I university. *Journal of College Student Development* 45-75.
- Gatz, L. B., & Hirt, J. B. (2000). Academic and social integration in cyberspace: Students and e-mail. *The Review of Higher Education*, 23(3), 299-318.
- Genia, V. (2001). Evaluation of the Spiritual Well-Being Scale in a sample of college students. *International Journal of the Psychology of Religion*, 11, 25-33.
- Gerdy, R. J., (2000) Sports in school: The future of an institution. *Teachers College Press*, 2000.
- Gill, D. L., & Deeter, T. E. (1988). The relationship of competitiveness and achievement orientation to participation in sport and nonsport activities. *Journal of Sport & Exercise Psychology*, 10, 139-150.
- Good, A., Brewer, B., Petitpas, A., Van Raalte, J., & Mahar, M. (1993). Identity foreclosure, athletic identity, and college sport participation. *The Academic Athletic Journal*, 8, 1-12.
- Griffith, K. A., & Johnson, K. A. (2002). Athletic identity and life roles of Division I and Division III collegiate athletes. *Journal of Undergraduate Research*, 5, 225-231.
- Groves, R. M., Fowler Jr., F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey methodology* (Vol. 561). John Wiley & Sons.

- Hale, B. D., James, B., & Stambulova, N. A. T. A. L. I. A. (1999). Determining the dimensionality of athletic identity: a "Herculean" cross-cultural undertaking. *International Journal of Sport Psychology*, 30(1), 83-100.
- Hall, T. W. & Edwards, K. J. (2002). The Spiritual Assessment Inventory: A theistic model and measure for assessing spiritual development. *Journal for the Scientific Study of Religion*, 41, 341-357.
- Harter, S. (1990). *Competence considered*. New Haven, CT: Yale University Press.
- Hernandez, S. E. (2015). *An examination of mandatory study hall for NAIA student-athletes and their involvement in Champions of Character* (Doctoral dissertation, WINGATE UNIVERSITY).
- Hill, P. C. & Pargament, K. I. (2003) Advances in the conceptualization and measurement of religion and spirituality. *American Psychologist*, 58, 64-74.
- Holland, D., Lachicotte W., Skinner D., & Cain, C. (2001). *Identity and agency in cultural worlds*. Cambridge, Massachusetts: Harvard University Press.
- Horton, R., & Mack, D. (2000). Athletic identity in marathon runners: Functional focus or dysfunctional commitment?. *Journal of Sport Behavior*, 23(2), 101.
- Identity Formation. 2014. In *Merriam-Webster.com*. Retrieved November 10th, 2014, from <http://www.merriam-webster.com/dictionary/identityformaton>
- Jackson, S. (1981). Measurement of commitment to role identities. *Journal of personality and social psychology*, 40(1), 138-146.
- Lally, P. S., & Kerr, G. A. (2005). The career planning, athletic identity, and student role identity of intercollegiate student-athletes. *Research Quarterly for Exercise and Sport*, 76(3), 275-285.

- Keim, M., & Strickland, J. M. (2004). Support services for two-year college student athletes. *College Student Journal*, 38(1), 36–44.
- Identity and spirituality: A psychosocial exploration of the sense of spiritual self.
- Kiesling, Chris; Sorell, Gwendolyn T.; Montgomery, Marilyn J.; Colwell, Ronald K. *Psychology of Religion and Spirituality*, Vol S(1), Aug 2008, 50-62.<http://dx.doi.org/10.1037/1941-1022.S.1.50>
- Koenig, H., & Bussing, A. (2010). The Duke University religion index (DUREL): A five-item measure for use in epidemiological studies. *Religions*, 1, 78-85.
- Krause, N. (1993). Measuring religiosity in later life. *Research on aging*, 15(2). 170-197.
- Lamont-Mills, A., & Christensen, S. A. (2006). Athletic identity and its relationship to sport participation levels. *Journal of Science and Medicine in Sport*, 9(6), 472-478.
- Lundy, B. (2007). *A Brief History of Modern Psychology* (pp. 63-68). Massachusetts: Blackwell Publishing.
- MacDonald, D. (2000). Spirituality: Description, measurement, and relation to the five factor model of personality. *Journal of personality*. 68 (1). 153-197.
- Marcia, J. (2009). Life Transitions and Stress in the Context of Psychosocial Development. *Handbook of Stressful Transitions Across the Lifespan*, 19-34.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3, 551-558.
- Marcia, J. (1966). The ego identity status approach to ego identity. *Ego Identity*, 3-21.
- Markus, H., & Nurius, P. (1986). Possible selves. *American psychologist*, 41(9), 954.

- Martin, J. J., Mushett, C. A., & Eklund, R. C. (1994). Factor structure of the athletic identity measurement scale with adolescent swimmers with disabilities. *Brazilian International Journal of Adapted Physical Education Research, 1*, 87-99.
- Masters, K., Spielmans, ., G., Goodson, & J. (2008). Are there demonstrable effects of distant intercessory prayer? A meta-analytic review. *Annals of Behavioral Medicine. 2*(1), 21-26.
- McAndrew, S. & Voas D. (2011). Measuring religiosity using surveys. *University of Manchester Topic Overview 4*. 1-15
- McEwen, M.K. (2003). The nature and uses of theory. In S.R. Komives, D.B. Woodlard Jr. & Associates (Eds.), *Student Services: A handbook for the profession* (pp. 153-178). San Fransico: Jossey-Bass.
- Mignano, A. C., Brewer, B. W., Winter, C. R., & Van Raalte, J. L. (2006). Athletic identity and student involvement of female athletes at NCAA Division III women's and coeducational colleges. *Journal of College Student Development, 47*(4), 457-464.
- Miller, P. S., & Kerr, G. A. (2003). The role experimentation of intercollegiate student athletes. *Sport Psychologist, 17*(2), 196-219.
- Moberg, D. (2010). Spirituality research: Measuring the immeasurable? *Perspectives on Science and Christian Faith, 62*(2), 99-114.
- Moberg, D. (2002) Assessing and Measuring Spirituality: Confronting dilemmas of universal and particular evaluative criteria. *Journal of Adult Development, 9*(1).

- Murphy, G. M., Petitpas, A. J., & Brewer, B. W. (1996). Identity foreclosure, athletic identity, and career maturity in intercollegiate athletes. *Sport Psychologist, 10*, 239-246.
- NAIA Honors (2015). Retrieved from <http://www.naiahonors.com/hall-of-fame>
- NAIA Health and Safety (2016). Retrieved from http://www.naia.org/fls/27900/1NAIA/membership/wellness/NAIA_HealthandSafety_MentalHealthResources.pdf
- Nakagawa, S., & Cuthill, I. C. (2007). Effect size, confidence interval and statistical significance: a practical guide for biologists. *Biological Reviews, 82*(4), 591-605.
- NBA Draft (2015). Retrieved from <http://www.nba.com/draft/?ls=iref:nba:gfooter>
- NCAA After the Game Career Center (2016). Retrieved from <http://www.ncaa.org/student-athletes/former-student-athlete/ncaa-after-game-career-center>
- Nelson, E. S. (1983). How the myth of the dumb jock becomes fact: A developmental view for counselors. *Counseling and Values, 27*, 176-185.
- Nichols, A. J., & Levy, Y. (2009). Empirical assessment of college student-athletes' persistence in e-learning courses: A case study of a US National Association of Intercollegiate Athletics (NAIA) institution. *The Internet and Higher Education, 12*(1), 14-25.
- Oregon, E. M., (2010). An Examination of Athletic Identity and Identity Foreclosure among Male Collegiate Student-Athletes. Graduate Theses and Dissertations.

- Paloutzian, R. F., & Ellison, C.W. (1982). Loneliness, spiritual well-being, and quality of life. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*. New York: Wiley.
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37, 710–724.
- Parham, W. D. (1993). The Intercollegiate Athlete A 1990s Profile. *The counseling psychologist*, 21(3), 411-429.
- Partridge, J. A. (1998). An examination of the relationship between athletic participation, multidimensional self-concept, self-esteem, gender, and collegiate academic performance (master's thesis). University of North Carolina, Chapel Hill.
- Pascarella, E.T., Truckenmiller, R., Nora, A., Terenzini, P.T., Edison, M. & Hagedorn, L.S., (1999). Cognitive impacts of intercollegiate athletic participation. *The Journal of Higher Education*, 70, 1-26.
- Pearson, R. E., & Petitpas, A. J. (1990). Transitions of athletes: Developmental and preventive perspectives. *Journal of Counseling & Development*, 69(1), 7-10.
- Peek, L. (2005). Becoming Muslim: The development of a religious identity. *Sociology of Religion*, 66(3), 215-242.
- Petipas, A. J. (1978). Identity Foreclosure: A unique challenge. *Personnel and Guidance Journal*, 56, 558-561.
- Petitpas, A. J., & Champagne, D. E. (1988). Developmental programming for intercollegiate athletes. *Journal of College Student Development*, 29, 454-460.

- Pfeifer, S., & Waeltly, U. (1995). Psychopathology and religious commitment: A controlled study. *Psychopathology, 28*, 70-77.
- Piedmont, R.L. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five-factor model. *Journal of Personality, 67*, 985–1013.
- Piedmont, R. L., & Leach, M. M. (2002). Cross-cultural generalizability of the Spiritual Transcendence Scale in India: Spirituality as a universal aspect of human experience. *American Behavioral Scientist, 45*, 1888-1901.
- Pieper, J. Z., Van Uden, M. H., & De Vries-Schot, M. R. (2012). Mature Religiosity Scale: Validity of a new questionnaire. *European Journal of Mental Health, 1*, 57-71.
- Policy Questions on the Department of Education's 2007 Guidance on Collecting, Maintaining and Reporting Data by Race and Ethnicity. (Ed. October 2008). Retrieved from <http://www2.ed.gov/policy/rschstat/guid/raceethnicity/questions.html>
- Polit, D. F., Beck, C. T., & Hungler, B. P. (2001). Essentials of nursing research. *Methods*.
- Porter, S. R., & Umbach, P. D. (2006). Student survey response rates across institutions: Why do they vary?. *Research in Higher education, 47*(2), 229-247.
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: quantitative strategies for communicating indirect effects. *Psychological methods, 16*(2), 93.

- Rabe, M. (2015). Athletic Governing Body and Gender Equality in Intercollegiate Athletics.
- Religiosity. 2014. In *Merriam-Webster.com*. (2014, November 10). Retrieved from <http://www.merriam-webster.com/dictionary/religiosity>
- Report: 41 percent of bowl-bound schools miss academic standard. (2005). *Diverse Issues in Higher Education*, 22(23), 16. Retrieved from <http://ezproxy.uky.edu/login?url=http://search.proquest.com/docview/194222128?accountid=11836>
- Renn, K. A., & Arnold, K. D. (2003). Reconceptualizing research on peer culture. *Journal of Higher Education*, 74, 261-291.
- Rhea, M. R. (2004). Determining the magnitude of treatment effects in strength training research through the use of the effect size. *The Journal of Strength & Conditioning Research*, 18(4), 918-920.
- Rosenberg, M. (1989). *Society and the adolescent self-image*. Princeton, NJ: Princeton University.
- Ryan, F. J. (1989). Participation in intercollegiate athletics: Affective outcomes. *Journal of College Student Development*.
- Sack, A. L., & Staurowsky, E. J. (1998). *College athletes for hire: The evolution and legacy of the NCAA's amateur myth*. Columbia University Press.
- Sandler, L. (2010, July 19). One and Done. *Time*, 35-41.
- Sethi, S., & Seligman, M. E. P. (1993). Optimism and fundamentalism. *Psychological Science*, 4, 256-259.

- Settles, I. H., Sellers, R. M., & Damas Jr, A. (2002). One role or two?: The function of psychological separation in role conflict. *Journal of Applied Psychology*, 87(3), 574.
- Shaughnessy, J., Zechmeister, E., & Jeanne, Z. (2011). *Research methods in psychology* (9th ed.). New York, NY: McGraw Hill.
- Sherrill, C. (1993). Women with disability: Paralympics and reasoned action contact theory. *Women in Sport and Physical Activity Journal*, 2, 51-60.
- Smyth, J. D., Dillman, D. A., Christian, L. M., & McBride, M. (2009). Open-Ended Questions in Web Surveys Can Increasing the Size of Answer Boxes and Providing Extra Verbal Instructions Improve Response Quality?. *Public Opinion Quarterly*, nfp029.
- Solomon, Jon (October 15, 2013). ["Schooled: The Price of College Sports' is a movie worth the NCAA history lesson \(review\)". al.com. Archived](#) from the original on March 17, 2015
- Sparkes, C. Andrew. (1998). Athletic Identity: An Achilles' Heel to the Survival of Self. *Qualitative Health Research*, 8, 644.
- Spirituality.(2014, November 10). Retrieved from <http://www.merriam-webster.com/dictionary/spirituality>
- Steinfeldt, J. A., Foltz, B. D., Mungro, J., Speight, Q. L., Wong, Y. J., & Blumberg, J. (2011). Masculinity socialization in sports: Influence of college football coaches. *Psychology of Men & Masculinity*, 12(3), 247.

- Steinfeldt, J. A., Steinfeldt, C. M., England, B., & Speight, Q. L. (2009). Gender role conflict and help-seeking stigma among college football players. *Psychology of Men & Masculinity, 10*, 261– 272.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Torres, V., Jones, S. R., & Renn, K. A. (2009). Identity development theories in student affairs: Origins, current status, and new approaches. *Journal of College Student Development, 50*(6), 577-596.
- Turner, J. C., & Oakes, P. J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *British Journal of Social Psychology, 25*(3), 237-252.
- Waterman, A. S. (1993). Developmental perspectives on identity formation: From adolescence to adulthood. In J. E. Marcia, A. S. Waterman, D. R. Matteson, S. L. Archer, & J. L. Orlofsky (Eds.), *Ego identity: A handbook for psychosocial research* (pp. 42-68). New York: Springer-Verlag.
- Welcome to Asbury University (2015). Retrieved from <https://www.asbury.edu/about-us>
- Werthner, P., & Orlick, T. (1986). Retirement experiences of successful Olympic athletes. *International journal of sport psychology.*
- Willemsen, E. & Waterman, K. (1991). Dynamics of perceived parenting and identity formation in late adolescence. *Psychological Reports, 66*, 1203-1212.

Williams, D. J. (2007). *An examination of athletic identity, sport commitment, time in sport, social support, life satisfaction, and holistic wellness in college student-athletes*. ProQuest.

Whipple, K. R. (2009). Athletic identity, identity foreclosure, and career maturity: An investigation of intercollegiate athletes. Graduate Theses and Dissertations. Paper 10492.

Who We Are (2015) Retrieved from <http://www.ncaa.org/about/who-we-are>

Vita

Gavin Pierre Washington

Education

Masters of Science in Physical Education Eastern Kentucky University
Emphasis: Sports Administration 2004
Minor: Exercise Science

Bachelors of Science in Health and Physical Education Asbury University
Minor: Exercise Science 2002

Certifications/Licensures

Teacher Certification Grades P-12 for Health and Physical Education
Certified in CPR and First Aide
Certified Personal Trainer
Certified Health Education Specialist

Professional Experience

Kentucky State University August 2015 – Present
Assistant Professor

Indiana Wesleyan University August 2014 – Present
Adjunct Professor

Bourbon County Public Schools August 2010 – August 2015
Health/Physical Education Teacher

Bourbon County Public Schools August 2010 – August 2015
Head Middle School Boys Basketball Coach

Fayette County Public Schools August 2009 – August 2010
Special Education

University of Kentucky February 2009 – Sept. 2009
Health Education Specialist

University of Kentucky August 2007 – March 2009
Director of Recruitment for the College of Business and Economics

Bluegrass Community and Technical College Assistant Director of Admissions and Recruitment	Dec. 2006- August 2007
Jim Karas, Incorporated Exercise Scientist	January 2006-Dec. 2006
North Central Area Health Education Center Health Careers Coordinator	March 2005 – January 2006
St. Catharine College Asst. Men’s Basketball Coach	July 2003 – May 2004
Asbury College Asst. Women’s Softball Coach	August 2001- May 2003
Fayette County Board of Education Teacher	August 2002- May 2003

Extra-Curricular/Honors/Awards

4 year Collegiate Lettermen in Basketball
 2 year Collegiate Lettermen in Baseball
 Captain of Collegiate Basketball Team
 Martin Luther King Jr. Scholarship Recipient
 NAACP Scholarship Recipient
 University of Kentucky Humanity Academy Award Recipient