Athletic Identity and Identity Foreclosure Among Division III National Junior College Athletic Association Student-Athletes

Egbert Shillingford  
*St. John Fisher College*, bertshillingford@yahoo.com

Follow this and additional works at: [https://fisherpub.sjfc.edu/education_etd](https://fisherpub.sjfc.edu/education_etd)

Part of the Education Commons

**How has open access to Fisher Digital Publications benefited you?**

**Recommended Citation**

Please note that the Recommended Citation provides general citation information and may not be appropriate for your discipline. To receive help in creating a citation based on your discipline, please visit [http://libguides.sjfc.edu/citations](http://libguides.sjfc.edu/citations).

This document is posted at [https://fisherpub.sjfc.edu/education_etd/509](https://fisherpub.sjfc.edu/education_etd/509) and is brought to you for free and open access by Fisher Digital Publications at St. John Fisher College. For more information, please contact fisherpub@sjfc.edu.
Athletic Identity and Identity Foreclosure Among Division III National Junior College Athletic Association Student-Athletes

Abstract

The purpose of this survey study was to replicate Deborah L. Borak’s doctoral dissertation, Measuring the Levels of Athletic Identity and Identity Foreclosure Among Student Athletes at a National Junior College Athletic Association (NJCAA) College. Using a diverse sample of student-athletes across six Division III (DIII) NJCAA colleges within the State University of New York (SUNY) system, 113 DIII student-athletes completed online surveys to measure their demographics (sports played, gender, ethnicity, years played), athletic identity, and identity foreclosure. Consistent with previous studies, the DIII junior college athletes in this study also reported high levels of athletic identity and identity foreclosure, and athletic identity was a significant positive predictor of identity foreclosure. Demographic differences in athletic identity and identity foreclosure were also found based on ethnicity and the sport played.

Document Type
Dissertation

Degree Name
Doctor of Education (EdD)

Department
Executive Leadership

First Supervisor
Byron K. Hargrove, Ph.D.

Subject Categories
Education

This dissertation is available at Fisher Digital Publications: https://fisherpub.sjfc.edu/education_etd/509
Athletic Identity and Identity Foreclosure Among Division III National Junior College Athletic Association Student-Athletes

By

Egbert Shillingford

Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by
Dr. Byron Hargrove

Committee Member
Dr. Nikki Stewart

Ralph C. Wilson, Jr. School of Education
St. John Fisher College

August 2021
Biographical Sketch

Egbert Shillingford is currently the Program Director at SUNY Rockland Community College, Automotive Technology Department. Mr. Shillingford attended CUNY Baruch College from 1980 to 1985 and graduated with a Bachelor of Business Administration degree in 1985. He attended Mercy College from 1998 to 1999 and graduated with a Master of Science degree in 1999. He came to St. John Fisher College in summer of 2019 and began doctoral studies in the Ed.D. Program in Executive Leadership. Mr. Shillingford pursued his research in junior college athletics under the direction of Dr. Byron Hargrove and Dr. Nikki Stewart and received the Ed.D. degree in 2021.
Abstract

The purpose of this survey study was to replicate Deborah L. Borak’s doctoral dissertation, *Measuring the Levels of Athletic Identity and Identity Foreclosure Among Student Athletes at a National Junior College Athletic Association (NJCAA) College*. Using a diverse sample of student-athletes across six Division III (DIII) NJCAA colleges within the State University of New York (SUNY) system, 113 DIII student-athletes completed online surveys to measure their demographics (sports played, gender, ethnicity, years played), athletic identity, and identity foreclosure. Consistent with previous studies, the DIII junior college athletes in this study also reported high levels of athletic identity and identity foreclosure, and athletic identity was a significant positive predictor of identity foreclosure. Demographic differences in athletic identity and identity foreclosure were also found based on ethnicity and the sport played.
Table of Contents

Biographical Sketch ........................................................................................................... iii
Abstract .............................................................................................................................. iv
Table of Contents ................................................................................................................ v
List of Tables .................................................................................................................... vii
Chapter 1: Introduction ....................................................................................................... 1
  Problem Statement ........................................................................................................ 3
  Theoretical Rationale .................................................................................................... 5
  Statement of Purpose .................................................................................................... 6
  Research Questions ....................................................................................................... 7
  Significance of the Study .............................................................................................. 8
  Definitions of Terms ..................................................................................................... 8
  Chapter Summary ....................................................................................................... 10
Chapter 2: Review of the Literature .................................................................................. 11
  Introduction and Purpose ............................................................................................ 11
  Identity Development .................................................................................................. 12
  Ego Identity ................................................................................................................. 13
  Factors Influencing Identity Formation ...................................................................... 14
  Athletic Identity .......................................................................................................... 16
  Outcomes Associated With High Levels of Athletic Identity .................................... 28
  Athletic Identity Foreclosure ...................................................................................... 31
Chapter Summary ....................................................................................................... 37

Chapter 3: Research Design Methodology ................................................................. 39
  Introduction............................................................................................................... 39
  Research Design...................................................................................................... 40
  Research Participants............................................................................................... 44
  Instruments Used in Data Collection ...................................................................... 45
  Procedures for Data Collection and Analysis ......................................................... 48
  Summary.................................................................................................................. 49

Chapter 4: Results ....................................................................................................... 50
  Introduction............................................................................................................... 50
  Post-Hoc Analysis.................................................................................................... 65
  Identity Foreclosure ............................................................................................... 67
  Athletic Identity...................................................................................................... 68

Chapter 5: Discussion ................................................................................................. 73
  Introduction............................................................................................................... 73
  Implications of Findings ......................................................................................... 73
  Limitations............................................................................................................... 79
  Recommendations................................................................................................. 80
  Conclusion............................................................................................................... 82
  Summary.................................................................................................................. 84
  References.............................................................................................................. 85
  Appendix A............................................................................................................ 93
# List of Tables

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 3.1</td>
<td>Comparison of Benefits and Responsibilities for Student-Athletes at DI, DII, and DIII Institutions</td>
<td>41</td>
</tr>
<tr>
<td>Table 3.2</td>
<td>Divisional Differences in Sports Offerings and Scholarships at NJCAA Institutions</td>
<td>42</td>
</tr>
<tr>
<td>Table 3.3</td>
<td>DII and DIII SUNY Sports by Community College in This Study</td>
<td>43</td>
</tr>
<tr>
<td>Table 3.4</td>
<td>Demographic Profile of NJCAA DIII New York State Student-Athletes</td>
<td>48</td>
</tr>
<tr>
<td>Table 4.1</td>
<td>Summary of Internal Reliability Estimates for the AIMS and SSMIF for DIII Student-Athletes</td>
<td>51</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>Summary of Internal Reliability for Identity Foreclosure and Athletic Identity</td>
<td>52</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>Descriptive Summary of the Identity Foreclosure Using NJCAA DIII Student-Athletes</td>
<td>53</td>
</tr>
<tr>
<td>Table 4.4</td>
<td>Descriptive Summary of Athletic Identity and Subscales</td>
<td>54</td>
</tr>
<tr>
<td>Table 4.5</td>
<td>Summary of Descriptive Statistics for Identity Foreclosure and Athletic Identity by Demographic Identifier Variables</td>
<td>54</td>
</tr>
<tr>
<td>Table 4.6</td>
<td>Summary of Finding: One-Sample t Test for Perceptions of Identity Foreclosure</td>
<td>56</td>
</tr>
<tr>
<td>Table 4.7</td>
<td>Summary of Finding: One-Sample t Test for Perceptions of Athletic Identity</td>
<td>57</td>
</tr>
<tr>
<td>Table 4.8</td>
<td>Pearson Correlation Coefficient Findings: Foreclosure and Athletic Identity</td>
<td>59</td>
</tr>
<tr>
<td>Table 4.9</td>
<td>Predicting Perceptions of Identity Foreclosure by Perceptions of Athletic Identity</td>
<td>60</td>
</tr>
<tr>
<td>Table 4.10</td>
<td>MANOVA Summary: Foreclosure and Athletic Identity by Gender</td>
<td>61</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

Student-athletes participate in intercollegiate sports in return for the promise of an education (D. Keeley, personal communication, July 27, 2019). According to the National Collegiate Athletic Association (NCAA, 2016; Johnson, 2016), the term student-athlete was created to identify college students who participate in an intercollegiate sport. The term implies duality, with the role of the student representing the primary role and the role of athlete aligning with that of an elite amateur (Heird & Steinfeldt, 2013). Nevertheless, research has demonstrated that the real time demands of intercollegiate sports often limit the amount of time student-athletes can focus on their academic responsibilities (Adler & Adler, 1991; Battier, 2016; NCAA, 2016). As a result, many student-athletes (especially in Division I) prefer to focus primarily on athletics, further strengthening their athletic identity while gradually detaching from normal academics pursuits (Adler & Adler, 1991). In the United States, approximately 460,000 student-athletes play a Division I (DI) sport each year, yet only 2% of those individuals go on to become professional athletes (NCAA, 2016). This can be problematic for the remaining 98%, who might not be prepared to secure a suitable career outside of athletics. Similarly, junior college student-athletes in Division II (DII) and Division III (DIII) programs rarely get recruited into a professional sport. Approximately 125,000 and 200,000 student-athletes play DII and DIII, respectively. Of these, only 2.5% and 0.5% become professional athletes. Despite these low professional rates, many DII and DIII student-athletes strongly identify with their athletic identity while in college (NCAA, 2020).
“Athletic identity” refers to the degree of strength and exclusivity to which a person identifies with being an athlete (Brewer et al., 1993). An individual with a solid athletic identity emphasizes the role of athletics over academics (Houle et al., 2010). Having a robust athletic identity can lead to many positives and negatives (pros and cons) for student-athletes. Research indicates that an individual’s athletic identity increases with the level of competition (Beamon, 2012; Harrison et al., 2011) and can positively impact the student’s overall sense of well-being (Brewer et al., 2012). However, a robust athletic identity can also interfere with the typical career development for student-athletes. When student-athletes strongly identify with their athletic identity, they are more likely to overcommit to the pursuit of professional athletic careers and under commit to or “foreclose” on other nonathletic professions (Miller & Buttell, 2018). The term “identity foreclosure” was coined by Erikson in 1956. He suggested that identity foreclosure occurs when “people who have committed to an occupation or an ideology without first engaging in exploratory behavior” (Good et al., 1993, p. 2).

Unfortunately, many student-athletes leave their higher education institutions ill prepared for a career outside of sport because they did not engage in proper career-related exploratory behaviors that are expected at the undergraduate level (Beamon, 2012; Harrison et al., 2011). According to Pflum et al. (2017), student-athletes enter higher education with the mindset of a person pursuing professional athletics, which further strengthens their athletic identity. According to Brewer and Petitpas (2017), many student-athletes spend so much time and energy on a sport that they do not explore alternate academic and social activities, which impedes their career development and promotes identity foreclosure. An individual’s level of engagement in sports can cause
them to abandon other interests that require a significant amount of time (Harrison et al., 2011). For example, a student-athlete’s schedule includes practices, games, study hall, and film sessions that often conflict with time for other endeavors (Harrison et al., 2011). Watson (2016) claimed that “student-athletes who endorse a strong athletic identity often neglect the academic and social roles and responsibilities associated with their college experience” (p. 731). The question remains if this athletic identity phenomenon extends to all student-athletes, no matter the level of competition, or are there unique divisional differences that need to be clarified? The next section frames the specific research problem that is related to athletic identity and identity foreclosure for student-athletes in the United States.

**Problem Statement**

The relationship between athletic identity and identity foreclosure in student-athletes has received limited attention over the last decade by only a handful of researchers, particularly in highly competitive environments where athletes receive scholarships, such as in NCAA division schools and NJCAA DI and DII schools (Beamon, 2012; Borak, 2018; Brewer et al., 2012; Harrison et al., 2011). Borak (2018) examined student-athletes’ athletic identity and identity foreclosure levels at an NJCAA DI program located in a suburban area, and there showed levels of athletic identity and identity foreclosure increase as competition increased. Consequently, DII athletes have higher measurements of athletic identity than DIII student-athletes. However, this line of research continues to be limited in scope and more replications are needed across DII and DIII levels. For example, student-athletes who attend NJCAA DIII schools do not receive
scholarships, and their level of competition does not compare to DI programs (Brewer et al., 2012).

Demographic factors have been found to influence the link between athletic identity and identity foreclosure among student-athletes. Researchers have identified group differences based on gender, sport played, race, and level of competition in NJCAA schools as factors influencing or interacting with athletic identity and identity foreclosure (Beamon, 2012; Borak, 2018, Harrison et al., 2011). For instance, Harrison et al. (2011) found levels of athletic identity and foreclosure rates higher in African American male football and basketball players than in White male players in the same sports. Similarly, Borak (2018) reported significant differences in identity foreclosure based on gender and the sport played among DI NJCAA college athletes. Borak (2018) also noted a positive relationship between athletic identity and identity foreclosure in student-athletes ($r = 0.25$) and recommended that future research be conducted on student-athletes who participate in DIII athletic programs on an urban campus.

In order to extend this limited body of research, this present study partially replicated and extended the study by Borak (2018) with NJCAA DII and DIII student-athletes from urban environments in the northeastern United States. Colleges in urban areas are known to be more racially and ethnically diverse than colleges situated in suburban areas, potentially resulting in different outcomes regarding the relationship between athletic identity and identity foreclosure. This present study’s target sample came from the SUNY system, which is affiliated with both DII and DIII in the NJCAA. The colleges in this study were in the Southern Tier of New York State. This region is notably diverse, and students have access to many career exploration activities during
their time at school. Therefore, the distinct setting of this SUNY system offers a distinctive experience for student-athletes from diverse backgrounds compared to the experiences of those who compete in more competitive and isolated suburban schools, potentially demonstrating lower levels of athletic identity and identity foreclosure.

**Theoretical Rationale**

Social identity theory served as the theoretical framework for this study. The theory also provides a framework for considering group behaviors, attitudes, and the emotions displayed toward ingroup members and outgroup members (Hawley et al., 2014). Social identity theorists have also suggested that an individual’s sense of self-concept depends on the group in which they belong (Rees et al., 2015). Hawley et al. (2014) explained that individuals attribute meanings to the roles they identify within social environments. For this present study, student-athletes considered their membership in a group (e.g., the team) to be central to their self-concept. Tajfel first introduced social identity theory in the early 1970s to study ingroup and outgroup behavior. Tajfel (1970) learned that people assigned more points to their group than other groups (Rees et al., 2015). Tajfel’s (1970) study of ingroup and outgroup behavior showed how individuals identify and act as a group (Huddy, 2001). Huddy (2001) explained that the premise of studying ingroup and outgroup behavior is to differentiate one group from another by promoting a positive social identity.

Social identity theory was helpful in this study of student-athletes’ athletic identity and identity foreclosure because students develop their identity through skills acquisition and social interaction with team members while competing in sports (Brewer et al., 2012). Social identity theorists explore individuals’ sense of who they depend on
and the groups (e.g., an athletic team) to which they belong (Rees et al., 2015). How individuals define themselves impacts their behavior and social interaction in team sports (Harrison et al., 2011), and their identity as a group member (e.g., sports team) defines their sense of belonging within the ingroup (Rees et al., 2015). Rees et al. (2015) asserted that successful groups form solid bonds and cohesiveness, and group members complement each other and believe they can meet their needs by working together toward a common goal. Conversely, Rees et al. added that when individuals do not identify with other groups (e.g., college clubs), they view others as members of outgroups. Concerning the outgroup, the individual develops an us-versus-them mentality (Slater et al., 2014).

The central tenets of social identity theory informed this study’s research questions because the theory can be used to explain how a student-athlete’s identity as a member of an ingroup diminishes other parts of themselves (e.g., academic and career identities). As a result, the students’ athletic goals take precedence over their academic and career ambitions. According to social identity theory, individuals develop their self-concept based on the group to which they belong, which further influences their identity development. In the context of this study, social identity theory was used to explain how students develop their identity as an athlete based on their membership within an athletic team, which, in turn, influences their commitment to a career outside of sports. In this sense, a career outside of sports represents an outgroup, which is opposite the ingroup represented by their athletic team membership.

Statement of Purpose

The purpose of this present study was to replicate and extend the Borak (2018) study by quantitatively describing the levels of athletic identity and identity foreclosure
among student-athletes across six DIII NJCAA colleges in the southern region of New York State. Thus, according to social identity theory, many student-athletes consider their membership on a sports team to be central to their self-concept over other lesser identifying memberships (e.g., academic, career, gender, worker, student, race or ethnicity). This study was designed to determine how central the student-athlete identity was to the DIII student-athlete participants, how committed these student-athletes were to pursuing professional athletic careers without exploring alternatives outside of professional sports, and if a relationship existed between athletic identity and identity foreclosure and the strength and direction of that relationship. Finally, this present study also explored demographic differences based on race, gender, and sport played.

**Research Questions**

The three research questions to be answered by the data gathered by the questionnaires and the corresponding hypothesis for each research question follow:

1. What are the levels of athletic identity and identity foreclosure for junior college student-athletes across the six NJCAA colleges?

   Hypothesis 1: Junior college DIII student-athletes will report low levels of athletic identity (i.e., a score of 7–11 on the AIMS) and identity foreclosure (i.e., a score of 12–28 on the SSMIF).

2. To what degree do athletic identity and identity foreclosure correlate among student-athletes across the six DIII NJCAA colleges?

   Hypothesis 2: There will be a significant positive relationship between athletic identity and identity foreclosure for student-athletes across the six DIII NJCAA colleges.
3. Are there significant group differences in athletic identity and identity foreclosure scores after controlling for race, gender, and sport played?

Hypothesis 3: There will be statistically significant differences in the measures of athletic identity and identity foreclosure when controlling for sport played, race, and gender for student-athletes across the six DIII NJCAA colleges.

Significance of the Study

This study is significant because it highlights potential differences in athletic identity and identity foreclosure in student-athletes in DIII NJCAA colleges located in a suburban setting. Knowledge generated by this study can be used to aid school and athletic administrators who make decisions and shape policy for student-athletes. Students who live in suburban settings are often considered at-risk for dropping out of college (Melendez, 2016). If school and athletic administrators understand student-athletes’ levels of athletic identity and identity foreclosure, then they could implement programs to prevent unwanted outcomes associated with high levels of identity foreclosure. For example, career support programs might be implemented with student-athletes to raise their awareness of career opportunities after graduating from college. In addition, if significant differences are noted based on gender, race, or sport played, custom programs can be developed to target specific student groups to reduce the likelihood of overcommitting to a career in sports without exploring other alternatives.

Definitions of Terms

Athletic identity – the degree of strength and exclusivity to which a person identifies with the athletic role (Brewer et al., 1993). How committed an athlete is to the
athletic role will determine their degree of self-concept. Also, the degree of self-concept determines an athlete’s social identity, which defines preferences of one identity over others (Rees et al., 2015). The AIMS (Brewer et al., 1993) measures an individual’s identification with the athlete role across three factors: social identity, exclusivity, and negative affectivity.

*Career identity* – the means by which an individual links their interests and competencies to acceptable professional roles (Murdock et al., 2016).

*Career maturity* – the ability to make a reasonable and responsible decision knowing the relevant variables (Houle & Kluck, 2015).

*Community college* – a 2-year government-supported secondary education institution that offers an associate degree.

*Division II* – college and university athletic programs that choose to offer scholarships to their student-athletes.

*Division III* – college and university athletic programs that choose not to offer scholarships to their student-athletes.

*Exploratory behavior* – the tendency to study or investigate a new environment.

*Identity foreclosure* – the experience of committing to a career without exploring alternative options (Erikson, 1956). The sport-specific measure of identity foreclosure (SSMIF) measures athletes’ commitment to their role as an athlete and exploratory behavior in the context of a specific sport across three factors: future commitment, present commitment, and exploratory behavior.
Junior college – a secondary education institution that offers courses for 2 years beyond high school.

Student-athlete – an undergraduate on a college sports roster.

Chapter Summary

This study was an exploration of the relationship between athletic identity and identity foreclosure, the strength of the relationship, and the differences among demographic groups (i.e., race, gender, and sport played). The participants played sports at six DIII NJCAA colleges in the Southern Tier of New York State. Two measurement tools were used: the AIMS and the SSMIF. Social identity theory informed the research questions because of its usefulness in explaining how students’ identities as athletes and membership in an ingroup diminishes other parts of their identity. The results of this study can be used to aid school and athletic administrators who make decisions and shape policy for student-athletes.

A review of the literature regarding identity formation, athletic identity, and athletic identity foreclosure among student-athletes is presented in Chapter 2. The research design, methodology, and analysis are discussed in Chapter 3. Chapter 4 presents a detailed analysis of the results and findings, and Chapter 5 discusses the findings, implications, and recommendations for future research and practice.
Chapter 2: Review of the Literature

Introduction and Purpose

The purpose of this study was to quantitatively describe the levels of athletic identity and identity foreclosure of student-athletes across six DIII NJCAA colleges in the Southern Tier of New York State. This study was also designed to determine if significant differences exist in athletic identity and identity foreclosure based on race, gender, ethnicity, and the sport played. Finally, this study was an exploration of the relationship between athletic identity and identity foreclosure and the strength of that relationship. The literature review provides a summary and analysis of identity formation, athletic identity, and athletic identity foreclosure among student-athletes. Identity formation theory is discussed as a basis for athletic identity and athletic identity foreclosure, which is the primary focus of the literature review. Although the focus of this study was on measuring the levels of athletic identity and identity foreclosure at a suburban community college, the literature for this population was limited, with more research conducted on student-athletes and graduates from the NCAA institutions. Hence, the majority of the literature presented here relates to NCAA graduates and students. The review provides an overview of identity development and the factors known to influence identity formation, particularly in adolescents. Next, a description and analysis of the literature relating to athletic identity and identity foreclosure are presented. Finally, the researcher introduces various measures of athletic identity and identity foreclosure.
Identity Development

Several researchers have examined identity development. Erikson (1968) noted a series of eight stages in an individual’s psychological development: (a) trust versus mistrust (i.e., moral recognition), (b) autonomy versus shame/doubt (i.e., will to be oneself vs. self-doubt), (c) initiative versus guilt (i.e., anticipation of roles vs. role inhibition), (d) industry versus inferiority (i.e., take on an identification vs. the sense of futility), (e) self-certainty versus self-consciousness (i.e., identity vs. identity confusion), (f) intimacy versus isolation versus bisexual confusion (i.e., sexual polarization), (g) generativity versus stagnation versus authority confusion (i.e., leader vs. followership), and (h) integrity versus despair (i.e., ideological vs. confusion of values). According to Erikson (1968), the college years represent a critical time for identity formation, as this is often a time when adolescents develop a true sense of self. Erikson referred to this as Stage 5, or the crisis of identity versus confusion. During this time, adolescents begin to experience adulthood and search for their true selves (Erikson, 1968). Role models, peers, family members, coaches, professors, and athletes influence their identity.

Marcia (1966) extended the work of Erikson by examining the development stage of adolescence. Marcia and Josselson (2013) noted that individuals experience four identity stages during adolescence: identity diffusion, identity foreclosure, identity moratorium, and identity achievement. Marcia (1966) defined “identity diffusion” as occurring in individuals who have not developed their identities and who remain by themselves, unwilling to commit to any roles. Conversely, identity foreclosure occurs when an individual makes a solid commitment to an ideology without exploring an
alternative (Marcia & Josselson, 2013). “Identity moratorium” happens when an individual experiences a crisis and begins to explore alternative roles; if the alternative is chosen, they have arrived at the final stage of identity achievement (Marcia & Josselson, 2013). Much of the literature on adolescent identity development focuses on identity foreclosure (Marcia, 1966). To fully understand identity development, one must first understand ego identity and identity diffusion. The studies (Erikson, 1968 & Marcia, 1966) demonstrate that identity development begins during the adolescent age and continues through the college years. During that period, the individual identifies with role models. The role models provide the individual with career options to explore. As career development progresses, the individual makes choices and commits to a career path.

**Ego Identity**

Several studies examined the impact of ego identity on athletic identity. Erikson (1968) was the first researcher to explore ego identity and identity diffusion. Ego identity status refers to the conscious sense of self that develops through stages and social interaction (Erikson, 1968). Identity diffusion status refers to an individual’s failure to commit to an identity and lack of effort to form one. Categorizing an individual’s status as identity development requires attention to two variables: crisis and commitment. A crisis involves an adolescent’s period of engagement in choosing alternatives, and commitment involves individuals’ degree of personal investment in themselves. Once individuals proceed from the crisis stage to the commitment stage, they become committed to an occupation and political ideology (Erikson, 1968).

In addition to the crisis and commitment variables, Erikson (1968) predicted that the level of ego identity directly correlates to foreclosure status and self-esteem. The
results of Erikson’s study indicate that individuals with high ego identity receive lower scores on stress tests, as well, individuals with high ego identity set more realistic goals compared to individuals with low ego identity. Also, a positive relationship exists between the measurements of ego identity and self-esteem (Erikson, 1968). Beronsky et al. (2013) later confirmed this relationship.

Beronsky et al. (2013) examined longitudinal associations between ego identity and self-esteem among 167 undergraduate college psychology majors. Participants completed a questionnaire describing the association between ego identity and self-esteem. The study showed a positive association between ego identity and self-esteem.

Miller (2009) examined sport-related identities (e.g., athlete vs. jock), goal orientations, primary sports ratings, and conformity to masculine norms to better understand “toxic jock” identity, which is associated with undesired behaviors. A total of 581 undergraduate student-athletes, who participated in a more extensive study on athletic involvement at a large northeastern U.S. public university, completed a questionnaire. Miller (2009) ultimately found that students who identified with a jock identity positively associated with masculine norms and an ego-oriented approach to sports. In contrast, an athlete’s identity did not relate to masculine norms or an ego-oriented process (Miller, 2009). The study showed the ability of individuals to explore the sense of who they are and with what they identify. The majority of student-athletes identified themselves as athletes.

**Factors Influencing Identity Formation**

Several researchers have examined factors influencing identity formation. Identity formation can be challenging for adolescents (Erentaite et al., 2018), and multiple factors
influence it (e.g., gender, socioeconomic status, school involvement, family structure). For example, adolescents from low socioeconomic backgrounds struggle to develop clear goals (Kroger et al., 2009). Individuals without clear goals leave school without a clear identity commitment, which may hinder their development (Erentaite et al., 2018). Erentaite et al. (2018) demonstrated this concept in their study of 916 students in Grades 9–12 from a Lithuanian high school. Erentaite et al. administered a questionnaire at the participants’ high school to determine links between the adolescents’ school experiences and their identity formation. The results show that active engagement in learning at the high school helped in identity formation. Also, adolescents who participated actively in school activities became more inclined toward the identity formation process.

Gender has also been found to influence identity formation during adolescence. In a longitudinal case study of change and stability in identity formation, Klimstra et al. (2010) found that girls demonstrated more maturity than boys regarding identity formation in early adolescence. Klimstra et al. (2010) studied 923 early-to-middle adolescents at junior high and high schools in the province of Utrecht, Netherlands. The study’s purpose was to provide a comprehensive view of change and stability in identity formation. The results show that the levels of commitment remained stable during adolescence for both genders. Though girls demonstrated more maturity than boys in early adolescence, the boys caught up to them in late adolescence. Gonzalez-Serrano et al. (2020) later confirmed these findings.

Gonzalez-Serrano et al. (2020) conducted a cross-sectional survey in their study of 256 adolescents aged 16–19 (male = 55.5%, female = 44.5%) living and attending high school in Spain. The researchers considered how gender contributed to what variables
most influenced the participants’ intention to be physically active following graduation from high school. They also sought to determine if gender had a moderating effect on their athletic identity and self-concept. The results demonstrated that males showed statistically significant higher scores in athletic identity compared to females (Gonzalez-Serrano et al., 2020).

Gonzalez-Serrano et al. (2020) reviewed in this section examined factors influencing identity formation. They demonstrated that gender, socioeconomic status, school involvement, and family structure influence identity formation. For example, individuals from low socioeconomic backgrounds struggled to develop clear goals, which delayed their identity formation.

**Athletic Identity**

Athletic identity refers to the degree to which an individual identifies with the role of an athlete (Brewer et al., 1993). Researchers have demonstrated that athletic identity develops in adolescents beginning around age 10 and persists into college-age (Houle et al., 2010). Upon entering college, student-athletes have a dual identity (i.e., athlete and student). Unfortunately, the athletic role exerts time demands that exceed the student role, diminishing the focus on academics (Huml, 2018). Several factors, both external and internal, have been found to influence athletic identity development in student-athletes. These factors include college divisional structure, institutional sport policies, sport played, gender, racial identity, and stress perception. The most commonly reported factor was the college divisional structure (Huml, 2018).
College Divisional Structure

College divisional structure must be considered when exploring athletic identity formation. Student-athletes who attend DI and DII colleges receive a scholarship to compete, and many DI programs generate revenue. These two characteristics relate to higher competition and athletic identity (Beamon, 2012; Feltz et al., 2013; Harrison et al., 2011; Watson, 2016). In addition, sports with a higher level of competition tend to be more culturally popular, which researchers have also linked to higher levels of athletic identity (Rasquinha & Cardinal, 2017).

Rasquinha and Cardinal (2017) established the association between competitive sport level, cultural popularity, and athletic identity in their study of 385 student-athletes from a large Canadian university. The researchers sought to determine the association of athletic identity by competitive sport level and cultural popularity. Participants completed the AIMS and a questionnaire about their level of sport involvement. Results show higher athletic identity among the student-athletes participating in high-level sports that were culturally popular (Rasquinha & Cardinal, 2017).

Lupo et al. (2017) reported similar findings regarding competition level and athletic identity in their study of 750 Italian student-athletes competing in national sub-elite, national elite, and international-level college sports. Lupo et al. (2017) found that student-athletes who competed in national elite-level sports reported higher athletic identity than sub-elite student-athletes. Research has also shown that student-athletes who play in more select settings are more susceptible to stereotype threats (Lupo et al., 2017).

Feltz et al. (2013) sought to determine the extent to which collegiate student-athletes are susceptible to stereotype threat and the factors that predict it. Participants
included 318 student-athletes from across the United States, representing 11 higher education institutions (DI = 4; DII = 3; DIII = 4). Feltz et al. identified two dependent variables (i.e., athletic identity and athletic ability) and four independent variables (i.e., gender, race/ethnicity, type of sport, and division level). The researchers measured academic identity using the AIMS. They found that athletic identity was more prominent for DI athletes than DIII athletes. Lastly, student-athletes who participated in high-profile sport felt more susceptible to stereotype threat (Feltz et al., 2013).

Four-year colleges compete in the NCAA, and 2-year programs compete in the NJCAA. Huml (2018) examined NCAA divisional structures and the impact on athletic identity using the AIMS. Huml included 17 NCAA institutions using a random sampling technique stratified by division and invited 7,098 student-athletes to participate. The researcher received 576 responses, achieving an 8% response rate, representing athletes from all three NCAA divisions. Student-athletes from DI and DII institutions reported similar levels of athletic identity, and DIII student-athletes showed a lower level of athletic identity. The lower level of athletic identity implied that DIII athletes were likely to experience a higher level of academic achievement because they did not focus primarily on athletics (Watson, 2016).

An athletic program’s revenue-generating status represents another critical aspect of a school’s divisional structure. Many DI colleges generate revenue and are associated with higher levels of competition and athletic identity (Sturm et al., 2011). Sturm et al. (2011) examined levels of athletic identity and student identity among DI and DIII athletes. The sample size of 188 consisted of athletes at all levels (i.e., freshmen, sophomores, juniors, and seniors). Both female and male athletes completed
questionnaires. Coakley (2009) asserted that DI and DIII institutions operate differently when relating to athletes and academics. However, little is known about whether the athletes who attend schools at different NCAA division levels have different degrees of athletic identity. Sturm et al. (2011) posited that responses to the study questionnaire showed that many student-athletes entered college with high academic expectations. After their first year, they detached from academics and started taking easier courses and shifting to less challenging majors with the sole purpose of maintaining their eligibility to play sports. Sturm et al. decided to use the AIMS to assess the students’ level of athletic identity to determine whether student-athletes detached from academics once they matriculated after their first semester of college. The results show that DI schools do not promote athletic identity any more than DIII institutions. Still, the DIII student-athletes showed a lower level of athletic identity compared to the DI student-athletes (Sturm et al., 2011).

In most college athletic studies, researchers focused on the NCAA DI and revenue-generating sports. However, a large pool of U.S. community colleges sponsor athletic programs. Approximately 75,000 community college student-athletes participate in approximately 500 community and junior college athletic programs (Pflum et al., 2017). Nearly 60% of all community colleges reside in rural or suburban areas. Pflum et al. (2017) studied 200 student-athletes from two midwestern community colleges and showed many student-athletes viewed community college as a stopgap to the NCAA. Psychologically, they considered the NCAA a step closer to being a professional athlete. Horton (2009) disagreed with the idea that community college serves as a stopgap to the NCAA.
According to Horton (2009), community colleges play an essential role as an entryway for students to explore higher education at a meager cost. The researcher added that community colleges provide flexibility within the local community and opportunities for underserved nontraditional students. Miller (2018) asserted that community colleges also foster sponsorship opportunities and have looked at athletics to increase enrollment. Pflum et al. (2017) noted that “private two-year colleges, in particular, find it helpful to demonstrate an inclusive environment through common activities for students to participate in, such as basketball game attendance and the collateral elements that can be attached to athletics” (p. 533). Private institutions may attach dances, parades, pep rallies, the sale of standard apparel, and spirit days to athletics to build school spirit. Horton (2009) agreed that athletic programs can engage students.

Pflum et al. (2017) noted that athletic status engaged student-athletes, and according to Miller (2009), student-athletes viewed their community college experience as beneficial and productive. Miller also asserted that overall, both the institution and athletes benefited from their experience. The student-athletes expressed pleasure, and the college utilized athletics to increase enrollment and validate their image (Miller, 2009).

Some community college student-athletes compete for the love of their sport, and others aspire to transfer to the NCAA with the hope of making it to the professional leagues (Kissinger et al., 2011). Kissinger et al. (2011) conducted a study of 400 community college student-athletes to understand student-athletes’ counseling needs. The researchers surveyed the participants about their participation in sports and found 89.1% would leave college for a professional career. In addition, they found 48.7% planned on playing sports at a 4-year institution. Kissinger et al. (2011) utilized the AIMS to measure
the athletes’ identity, and the results supported the notion that student-athletes with high levels of athletic identity tend to avoid counseling. Kissinger et al. also pointed out that participation in intercollegiate athletics has been associated with low grades and a sense of entitlement. This negative stereotype permeates classrooms and school culture. Kissinger et al. (2011) showed that 32% of those surveyed aspired to become a professional athlete, which adds pressure to the counselors’ jobs because these student-athletes focus more on becoming a professional athlete than on academics. With the players’ aspirations to become professional athletes, career decisions and career maturity play an integral part in the athletes’ growth.

The studies reviewed in this section acknowledged that colleges are divided into three divisions. DI and DII schools provide full athletic scholarships, which cover tuition, fees, books, room, and board. DIII schools do not offer athletic scholarships. Researchers have noted that the more competitive programs offered athletic scholarships, and students in these programs possessed a high level of athletic identity and identity foreclosure (Beamon, 2012; Feltz et al., 2013; Harrison et al., 2011).

**Institutional Sport Policies**

Researchers (Fernandes et al., 2019) have examined the impact of institutional sport policies on student-athletes’ identities and have shown that the most engaged student-athletes had higher athletic identity levels than the student-athletes who were less involved. An institution’s sport policies have also been found to influence a student-athlete’s athletic identity. Fernandes et al. (2019) conducted a cross-sectional survey of 201 Portuguese student-athletes. The researchers sought to evaluate the effects of three institutional sport policies on student-athletes’ identity and motivation. At the time of
In their study, three types of sports organizations existed in Portugal. In Type 1, the higher education institution completely structures the sport. In Type 2, a student association within the higher education institution structures the sport, and in Type 3, an organization outside of the higher education institution structures the sport. Fernandes et al. (2019) recruited participants from each type of institution (Type 1 and Type 2) for comparison and used two questionnaires: the Baller Identity Measurement Scale and the Student-Athletes Motivation Towards Sports and Academics Questionnaire. The Fernandes et al. results indicate that the participants who played sports at a Type 2 institution, where a student association partnered with the university to manage the sport, reported they were more involved in the decision-making process and were further motivated to pursue a career as an athlete, thus they had higher athletic identities. However, it should be noted that Portugal does not integrate sports and academics at the same level as educational institutions in America (Fernandes et al., 2019). For instance, institutions in Portugal do not recognize student-athletes as different from the academic student population regarding social and academic structure. Consequently, their student-athletes do not perceive themselves as different from their peers because they play a sport in college. Therefore, these results might not apply to U.S. student-athletes.

Fernandes et al. (2019) showed the impact institutional sport policies have on student-athletes' identities. It showed that the students who were most engaged because of the institutional policies in athletics had higher levels of athletic identity compared to the student-athlete who were less engaged.
Several researchers examined the impact of demographic factors on athletic identity. Melendez (2016) examined the impact of race or ethnicity, gender, and athletic participation on adjusting to college in an urban commuter setting. Of the 162 college freshmen, including 50 White, 36 Black, and 76 Hispanic/Latino students who participated in the study, 29.6% identified as student-athletes. Melendez (2016) recruited all participants from a commuter college on the East Coast of the United States. The researcher used the Student Adaptation to College Questionnaire (SACQ) to test the independent variables (i.e., race/ethnicity, gender, and athletic participation). The study supported three hypotheses. Hypotheses 1 stated that female athletes would report higher scores on academics and social adjustment. Further, Hypothesis 2 stated that White students would report higher scores than Black and Hispanic/Latino students. The SACQ scores in this case were insignificant. The third hypothesis stated that student-athletes would report higher SACQ scores than nonathletes. Again, the SACQ scores were insignificant. Finally, the SACQ showed that sports participation could enhance specific developmental experiences that help student-athletes transition into college (Melendez, 2016).

Sturm et al. (2011) compared athlete identity and student identity for DI and DIII students. The researchers recruited 188 participants and showed that DI student-athletes demonstrated a stronger athletic identity than student identity. Also, they showed the environment at DIII schools and noncompetitive environments promoted athletic identity just as much as competitive DI schools. The study also showed that the competitive
sports programs had higher levels of athletic identity compared to noncompetitive sports programs (Sturm et al., 2011).

**Gender**

Several researchers have examined gender's impact on athletic identity. Consistent evidence exists to show the significant influence of gender on athletic identity (Anthony & Swank, 2018; Melendez, 2010; Williams et al., 2014). Melendez (2010) conducted a qualitative study of 101 varsity student-athletes from three universities to determine if individuals’ gender influenced their athletic identity during their freshmen and sophomore years of college. The study showed that male athletes reported higher athletic identity than female athletes (Melendez, 2010).

Williams et al. (2014) investigated athletic identity among African American college student-athletes. The researchers used the AIMS to survey a convenience sample from classes in the department of health and human performance at a southeastern, private, historically Black college and university. The analysis revealed a significant difference in athletic identity according to gender and class. For example, seniors reported a higher athletic identity score than first-year students, and men reported higher athletic identity levels than women (Williams et al., 2014).

Anthony and Swank (2018) examined racial identity, identity status, gender, and athletic identity among male and female Black college student-athletes ($N = 98$) who attended predominantly White institutions in the United States with a DI status in football. The demographic questionnaire addressed gender, college classification, sport, and scholarship status. In addition, the researchers measured racial identity using the Multidimensional Inventory of Black Identity (Sellers et al., 1998) and athletic identity
using the AIMS (Brewer et al., 2012). The results indicated that only gender predicted identity status.

The studies in this section showed that male athletes have stronger levels of athletic identity compared to female athletes. Moreover, the studies showed that males at the lower division levels had higher levels of athletic identity compared to females on the same level (Anthony & Swank, 2018).

Race

Several studies examined the impact of race on athletic identity. In the United States, Black male and female students account for less than 4% of all students who attend predominantly White institutions; yet, they account for more than half of football and basketball players (Bimper, 2014). Therefore, much of the literature on the racial identity of student-athletes in the United States focused on Black racial identity. Black racial identity represents the “significance and qualitative meaning that individuals attribute to their membership within the Black racial group within their self-concepts” (Sellers et al., 1998, p. 23). According to the literature, racial identity and athletic identity are closely linked, and Black student-athletes often demonstrate higher levels of athletic identity than their White counterparts (Anthony & Swank, 2018; Bimper, 2014; Harrison et al., 2011; Melendez, 2010).

Bimper (2014) examined how athletic and racial identities predicted academic outcomes for 255 Black student-athletes participating in NCAA DI football from seven predominantly White institutions. The researcher conducted a self-reporting questionnaire using the AIMS. The study results indicate a positive relationship between athletic identity and racial identity. Also, a direct negative correlation existed between
poor academic performance and a high degree of athletic identity. Harrison et al. (2006) and Melendez (2010) noted similar findings.

Harrison et al. (2011) assessed the relationship between race and athletic identity among 109 NCAA DI football student-athletes from a large, predominantly White institution. The researchers used the AIMS to measure responses to determine the degree of athletic identity. The study results indicate that Black football student-athletes had a higher athletic identity than their White counterparts.

Melendez (2010) examined the impact of race, gender, and athletic identity on the college adjustment of a group of freshmen and sophomore varsity student-athletes. Melendez’s (2010) quantitative study consisted of 101 varsity student-athletes from three universities. The AIMS and SACQ were utilized. The results of the survey show a high athletic identity among Black athletes compared to White athletes, and male athletes reported a higher athletic identity than female athletes. In addition, the higher the male athletes’ scores, the lower the academic and personal-emotional adjustment scores. However, these findings conflicted with a more recent study by Anthony and Swank (2018) who did not find a significant relationship between athletic identity and racial identity.

The studies reviewed in this section addressed the impact of race on athletic identity. The studies showed a direct correlation between racial identity and athletic identity. Black student-athletes reported higher levels of athletic identity compared to their White peers (Bimper, 2014; Harrison et al., 2006; Melendez, 2010; Sellers, 1998).
Stress Perception

Watson (2016) examined the impact of stress perception on athletic identity and asserted that student-athletes encounter tremendous stress resulting from academic and athletic pressure. The researcher added that those who place too much emphasis on athletics stand a greater risk of depression, anxiety, eating disorders, and substance abuse. Watson (2016) pointed to athletic pressures such as an exhaustive training schedule, internal and external competition, anxiety related to play, and burnout. Watson (2016) examined the relationship between athletic identity and stress perception at a DI community college, recruiting participants from three separate community colleges in the southern United States. A total of 144 student-athletes agreed to participate. To determine the extent of the participants’ athletic identity, Watson (2016) administered the 10-item AIMS. Furthermore, to assess the perceptions of stress on the student-athlete, the researcher administered the Perceived Stress Scale (PSS). The PSS is a 10-item, self-reporting instrument that rates the degree to which respondents have experienced stress in different life situations. Watson’s (2016) analysis of the PSS and AIMS scores aligned with student-athletes’ stress and athletic identity levels.

In addition, Watson (2016) examined the academic and athletic pressures experienced by student-athletes. Academically, the study addressed the pressure of maintaining the necessary grade-point average to complete and retain an athletic scholarship (Watson, 2016; Windham et al., 2014). Athletically, the study addressed the impact of training and playing schedules on athletic identity.
Outcomes Associated With High Levels of Athletic Identity

Several researchers have examined the outcomes associated with high levels of athletic identity. Many student-athletes spend so much time and energy on sports that they do not explore other academic and social activities which may impede their development and progress (Brewer & Petitpas, 2017). For instance, in a recent qualitative study of the experiences of four Black women college athletes at a DI predominantly White institution, Cooper and Jackson (2019) found that all participants prioritized their athletic role over academics.

As a result of focusing primarily on athletics, student-athletes detach from academics and other social activities. Consequently, many leave higher education institutions ill-prepared for a career in fields unrelated to athletics (Beamon, 2012). Furthermore, the student-athletes’ primary focus on athletics leads to athletic identity foreclosure (Brewer & Petitpas, 2017). According to Harrison et al. (2011), a high level of athletic engagement causes athletes to abandon alternative interests that may occupy significant amounts of time because their schedule is already filled with practices, games, and study halls. Such outcomes impede the development and progress of student-athletes (Brewer & Petitpas, 2017).

Multiple researchers examined the impact of career identity, development, and maturity on athletic identity (Cabrita et al., 2014; Murdock et al., 2016). Murdock et al. (2016) addressed collegiate athletes and career identity. The researchers aimed to evaluate a group-administered intervention program designed to impact student-athletes’ career transition from college to the real world. With the implementation of the Life After Sport Scale, they evaluated the program being administered. The Life After Sport Scale
measures African American athletes’ perceptions of life after sport (Murdock et al., 2016). Murdock et al. (2016) noted that “the [Life After Sport Scale] was designed to measure athletic identity and self-concept, along with perceptions of one’s life in the areas of academics, social life, and career development” (p. 402). Participants included 110 males and females DI student-athletes. Murdock et al. used IBM’s Statistical Package for the Social Sciences (SPSS) to analyze demographic variables such as gender, race, and grade-point average. Based on the results, attendance at one or more career intervention workshops did not show a difference in the variables. Further, the results showed less variance in career-athletic identity than gender and grade-point average.

Cabrita et al. (2014) explained they “examined the association between athletic identity, career decision making, self-efficacy, future time attitude, gender, and age to explore the process of future career selection in athletes” (p. 471). Participants’ ages ranged from 13 to 25 years. The participants consisted of 153 athletes from different sports, and the variables listed above (athletic identity, career decision making, self-efficacy, future time attitude, gender, and age) were measured using the AIMS, the Career-Decision-Making Self-Efficacy Scale short form, and the Time Attitude Scale. The results indicate that individuals with high levels of athletic identity were likely to choose a career in athletics. Also, individuals with higher levels of athletic identity scored higher on the Career-Decision-Making Self-Efficacy Scale. In conclusion, only athletic identity significantly impacted an individual’s career choice.

Researchers have conducted additional studies regarding student-athlete career maturity. Career maturity refers to the ability to make a reasonable and responsible decision knowing what the variables are to make such a decision. Houle and Kluck
(2015) examined the potential relationship between athletic identity and career maturity in 221 student-athletes at a southeastern U.S. university. To measure athletic identity and maturity, the researchers used the AIMS for athletic identity and career decision self-efficacy for maturity. The results show that scholarship recipients had high levels of athletic identity and believed they could financially sustain themselves after graduation by becoming a professional athlete. Also, the female athletes who participated scored higher on maturity than male athletes. Regarding race and ethnicity, Black students measured higher on athletic identity compared to their White counterparts (Houle & Kluck, 2015).

Additionally, White students scored higher on the maturity measurement compared to Black students (Houle & Kluck, 2015). The study provided valuable insight regarding athletic identity and career maturity for student-athletes, but limitations existed. The study was very narrow and lacked generalizability because it took place at one university. To get a broader view, the researchers recommended conducting a similar study at more than one school. Also, the findings were subjective, which opens the results to bias because of self-reporting. A longitudinal design may work better for this kind of study. The research could track participants beyond their college days. Further research may be possible to examine the differences between athletes and nonathletes (Houle & Kluck, 2015).

The research in this section shows that participant athletes lacked interest in career intervention workshops. Moreover, individuals with high athletic identity chose athletics as a career, especially the scholarship recipients (Houle & Kluck, 2015). Female and White students measured higher on the maturity level compared to Black male
student-athletes (Houle & Kluck, 2015). Finally, Black male student-athletes measured higher on athletic identity than their White counterparts (Houle & Kluck, 2015).

**Athletic Identity Foreclosure**

Athletic identity foreclosure refers to a phenomenon where student-athletes prematurely commit to an occupation without engaging in exploratory behavior (Brewer & Petitpas, 2017). Erik Erikson coined the term in 1956 in discussions of human psychosocial development. Later, in 1966, Marcia stated that foreclosure occurs when individuals make a solid commitment to an occupation or an ideology (Petitpas, 1978). During this time of exposure, individuals commit without being faced with a crisis. Crisis happens at each stage of development, and its positive resolution is essential (Erikson, 1968).

Student-athletes experience tremendous physical and psychological demands that compound the time and energy required for sports participation. These pressures restrict their opportunities for exploratory opportunities, which promotes identity foreclosure (Beamon, 2012). Therefore, the failure to explore other occupations leads to academic isolation (Harrison et al., 2011) and a higher risk of identity foreclosure (Miller, 2009). Brewer and Petitpas (2017) noted that “athletic identity foreclosure is a state in which individuals are strongly committed to the athlete role without having engaged in exploratory behavior” (p. 120). Brewer and Petitpas (2017) asserted society and parents accept such roles and explained that identity foreclosure increases relative to athletic identity, resulting in academic detachment.
Gender

Multiple researchers examined gender impact on identity foreclosure. Although female athletes also experience identity foreclosure (Cooper & Jackson, 2019), researchers have closely linked masculinity to higher levels of identity foreclosure in student-athletes (Miller, 2009; Murdock et al., 2016). Miller’s (2009) study of sport-related identities in 581 undergraduate student-athletes reports that the jock identity is positively related to masculine norms. The overemphasis of one social self over others may lead to identity foreclosure. Similarly, Murdock et al. (2016) reported that gender played a significant role in student-athletes’ career identity. The researchers evaluated a group-administered career development program designed to impact students’ career transitions after college. Murdock et al. (2016) also examined the role of gender in athletes’ career identity. Participants consisted of 110 students from a large DI university in the United States. Results demonstrate that gender played a significant role in student-athletes’ career identity. Males in the study needed more support and targeted intervention strategies, but career programming had no impact on student-athlete career identity (Murdock et al., 2016).

Cooper and Jackson (2019) examined the perceptions and experiences of four African American female college athletes at a DI predominantly White institution. Data collection methods included a focus group interview, individual interviews, and a demographic questionnaire. Findings indicate that participation in a college sport was both beneficial and detrimental for the females who participated in the study. The reported benefits consisted of the motivation to enroll in college, a sense of belonging to a group, and access to academic success services. The detriments included time demands
associated with athletics, restrictions on academic majors, and isolation from nonathletic
peers (Cooper & Jackson, 2019). Unfortunately, the detriments, as reported by the
participants, appeared to lead to identity foreclosure.

In conclusion, the research in this section showed male student-athletes are more
inclined to foreclose than female student-athletes. Also, student-athletes experienced
isolation due to the time demands of participating in athletics (Cooper & Jackson, 2019;
Miller, 2009; Murdock et al., 2016).

Race

Research also exists on the impact of race on identity foreclosure. The African
American community places tremendous emphasis on sports socialization (Beamon,
2010). Beamon (2010) asserted that overemphasis on athletic participation leads to lower
levels of academic achievement and higher expectations of professional sports careers as
a means of career advancement. As a result, many Black male student-athletes enter
college academically underprepared, especially those who play football and basketball
(Harrison et al., 2006). Consequently, these athletes make a solid commitment to an
athlete’s role without engaging in exploratory occupational behavior (Beamon, 2012).

Beamon (2010) conducted in-depth ethnographic interviews in a study of sport
socialization of 20 African American male former collegiate athletes from DI universities
all over the United States. Beamon (2010) asked participants if they believed sports were
overemphasized during their socialization process, and if so, how and by whom. Findings
reveal that African American families pushed African American youth toward athletics
because they saw it as an opportunity for a sports scholarship, and the lack of African
American role models outside of sports and entertainment contributed to the perception
of professional athletics as an achievable goal for young African American males, which led to identity foreclosure (Beamon, 2010).

Cooper (2016) conducted a literature review. He developed the excellence-beyond-athletics approach to empower, educate, and inspire Black male student-athletes to maximize their full potential as holistic individuals on and off the field. Through his research, Cooper learned that Black males are disproportionately impacted by athletic identity foreclosure, which means they were less likely to perform well academically or graduate at the same rate as their White students. In response, Cooper (2016) identified best practices for improving Black male student-athletes’ academic experiences. Critical race theory served as a theoretical framework for the approach. The excellence-beyond-athletics approach consists of six holistic development principles: self-identity awareness, positive social engagement, active mentorship, academic achievement, career aspirations, and balanced time management.

Beamon (2014) conducted an ethnographic study of athletic identity foreclosure among African American former student-athletes by interviewing 20 African American men who formerly had played football or basketball at a DI university. The respondents showed a high level of athletic identity foreclosure that was exclusive to the athletic role, despite retirement. They felt strongly that athletics defined who they were as a person. Furthermore, the research showed that their athletic identity foreclosure started at a very young age. All of the respondents had high expectations of playing professional sports. Unfortunately, most of them never achieved that goal. Most had pursued nonathletic careers despite lingering dreams of becoming a professional athlete (Beamon, 2014).
In conclusion, the studies in this section showed that identity foreclosure can start at a very young age. African American families view athletics as an opportunity to earn a sports scholarship that will make college affordable. Also, African American youth are exposed to an imbalanced set of role models comprising mostly individuals from the entertainment industry, especially in the athletic arena (Beamon, 2010; Cooper, 2016; Harrison et al., 2006).

**The Impact of Identity Foreclosure on Career Identity and Career Maturity**

Several researchers examined career identity and career maturity’s impact on identity foreclosure. Career identity and maturity closely relate to identity foreclosure because each of these concepts involves an individual’s work-related commitment and experiences. Career maturity refers to an individual’s readiness to make decisions about their career based on completing specific educational and vocational tasks (Savickas, 1984). An individual has high career maturity if they can make an informed and realistic decision about their career (Levinson et al., 1998). Several researchers have reported that student-athletes may commit to a career in a sport before considering other career interests, indicating athletic identity foreclosure (Linnemeyer & Brown, 2010; Murphy et al., 1996).

Murphy et al. (1996) conducted a study on identity foreclosure, athletic identity, and career maturity in intercollegiate athletes. The sample consisted of 124 student-athletes at an NCAA DI school. Participants represented several sports programs, including men’s and women’s basketball, men’s ice hockey, field hockey, wrestling, men’s and women’s crew, and men’s swimming. Participants included first-year students, sophomores, juniors, and seniors. The study examined the relationship between athletic
identity and career maturity and the relationship between identity foreclosure and career maturity. The researchers used the Objective Measure of Ego Identity Status (Adams et al., 1979) to assess foreclosure identity. The foreclosure scale consisted of 24 items with responses using a 6-point Likert scale ranging from strongly agree to strongly disagree. Murphy et al. (1996) assessed athletic identity level using the AIMS consisted of 10 items, and respondents used a 7-point Likert scale ranging from strongly agree to strongly disagree. Career maturity was evaluated with the Career Maturity Inventory Scale. The results of the measurements show the following: a higher level of maturity among female athletes compared to male athletes—which may be attributed to fewer professional sports for females—and a higher risk of athletic foreclosure for male athletes in revenue-producing sports (Murphy et al., 1996).

Linnemeyer and Brown (2010) surveyed 326 college students and compared their career maturity attitudes, identity foreclosure, and career foreclosure. Participants included 121 fine arts students, 104 general college students, and 101 student-athletes. The researchers measured identity foreclosure using the Objective Measure of Ego Identity Status (Adams et al., 1979), and they measured career maturity using the revised Career Maturity Inventory Scale (Crites & Savickas, 1996). Results indicate that student-athletes spent 21 hours per week on athletic activities, which restricted other roles and activities, such as academics. Further, student-athletes had a significantly higher identity foreclosure level than fine arts and general college students (Linnemeyer & Brown, 2010).

For many student-athletes, the transition from college to postcollege careers represents a struggle, especially for NCAA male DI basketball players (Cummins &
O’Boyle, 2015). Cummins and O’Boyle (2015) investigated the psychosocial factors that impacted DI male basketball players as they transitioned from college to athletic and nonathletic careers after college completion. The participants included existing and former NCAA DI basketball players. A total of nine individuals participated: four athletes who were transitioning and five who had transitioned. Cummins and O’Boyle (2015) conducted semi-structured qualitative phone interviews using interview questions relating to sports and career goals to collect the data. They designed the interview questions in the past tense to make them reflective; then they transcribed the interviews word-for-word to allow for thematic structure. The thematic structure depicted open coding, axial coding, and selective coding. The study provided varied answers from transitioning student-athletes and transitioned student-athletes: the transitioned student-athletes reported feeling unmotivated to pursue a professional athletic career compared to the transitioning student-athletes. Most expressed a desire to be a professional basketball player, especially the transitioning players.

In conclusion, the research shows a higher maturity level among male athletes compared to female athletes, especially in revenue-generating sports like basketball. Finally, transitioning athletes foreclosed at a higher rate than transitioned athletes (Adams et al., 1979; Crites & Savickas, 1996; Cummins, 2010; Linemeyer & Brown, 2010; Murphy et al., 1996; Savickas, 1984).

**Chapter Summary**

The literature review presented demonstrated evidence of an association between athletic identity and identity foreclosure in student-athletes, predominantly in DI NCAA settings. In addition, the review uncovered various factors associated with higher levels
of athletic identity and identity foreclosure, including race, ethnicity, gender, college divisional structure, and sport played. Many of the researchers investigating athletic identity and identity foreclosure utilized the AIMS and SSMIF, which provided a basis for including these surveys in this present study. Chapter 3 presents the research methodology, research design, data collection and analysis methods, and the ethical considerations.
Chapter 3: Research Design Methodology

Introduction

A number of studies have demonstrated that an individual’s athletic identity increases with the level of competition, and a robust athletic identity relates to high levels of identity foreclosure (Beamon, 2012; Harrison et al., 2011). Researchers have identified key demographics, such as gender, sport played, race, and level of competition in NCAA schools and NJCAA DI schools, as factors that influence athletic identity and identity foreclosure (Beamon, 2012; Borak, 2018; Harrison et al., 2011). While Borak (2018) previously studied athletic identity and identity foreclosure at an NJCAA DI college in a suburban area in the northeastern United States, little attention has been focused on NJCAA DIII. Borak (2018) aimed to uncover differences in students’ athletic identity and identity foreclosure at different competition levels. Therefore, the purpose of this present study was to replicate the Borak (2018) study by assessing levels of athletic identity and identity foreclosure among DIII athletes and exploring the effect of gender, race, and sport played on athletic identity and identity foreclosure.

The three research questions to be answered by the data gathered by the questionnaires and the corresponding hypothesis for each research question follow:

1. What are the levels of athletic identity and identity foreclosure for junior college student-athletes across six NJCAA colleges?
Hypothesis 1: Junior college DIII student-athletes will report low levels of athletic identity (i.e., a score of 7–11 on the AIMS) and identity foreclosure (i.e., a score of 12–28 on the SSMIF).

2. To what degree do athletic identity and identity foreclosure correlate among student-athletes across six DIII NJCAA colleges?

Hypothesis 2: There will be a significant positive relationship between athletic identity and identity foreclosure for student-athletes across six DIII NJCAA colleges.

3. Are there significant group differences in athletic identity and identity foreclosure scores after controlling for race, gender, and sport played?

Hypothesis 3: There will be statistically significant differences in measures of athletic identity and identity foreclosure when controlling for sport played, race, and gender for student-athletes across six DIII NJCAA colleges.

Research Design

This study relied on a quantitative, nonexperimental, and cross-sectional survey research design. A quantitative approach was selected to meet the need for nondescriptive and actual measurements. A quantitative approach was appropriate because the researcher sought to measure the known variables using numerical data (Creswell & Creswell, 2018). Quantitative researchers incorporate statistical and mathematical techniques to investigate empirical data, and they examine the relationships among the variables (Creswell & Creswell, 2018). This researcher conducted a cross-sectional survey (Appendix A) to collect data at one point in time. In choosing a cross-sectional survey design, consideration of costs, data availability, and convenience was included.
(Fowler, 2014). The purpose of this chapter is to outline the research method used to answer the research questions. A description of the research context, study participants, data collection, and methods for conducting this study are discussed.

**Research Context**

At the time of this study, the athletic conference was affiliated with the NJCAA Division II (DII) and Division III (DIII) schools. DIII schools only require students to have a high school diploma, or equivalent, to compete, and they are not allowed to provide athletic scholarships to the student-athletes (NCAA, 2020; NJCAA, 2020). DI and DII institutions are allowed to provide athletic scholarships (NJCAA, 2020). Table 3.1 provides a comparison of the benefits and responsibilities by Division for student-athletes. While DIII student-athletes gain access to regional competition and play for the love of the game within a competitive athletic environment, they receive greater emphasis on academics and have more career exploration activities (NCSA, 2020).

**Table 3.1**

*Comparison of Benefits and Responsibilities for Student-Athletes at DI, DII, and DIII Institutions*

<table>
<thead>
<tr>
<th>Division</th>
<th>Academic focus</th>
<th>Career exploration</th>
<th>Regional play</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Greater emphasis on sports</td>
<td>Limited time to explore other activities outside of sports because of time demands</td>
<td>Students compete on a national level in front of big crowds in large arenas.</td>
</tr>
<tr>
<td>II</td>
<td>Balanced approach between academics and athletics</td>
<td>Time demands are not as intense and rigorous to explore other activities.</td>
<td>Students compete on a regional level in front of smaller crowds.</td>
</tr>
<tr>
<td>III</td>
<td>A well-rounded experience where academics is the focal point</td>
<td>Time commitment is not as demanding, which gives student-athletes more opportunity to explore other activities</td>
<td>Competitions are mainly local. Therefore, student-athletes feel more part of the general college community.</td>
</tr>
</tbody>
</table>
Table 3.2 provides a comparison of divisional differences in sports offerings and scholarships at NJCAA institutions.

**Table 3.2**

*Divisional Differences in Sports Offerings and Scholarships at NJCAA Institutions*

<table>
<thead>
<tr>
<th></th>
<th>DI</th>
<th>DII</th>
<th>DIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum sports offering</td>
<td>17</td>
<td>10</td>
<td>14</td>
</tr>
</tbody>
</table>

**Scholarship limit per team, 2020–2021**

<table>
<thead>
<tr>
<th>Sport</th>
<th>DI</th>
<th>DII</th>
<th>DIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball</td>
<td>24</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Basketball</td>
<td>15</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Bowling</td>
<td>12</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>X-country</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Equestrian</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Football</td>
<td>85</td>
<td>85</td>
<td>0</td>
</tr>
<tr>
<td>Golf</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Ice hockey</td>
<td>16</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Lacrosse</td>
<td>20</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Rugby</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Soccer</td>
<td>24</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Softball</td>
<td>12</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Swimming</td>
<td>15</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Tennis</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Track/field</td>
<td>20</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Volleyball</td>
<td>12</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Wrestling</td>
<td>20</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* Scholarships include tuition, fees, books, room, and board. Values represent the maximum number of full scholarships. NJCAA is the governing association for community college athletics throughout the United States.
The DII and DIII colleges of this study’s location consisted of six colleges: State University of New York (SUNY) A Community College, SUNY B Community College, SUNY C Community College, SUNY D Community College, SUNY E Community College, and SUNY F Community College. Each college sponsors several sports programs. Table 3.3 displays the DII and DIII SUNY sports by community college and provides the number of participants per sport.

Table 3.3

**DII and DIII SUNY Sports by Community College in This Study**

<table>
<thead>
<tr>
<th></th>
<th>ACC</th>
<th>BCC</th>
<th>CCC</th>
<th>DCC</th>
<th>ECC</th>
<th>FCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball</td>
<td>23</td>
<td>19</td>
<td>30</td>
<td>21</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Men’s basketball</td>
<td>10</td>
<td>15</td>
<td>19</td>
<td>16</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Men’s soccer</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>20</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Women’s basketball</td>
<td>8</td>
<td>12</td>
<td>13</td>
<td>5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Women’s soccer</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowling</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Women’s volleyball</td>
<td>10</td>
<td>11</td>
<td>13</td>
<td>10</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Men’s cross country</td>
<td>4</td>
<td></td>
<td></td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Women’s cross country</td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Golf</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Men’s track &amp; field</td>
<td>3</td>
<td>5</td>
<td></td>
<td>5</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Softball</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Women’s track &amp; field</td>
<td>2</td>
<td>1</td>
<td></td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wrestling</td>
<td>3</td>
<td>11</td>
<td></td>
<td>14</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Research Participants

The population of interest for this present study included all junior college student-athletes at the six targeted DIII schools within the SUNY system. Given these delimitations, the population consisted of 585 junior college student-athletes, 18 years or older, on the 2020–2021 academic year roster at one of the six targeted DIII schools. Upon receiving institutional review board approval, the researcher sent a recruitment email containing the survey link to the SUNY athletic directors, asking that the link be distributed to prospective student-athletes. The survey (Appendix A) was distributed via Qualtrics. The first page of the survey contained questions to confirm participants’ eligibility and an informed consent form. Completion of the survey indicated consent, so a signed informed consent form was not required.

Sample-size parameters were determined for each research question based on the accepted conventions and a formal power analysis using G*Power software (van Voorhis & Morgan, 2007). Out of the 585 students, a minimum sample of 200 was needed to exceed a 20% response rate and achieve a medium effect size. Alpha was set at 0.05. Fowler (2014) asserted a response rate of 20% is appropriate for cross-sectional survey research. Participants were recruited using convenience sampling. The researcher contacted the athletic directors to obtain permission to contact the student-athletes. After the survey was distributed, it remained open for 4 weeks. A follow-up email was sent 2 weeks after the first email and 5 days before the survey closed. Demographic questions pertaining to gender, race, ethnicity, and sport played were included at the beginning of the survey. Convenience sampling creates a nonprobability sample through which the
researcher chooses respondents based on the convenience of access to the researcher. This method was appropriate for this survey research (Creswell & Creswell, 2018).

**Instruments Used in Data Collection**

The SSMIF (Brewer et al., 2020) measures an athlete’s commitment to his or her role as an athlete and exploratory behavior based on a specific sport context across three factors (i.e., future commitment, present commitment, and exploratory behavior; Brewer et al., 2020). Commitment was defined as “making a firm commitment to the role of the athlete” (Brewer, 2020, p. 3), and exploration was defined as “a deliberate internal or external action of seeking and processing information in relation to oneself or one’s environment outside of the realm of sport” (p. 3). The SSMIF for this study consisted of 12 items, with four items relating to future commitment (Questions 4, 5, 11, and 12), four items relating to present commitment (Questions 1, 2, 8, and 9), and four items relating to behavior exploration (Questions 3, 6, 7, and 10). The participants responded using a 7-point Likert scale where 1 = *strongly disagree*, and 7 = *strongly agree*. Scores ranged from 12 to 84. A high score on the SMMIF can range from 57 to 84 (e.g., the individual is strongly committed to a particular sport; low exploration). A low score on the SMMIF may range from 28 to 56 (e.g., the individual is minimally committed to a particular sport; high exploration). The SMMIF underwent internal and external review, as well as exploratory factor analysis. Cronbach’s 𝛼 coefficients for each factor were as follows: future commitment (𝛼 = .92), present commitment (𝛼 = .79), and exploration (𝛼 = .75) (Field, 2018; Taber, 2018). Psychometric analyses indicate strong internal consistency, factor validity, temporal stability, and convergent validity (George & Mallery, 2018).
The AIMS (Brewer & Cornelius, 2001) used for this study was a seven-item survey that measured an individual’s identification with the athlete’s role across three factors (i.e., social identity, exclusivity, and negative affectivity). Questions 1–12 correlated to the SSMIF items, and Questions 13–19 correlated to the AIMS items. The respondent participants recorded their answers using a 7-point Likert scale, where 1 = *strongly disagree*, and 7 = *strongly agree*. Total scores ranged from 7 to 49. The creators of the AIMS (Brewer & Cornelius, 2001) indicated that the total score should be tabulated to indicate the level of athletic identity and not to measure individual factors (i.e., social identity, exclusivity, and negative affectivity). A high score on the AIMS ranges from 36 to 49 (e.g., the individual identifies strongly with the athletic role). A moderate score on the AIMS ranges from 22 to 35 (e.g., the individual identifies fairly well with the athletic role). A low score on the AIMS ranges from 7 to 21 (e.g., the individual does not identify with an athletic role). Questions 1, 2, and 3 related to the athletes’ social identities; Questions 4 and 5 related to exclusivity, and Questions 6 and 7 related to negative affectivity. Social identity is defined as how much an athlete views themselves as fulfilling the athlete’s role. Exclusivity refers to how much the athlete measures their self-worth through their athletic performance. Negative affectivity refers to how much athletes’ underperformance negatively affects them. A recent analysis of the survey found a Cronbach’s $\alpha$ of .71. The survey displayed all survey items used in this study (future commitment, present commitment, exploration, future athletic identity foreclosure, present athletic identity foreclosure). A test-retest reliability for the coefficients and the descriptive statistics for SSMIF subscales are represented in Table 4.4 (Brewer et al., 2020). Both instruments were evaluated for validity and
reliability with Cronbach’s alpha scores above .70. Social scientists consider an alpha of .70 acceptable.

The demographic survey created for this study is a five-item, self-report multiple-choice survey designed to collect data regarding the individuals’ gender, race, sport played, campus, and years in the sport.

**Demographic Profile of Study Participants**

Descriptive statistical techniques provided a means for evaluating the study’s demographic identifier variables. Frequencies and percentages represented the primary means by which the study’s identifier variables were evaluated. Table 3.4 presents a summary of the findings for the descriptive statistical evaluation of the study’s demographic identifier variables.

The independent variable in this study was athletic identity, and the dependent variable was identity foreclosure. Research has established that higher levels of athletic identity is predictive of higher levels of identity foreclosure in student-athletes (Beamon, 2012; Borak, 2018; Harrison et al., 2011), and student-athletes’ gender, race, and sport played have been found to influence both variables in the NCJAA DI setting (Borak, 2018). According to Borak (2018), levels of athletic identity and identity foreclosure increase as the level of competition increases. Therefore, levels of athletic identity and identity foreclosure might differ in a suburban DIII college.
Table 3.4

Demographic Profile of NJCAA DIII New York State Student-Athletes

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>43.36</td>
<td>43.36</td>
</tr>
<tr>
<td>Male</td>
<td>64</td>
<td>56.64</td>
<td>100.00</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Years in Sport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>102</td>
<td>90.27</td>
<td>90.27</td>
</tr>
<tr>
<td>3 to 10 years</td>
<td>5</td>
<td>4.42</td>
<td>94.69</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>6</td>
<td>5.31</td>
<td>100.00</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>7</td>
<td>6.19</td>
<td>6.19</td>
</tr>
<tr>
<td>African American</td>
<td>30</td>
<td>26.55</td>
<td>32.74</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18</td>
<td>15.93</td>
<td>48.67</td>
</tr>
<tr>
<td>White</td>
<td>56</td>
<td>49.56</td>
<td>98.23</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.77</td>
<td>100.00</td>
</tr>
<tr>
<td>Sport</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseball</td>
<td>29</td>
<td>25.66</td>
<td>25.66</td>
</tr>
<tr>
<td>Women’s basketball</td>
<td>20</td>
<td>17.70</td>
<td>43.36</td>
</tr>
<tr>
<td>Men’s basketball</td>
<td>19</td>
<td>16.81</td>
<td>60.18</td>
</tr>
<tr>
<td>Men’s soccer</td>
<td>13</td>
<td>11.50</td>
<td>71.68</td>
</tr>
<tr>
<td>Softball</td>
<td>8</td>
<td>7.08</td>
<td>78.76</td>
</tr>
<tr>
<td>Men’s tennis</td>
<td>2</td>
<td>1.77</td>
<td>80.53</td>
</tr>
<tr>
<td>Women’s track &amp; field</td>
<td>3</td>
<td>2.65</td>
<td>83.19</td>
</tr>
<tr>
<td>Women’s volleyball</td>
<td>19</td>
<td>16.81</td>
<td>100.00</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note. NJCAA = National Junior College Athletic Association, DIII = Colleges that offer no tuition scholarships to student-athletes.

Procedures for Data Collection and Analysis

The researcher sought permission from the SUNY athletic directors to contact the student-athletes. Support letters from the athletic directors were provided. Upon IRB approval, a recruitment email containing the survey link was shared with the SUNY athletic directors, along with a request to distribute the link to prospective student-athletes. The survey (Appendix A) was distributed via Qualtrics. The first page of the survey contained questions to confirm the potential participants’ eligibility and a consent form. Survey completion indicated consent, eliminating the need for a signed informed
consent form. The survey remained open for 4 weeks. The researcher sent a follow-up email 2 weeks after the survey distribution and 5 days before the closing date. Data collection occurred between April and May 2021.

The researcher ran descriptive analyses to answer Research Question 1. Total scores for athletic identity and identity disclosure were analyzed and reported in aggregate. A Pearson’s product-moment correlation was conducted to assess the degree to which athletic identity and identity foreclosure mathematically associate. The study required a sample size of 67 participants to produce a significantly medium effect and a sample of 23 to produce a significantly large effect. A multivariate analysis of variances (MANOVA) was run to answer Research Question 3. A MANOVA is appropriate when there are two or more dependent variables. The independent demographic variables were race, gender, and sport played, and the dependent variables were athletic identity and identity foreclosure.

Summary

This chapter briefly discussed the problem statement, purpose, and research questions. This was followed by a discussion of the research design, research context, and research participants. Finally, the chapter addressed the instruments used in data collection, procedures for data collection, and procedures for data analysis. Chapter 4 discusses the results of this present study.
Chapter 4: Results

Introduction

There continues to be limited research on the link between athletic identity and identity foreclosure across all divisions of sport for student-athletes in the United States. The purpose of this study was to replicate and extend the study done by Borak (2018) with DIII student-athletes in a suburban setting. Specifically, this study quantitatively describes the levels of athletic identity and identity foreclosure of student-athletes across six DIII NJCAA colleges in New York State. Three research questions and hypotheses addressed the study’s topic and problem statement. Descriptive and inferential statistical techniques were used to provide preliminary analyses and hypothesis testing. The preliminary analyses run in this study included data cleaning procedures, reliability testing of measures, a demographic profile of the survey respondents, and descriptive statistics. The following represents a formal reporting of the findings achieved in the preliminary analyses.

Missing Data and Completion Rate

The first preliminary analysis run was to clean up the missing data among the survey respondents. An initial data screening was conducted to assess the data set’s intactness. In the wake of initial data cleaning, the actionable data set resulted in 113 DIII student-athlete participants out of the original sample of 121 survey respondents. Eight participants were removed from the data set for significant nonresponsiveness to items on
the research instruments. In the wake of the initial data cleaning process, the study’s data set was 100% intact, reflecting no missing data.

**Internal Reliability**

The internal reliability of the responses to the survey items was addressed using Cronbach’s alpha. Cronbach’s alpha suits assessments of internal reliability for data sets involving more than two responses (Field, 2018; Taber, 2018). Internal reliability values were calculated for the constructs of identity foreclosure and athletic identity and for internal reliability across all items on both constructs.

Table 4.1 contains a summary of the findings for the overall level of internal reliability achieved across all survey items on the research instruments associated with identity foreclosure and athletic identity. The lower and upper bounds of Cronbach’s $\alpha$ were calculated using a 95% confidence interval (CI). Using the conventions of interpretation of alpha offered by George and Mallery (2018), the internal reliability achieved was considered excellent ($\alpha = .93$) for the study participant responses to the survey items across all items for the constructs of identity foreclosure and athletic identity.

<table>
<thead>
<tr>
<th>Scale</th>
<th>No. of items</th>
<th>$A$</th>
<th>Lower bound</th>
<th>Upper bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>19</td>
<td>0.93</td>
<td>0.91</td>
<td>0.94</td>
</tr>
</tbody>
</table>

*Note.* AIMS = Athletic Identity Measurement Scale; SSMIF = Sport-Specific Measure of Identity Foreclosure.
The internal reliability level achieved was considered very good ($\alpha = .87$) for the study participant responses to items on the research instrument associated with the construct of identity foreclosure using the conventions of alpha interpretation proposed by George and Mallery (2018). The internal reliability level achieved was considered very good ($\alpha = .88$) for study participant responses to items on the research instrument associated with the construct of athletic identity using the conventions of alpha interpretation proposed by George and Mallery (2018). Table 4.2 contains a summary of the findings for the level of internal reliability achieved across all survey items on the research instrument associated with identity foreclosure and athletic identity.

Table 4.2

Summary of Internal Reliability for Identity Foreclosure and Athletic Identity

<table>
<thead>
<tr>
<th>Scale</th>
<th>No. of items</th>
<th>$\alpha$</th>
<th>Lower bound</th>
<th>Upper bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity Foreclosure</td>
<td>12</td>
<td>0.87</td>
<td>0.83</td>
<td>0.90</td>
</tr>
<tr>
<td>Athletic Identity</td>
<td>7</td>
<td>0.88</td>
<td>0.85</td>
<td>0.91</td>
</tr>
</tbody>
</table>

*Note.* The lower and upper bounds of Cronbach’s $\alpha$ were calculated using a 95% CI.

The internal reliability level achieved was considered very good ($\alpha = .88$) for the study participant responses to items on the research instrument associated with the construct of athletic identity using the conventions of alpha interpretation proposed by George and Mallery (2018).
Descriptive Statistics and Preliminary Findings

Descriptive statistical techniques provided a means for evaluating the study’s initial findings for the construct of identity foreclosure and the three elements of the construct. Frequencies, measures of central tendency (i.e., mean scores), variability (i.e., standard deviations), and data normality (i.e., skew and kurtosis) represent the primary means of evaluating this study’s construct of identity foreclosure and the three elements of the construct. Table 4.3 presents a summary of these findings.

Table 4.3

Descriptive Summary of the Identity Foreclosure Using NJCAA DIII Student-Athletes

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>n</th>
<th>SEM</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity foreclosure (IF)</td>
<td>5.24</td>
<td>1.09</td>
<td>113</td>
<td>0.10</td>
<td>1.00</td>
<td>6.92</td>
<td>−1.38</td>
<td>3.08</td>
</tr>
<tr>
<td>IF future commitment</td>
<td>4.58</td>
<td>1.78</td>
<td>113</td>
<td>0.17</td>
<td>1.00</td>
<td>7.00</td>
<td>−0.34</td>
<td>−1.01</td>
</tr>
<tr>
<td>IF present commitment</td>
<td>5.84</td>
<td>1.23</td>
<td>113</td>
<td>0.12</td>
<td>1.00</td>
<td>7.00</td>
<td>−1.80</td>
<td>3.87</td>
</tr>
<tr>
<td>IF exploration</td>
<td>2.12</td>
<td>0.58</td>
<td>113</td>
<td>0.05</td>
<td>0.40</td>
<td>2.80</td>
<td>−1.01</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Note. IF scores can range from 1 to 7; NJCCA = National Junior College Athletic Association; DIII = Colleges that offer no athletic scholarships to student-athletes.

Frequencies, mean scores, standard deviations, and skew and kurtosis represent the primary means for evaluating this study’s initial findings for construct of athletic identity and the construct’s three elements. Table 4.4 displays the summary of these findings.
Table 4.4

*Descriptive Summary of Athletic Identity and Subscales*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$n$</th>
<th>$SE_M$</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic identity (AI)</td>
<td>5.33</td>
<td>1.36</td>
<td>113</td>
<td>0.13</td>
<td>1.00</td>
<td>7.00</td>
<td>−1.26</td>
<td>1.68</td>
</tr>
<tr>
<td>AI social identity</td>
<td>5.76</td>
<td>1.41</td>
<td>113</td>
<td>0.13</td>
<td>1.00</td>
<td>7.00</td>
<td>−1.79</td>
<td>3.56</td>
</tr>
<tr>
<td>AI exclusivity</td>
<td>4.69</td>
<td>1.86</td>
<td>113</td>
<td>0.17</td>
<td>1.00</td>
<td>7.00</td>
<td>−0.47</td>
<td>−0.73</td>
</tr>
<tr>
<td>AI negative affectivity</td>
<td>5.31</td>
<td>1.73</td>
<td>113</td>
<td>0.16</td>
<td>1.00</td>
<td>7.00</td>
<td>−0.83</td>
<td>−0.45</td>
</tr>
</tbody>
</table>

*Note.* AI scores can range from 1 to 7.

Table 4.5

*Summary of Descriptive Statistics for Identity Foreclosure and Athletic Identity by Demographic Identifier Variables*

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>$n$</th>
<th>Identity foreclosure $M$ ($SD$)</th>
<th>Athletic identity $M$ ($SD$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td>Identity foreclosure</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>5.18 (1.24)</td>
<td>5.35 (1.51)</td>
</tr>
<tr>
<td>Male</td>
<td>64</td>
<td>5.29 (0.98)</td>
<td>5.31 (1.25)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td>Identity foreclosure</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>7</td>
<td>5.53 (0.85)</td>
<td>5.39 (0.96)</td>
</tr>
<tr>
<td>Black</td>
<td>30</td>
<td>5.43 (0.74)</td>
<td>5.90 (0.95)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18</td>
<td>4.88 (1.62)</td>
<td>4.65 (1.66)</td>
</tr>
<tr>
<td>White</td>
<td>56</td>
<td>5.25 (1.08)</td>
<td>5.25 (1.42)</td>
</tr>
<tr>
<td>Sport Played</td>
<td></td>
<td>Identity foreclosure</td>
<td></td>
</tr>
<tr>
<td>Baseball</td>
<td>29</td>
<td>5.53 (0.77)</td>
<td>5.39 (0.95)</td>
</tr>
<tr>
<td>Women’s basketball</td>
<td>20</td>
<td>5.27 (1.19)</td>
<td>5.66 (1.22)</td>
</tr>
<tr>
<td>Men’s basketball</td>
<td>19</td>
<td>5.33 (0.95)</td>
<td>5.59 (1.34)</td>
</tr>
<tr>
<td>Men’s soccer</td>
<td>13</td>
<td>4.97 (0.67)</td>
<td>4.84 (1.06)</td>
</tr>
<tr>
<td>Softball</td>
<td>8</td>
<td>3.96 (1.00)</td>
<td>3.83 (1.56)</td>
</tr>
<tr>
<td>Women’s track &amp; field</td>
<td>3</td>
<td>2.64 (2.12)</td>
<td>2.19 (1.81)</td>
</tr>
<tr>
<td>Women’s volleyball</td>
<td>19</td>
<td>5.78 (0.74)</td>
<td>5.93 (1.04)</td>
</tr>
<tr>
<td>Years in Sport</td>
<td></td>
<td>Identity foreclosure</td>
<td></td>
</tr>
<tr>
<td>1 to 2</td>
<td>102</td>
<td>5.22 (1.07)</td>
<td>5.25 (1.31)</td>
</tr>
<tr>
<td>3 to 10</td>
<td>5</td>
<td>4.92 (1.96)</td>
<td>5.37 (2.38)</td>
</tr>
<tr>
<td>&gt;10</td>
<td>6</td>
<td>5.89 (0.38)</td>
<td>6.62 (0.39)</td>
</tr>
</tbody>
</table>

*Note.* Both IF and AI can range from 1 to 7.
Descriptive statistical techniques were used to evaluate the typicality (i.e., mean score) and standard deviation of perceptions of identity foreclosure and athletic identity by the participants’ demographic variables. Table 4.5 shows a summary of the findings for the descriptive statistical evaluation of the central constructs of identity foreclosure and athletic identity by this study participants’ demographic variables.

**Hypothesis Testing**

The null hypotheses stated in conjunction with this study’s three research questions were tested using the probability level of $p \leq .05$. The null hypotheses were rejected in instances of statistically significant findings, and they were retained in instances of non-statistically significant findings. The three research questions and hypotheses described this study’s topic and research problem. Descriptive and inferential statistical techniques addressed the research questions and hypotheses. The probability level of $p \leq .05$ represented the value for the statistical significance of the findings. The conventions of effect size interpretation proposed by Sawilowsky (2009) were used to translate the numeric effect size values into qualitative evaluative statements. The following represents the findings achieved for each of the stated research questions.

**Research Question 1**

*What are the levels of athletic identity and identity foreclosure for junior college student-athletes across six NJCAA colleges?*

The statistical significance of study participant perceptions of the constructs of identity foreclosure and athletic identity was addressed using a one-sample $t$ test. Howell (2007) explained the one-sample $t$ test is ideally suited for instances in which statistical
significance of a mean score is sought using either a universal value or a test value of another data array of the null value of the response scale itself.

The assumption of normality for the data array for identity foreclosure was assessed using the data’s skew and kurtosis values. Using the conventions of data normality established by George and Mallery (2018), the skew value of –1.38 and the kurtosis value of 3.08 fell well within normal skew (−/+2.0) and kurtosis (−/+7.0) value parameters. The study participants’ perceptions of identity foreclosure are reflected at a statistically significant level ($t_{(112)} = 12.07; p < .001$). The magnitude of effect for this study participants’ perceptions of identity foreclosure approached a very large effect ($d = 1.14$) using Sawilowsky’s (2009) conventions of interpretation. Table 4.6 contains a summary of the finding for the study participants’ perceptions of identity foreclosure.

Table 4.6

Summary of Finding: One-Sample $t$ Test for Perceptions of Identity Foreclosure

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$µ$</th>
<th>$t$</th>
<th>$p$</th>
<th>$D$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity foreclosure</td>
<td>5.24</td>
<td>1.09</td>
<td>4</td>
<td>12.07</td>
<td>&lt;.001</td>
<td>1.14</td>
</tr>
</tbody>
</table>

Note. Degrees of freedom for the $t$ statistic = 112; $d$ represents Cohen’s $d$ (effect size).

Hypothesis 1 stated: “Junior college DIII student-athletes will report low levels of athletic identity (i.e., a score of 7–11 on the AIMS) and identity foreclosure (i.e., a score of 12–28 on the SSMIF),” which means there would be no statistically significant effect for the study participants’ perceptions of identity foreclosure. Considering the statistically significant finding for the study participants’ mean score perceptions of identity foreclosure, the null hypothesis was rejected for the construct of identity foreclosure,
because the probability of this study’s finding in Research Question 1 for participant perceptions of identity foreclosure having occurred by chance or something other than a true effect were less than one in 1,000.

The statistical significance of the study participants’ perceptions of the construct of athletic identity was addressed using the one-sample t test. The assumption of normality for athletic identity was assessed using the data’s skew and kurtosis values. Using the conventions of data normality established by George and Mallery (2018), the skew value of –1.26 and the kurtosis value of 1.68 fell well within normal skew (–/+/2.0) and kurtosis (–/+/7.0) value parameters.

Study participant perceptions of athletic identity reflect at a statistically significant level ($t_{(112)} = 10.36; p < .001$). In essence, the probability of this study’s finding for the perceptions of athletic identity having occurred by chance or something other than a true effect is less than 1 in 1,000. The magnitude of effect for the study participants’ perceptions of athletic identity was considered large ($d = 0.97$) using Sawilowsky’s (2009) conventions of interpretation. Table 4.7 contains a summary of finding for the study participants’ perceptions of athletic identity.

**Table 4.7**

*Summary of Finding: One-Sample t Test for Perceptions of Athletic Identity*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$\mu$</th>
<th>$t$</th>
<th>$p$</th>
<th>$D$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic identity</td>
<td>5.33</td>
<td>1.36</td>
<td>4</td>
<td>10.36</td>
<td>&lt;.001</td>
<td>0.97</td>
</tr>
</tbody>
</table>

*Note.* Degrees of freedom for the $t$ statistic = 112; $d$ represents Cohen’s $d$ (effect size).
Hypothesis 1 inferred that there would be no statistically significant effect for the study participants’ perceptions of athletic identity. Considering the statistically significant finding for the study participants’ perceptions of athletic identity, the null hypothesis was rejected, as the null hypothesis presumes that the study participants’ responses for perceptions of athletic identity would not be significantly different than the null value of 4 on the research instrument’s response scale.

**Research Question 2**

*To what degree do athletic identity and identity foreclosure correlate among student-athletes across six DIII NJCAA colleges?*

The Pearson product-moment correlation coefficient was used to address the mathematical relationship between the study participants’ perceptions of identity foreclosure and athletic identity (Fraenkel et al., 2019). This study’s sample size proved adequate and sufficiently powered to detect a statistically significant finding in the correlational analysis, given the sample size parameters of 23 to 67 achieved using G*Power software version 3.1.9.2.

A statistically significant, direct correlation between perceptions of identity foreclosure and athletic identity ($r_p = 0.82, p < .001, 95\% \text{ CI} [0.75, 0.87]$) was manifested in the analysis. The correlation coefficient of 0.82 is indicative of a large effect for the mathematical relationship ($r^2 = .672$). Thus, for these DIII student-athletes, as their perceptions of athletic identity increased, their perceptions of identity foreclosure also increased. Table 4.8 contains a summary of the finding for the mathematical relationship between the study participants’ perceptions of identity foreclosure and athletic identity.
Table 4.8

Pearson Correlation Coefficient Findings: Foreclosure and Athletic Identity

<table>
<thead>
<tr>
<th>Variables</th>
<th>$r_p$</th>
<th>95% CI</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreclosure: Athletic identity</td>
<td>0.82</td>
<td>[0.75, 0.87]</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Note. $P =$ Pillai’s trace; $N = 113$.

The predictive aspect of Research Question 2 was addressed using the simple linear regression statistical technique (Adams & Lawrence, 2019). The study’s sample size proved adequate and sufficiently powered to detect a statistically significant finding in the correlational analysis given the sample size parameters of 25 to 55 achieved using G*Power software version 3.1.9.2.

The predictive model used in the follow-up linear regression analysis was statistically significant ($F (1,111) = 232.84, p < .001, R^2 = 0.68$), indicating that approximately 68% of the variance in the study participants’ perceptions of identity foreclosure could be explained by perceptions of athletic identity. The construct of athletic identity emerged as a statistically significant predictor of the study participants’ perceptions of identity foreclosure ($B = 0.66, t_{(111)} = 15.26, p < .001$), indicating that on average, a one-unit increase in perceptions of athletic identity increases the value of identity foreclosure by 0.66 units. Table 4.9 contains a summary of the finding for the predictive model used in the follow-up analysis of Research Question 2.
Table 4.9

*Predicting Perceptions of Identity Foreclosure by Perceptions of Athletic Identity*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE</th>
<th>95% CI</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>1.72</td>
<td>0.24</td>
<td>[1.25, 2.19]</td>
<td>7.23</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Athletic identity</td>
<td>0.66</td>
<td>0.04</td>
<td>[0.57, 0.75]</td>
<td>15.26</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

*Note. P = Pillai’s trace.*

Hypothesis 2 stated: “There will be a significant positive relationship between athletic identity and identity foreclosure for student-athletes across the six DIII NJCAA colleges,” which means there would not be a statistically significant correlational or predictive effect for study participants’ perceptions of athletic identity upon their perceptions of identity foreclosure. Considering the statistically significant correlation and predictive effect between the study participants’ perceptions of athletic identity and identity foreclosure, the null hypothesis in Research Question 2 was rejected, as the null hypothesis was stated as a presumption that the relationship between athletic identity and identity foreclosure would not be reflected at a statistically significant level. The finding in Research Question 2 may be interpreted that there was less than one chance in 1,000 that the relationship between athletic identity and identity foreclosure in the finding achieved in the analysis was attributed to chance or something unexplained rather than a true associative/predictive effect.

**Research Question 3**

*Are there significant group differences in athletic identity and identity foreclosure scores after controlling for race, gender, and sport played?*
A MANOVA analysis was conducted to determine if there were statistically significant differences in the linear combination of the constructs of identity foreclosure and athletic identity among the primary demographic variables. Tabachnick and Fidell (2019) asserted that MANOVA is ideally suited for assessing the statistical significance of the effect exerted by an independent variable on more than one dependent variable in an analysis.

A non-statistically significant effect was manifested for study participant gender upon the constructs of identity foreclosure and athletic identity for the study participants identified as DIII student-athletes ($F(2, 110) = 0.65, p = .52, \eta^2_p = 0.01$). As a result, the null hypothesis was maintained; the participants’ gender did not have a significant impact on identity foreclosure and athletic identity. A summary of the MANOVA analysis findings for study participant gender and perceptions of identity foreclosure and athletic identity is presented in Table 4.10.

### Table 4.10

**MANOVA Summary: Foreclosure and Athletic Identity by Gender**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$P$</th>
<th>$F$</th>
<th>$df$</th>
<th>Residual $df$</th>
<th>$p$</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.01</td>
<td>0.65</td>
<td>2</td>
<td>110</td>
<td>.52</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*Note. $P$ = Pillai’s trace.*

A MANOVA analysis was conducted to determine if there were statistically significant differences in the linear combination of the constructs of identity foreclosure and athletic identity between the levels of the study participants’ ethnicity. The main
effect for ethnicity was statistically significant ($F(6, 214) = 2.50, p = .02, \eta_p^2 = 0.07$). A summary of the MANOVA analysis finding appears in Table 4.11. The null hypothesis was rejected.

**Table 4.11**

*MANOVA Results for Identity Foreclosure and Athletic Identity by Study Participant*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>$P$</th>
<th>$F$</th>
<th>$df$</th>
<th>Residual $df$</th>
<th>$p$</th>
<th>$\eta_p^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>0.13</td>
<td>2.50</td>
<td>6</td>
<td>214</td>
<td>.02</td>
<td>0.07</td>
</tr>
</tbody>
</table>

*Note. $P$ = Pillai’s trace.*

Hypothesis 3 stated: “There will be statistically significant differences in the measures of athletic identity and identity foreclosure when controlling for sport played, race, and gender for student-athletes across the six DIII NJCAA colleges.” The null hypothesis was rejected in light of the statistically significant finding for the study participants’ perceptions of identity foreclosure and athletic identity by ethnicity. In essence, there were two chances in 100 that the finding for the study participants’ perceptions of identity foreclosure and athletic identity by study participant ethnicity would be due to chance or something other than a true effect in the analysis. Table 4.12 shows the frequencies, means, and standard deviations for the study participants’ ethnicity by constructs of athletic identity and identity foreclosure.
Table 4.12

The Frequencies, Means, and Standard Deviations for Ethnicity by the Constructs of Athletic Identity and Identity Foreclosure

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>AI M (SD)</th>
<th>IF M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>7</td>
<td>5.53 (0.85)</td>
<td>5.39 (0.96)</td>
</tr>
<tr>
<td>Black</td>
<td>30</td>
<td>5.43 (0.74)</td>
<td>5.90 (0.95)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18</td>
<td>4.88 (1.62)</td>
<td>4.65 (1.66)</td>
</tr>
<tr>
<td>White</td>
<td>56</td>
<td>5.25 (1.08)</td>
<td>5.25 (1.42)</td>
</tr>
</tbody>
</table>

The effects of ethnicity on identity foreclosure and athletic identity were further evaluated using a univariate analysis of variance (ANOVA) statistical technique for each dependent variable in the model. A univariate ANOVA analysis was first conducted to determine whether there were statistically significant differences in identity foreclosure by study participant ethnicity.

The finding for the ANOVA analysis was not statistically significant ($F(3, 107) = 1.12, p = .35$), indicating that although there were differences in perceptions for identity foreclosure by study participant ethnicity, the differences in identity foreclosure among the levels of the study participants’ ethnicity were not manifested at a significant measure (Table 4.13). The means and standard deviations in the analysis appear for comparative purposes in Table 4.14.
A univariate ANOVA analysis was conducted to determine if statistically significant differences existed in the construct of athletic identity by study participant ethnicity. The results of the ANOVA were statistically significant ($F(3, 107) = 3.45, p = .02$), indicating statistically significant differences did exist in the construct of athletic identity among the levels of the study participants’ ethnicity (Table 4.15). The eta-squared value achieved in the analysis was 0.09, indicating the study participants’ ethnicity explained approximately 9% of the variance in the construct of athletic identity. The means and standard deviations in the analysis appear in Table 4.16.
Table 4.15

*ANOVA Summary for Athletic Identity by Study Participant Ethnicity*

<table>
<thead>
<tr>
<th>Term</th>
<th>SS</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>18.27</td>
<td>3</td>
<td>3.45</td>
<td>.02</td>
<td>0.09</td>
</tr>
<tr>
<td>Residuals</td>
<td>189.03</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.16

*Mean, Standard Deviation, and Sample Size for Athletic Identity by Study Participant Ethnicity*

<table>
<thead>
<tr>
<th>Combination</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>5.39</td>
<td>0.96</td>
<td>7</td>
</tr>
<tr>
<td>African American</td>
<td>5.90</td>
<td>0.95</td>
<td>30</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4.65</td>
<td>1.66</td>
<td>18</td>
</tr>
<tr>
<td>White</td>
<td>5.25</td>
<td>1.42</td>
<td>56</td>
</tr>
</tbody>
</table>

Post-Hoc Analysis

Tukey’s (1949) honesty significance test (HSD) follow-up, post-hoc analyses were conducted for athletic identity, considering the statistically significant overall effect in the univariate ANOVA analysis. As a result, the only significant follow-up effect was manifested in the athletic identity comparison for the participants identified as African American and Hispanic, favoring African American by a mean score difference of 1.25 (0.40). The finding favoring the perceptions of the African American participants manifested at a statistically significant level (\( t_{(23.88)} = 2.91; p = .008 \)) with a concomitant large effect (\( d = .99 \)). Thus, among these survey respondents, the African American DIII student-athletes reported significantly higher levels of athletic identity than the Hispanic...
American DIII student-athletes. Table 4.17 contains a summary of the findings for the follow-up, post-hoc analysis for ethnicity and perceptions of athletic identity.

**Table 4.17**

*Post-Hoc Analysis Finding: Ethnicity and Athletic Identity*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>30</td>
<td>5.90</td>
<td>0.95</td>
<td>2.91**</td>
<td>.99*</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18</td>
<td>4.65</td>
<td>1.66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* **p = .008 (p < .01); *Large effect size (d ≥ .80).*

A MANOVA analysis was conducted to determine if statistically significant differences existed in the linear combination of identity foreclosure and athletic identity between the levels of the study participants’ sport. The main effect for the study participants’ sport played was statistically significant, indicating a significant difference in the identity foreclosure and athletic identity constructs among the levels of the study participants’ sport played. A summary of the MANOVA analysis findings appears in Table 4.18.

**Table 4.18**

*Summary of MANOVA Results: Identity Foreclosure and Athletic Identity by Sport*

<table>
<thead>
<tr>
<th>Variable</th>
<th>P</th>
<th>F</th>
<th>df</th>
<th>Residual df</th>
<th>p</th>
<th>ηp²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport</td>
<td>0.40</td>
<td>4.40</td>
<td>12</td>
<td>208</td>
<td>&lt;.001</td>
<td>0.20</td>
</tr>
</tbody>
</table>

*Note.* P = Pillai’s trace.
Hypothesis 3 inferred that there would be no statistically significant effect for the study participants’ perceptions of identity foreclosure and athletic identity by levels of sport played. Considering the statistically significant finding for the study participants’ perceptions of identity foreclosure and athletic identity by sport, the null hypothesis was rejected.

The effects of the study participants’ sport on identity foreclosure and athletic identity were further evaluated using a univariate ANOVA statistical technique for each dependent variable in the model. The analysis was conducted to determine if a statistically significant difference existed in identity foreclosure by study the participants’ sport.

**Identity Foreclosure**

The results of the univariate ANOVA analysis were statistically significant ($F(6, 104) = 8.09, p < .001$) in the construct of identity foreclosure among the levels of study participants’ sport played (Table 4.19). The eta-squared value achieved in the analysis was 0.32, indicating the variable of the study participants’ sport explained approximately 32% of the variance in the construct of identity foreclosure. The means and standard deviations in the analysis appear in Table 4.20.

### Table 4.19

**Univariate ANOVA Summary: Identity Foreclosure by Sport Played**

<table>
<thead>
<tr>
<th>Term</th>
<th>SS</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport</td>
<td>42.56</td>
<td>6</td>
<td>8.09</td>
<td>&lt;.001</td>
<td>0.32</td>
</tr>
<tr>
<td>Residuals</td>
<td>91.20</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.20

Mean, Standard Deviation, and Sample Size for Identity Foreclosure by Sport Played

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball</td>
<td>5.53</td>
<td>0.77</td>
<td>29</td>
</tr>
<tr>
<td>Women’s basketball</td>
<td>5.27</td>
<td>1.19</td>
<td>20</td>
</tr>
<tr>
<td>Men’s basketball</td>
<td>5.33</td>
<td>0.95</td>
<td>19</td>
</tr>
<tr>
<td>Men’s soccer</td>
<td>4.97</td>
<td>0.67</td>
<td>13</td>
</tr>
<tr>
<td>Softball</td>
<td>3.96</td>
<td>1.00</td>
<td>8</td>
</tr>
<tr>
<td>Women’s track &amp; field</td>
<td>2.64</td>
<td>2.12</td>
<td>3</td>
</tr>
<tr>
<td>Women’s volleyball</td>
<td>5.78</td>
<td>0.74</td>
<td>19</td>
</tr>
</tbody>
</table>

**Athletic Identity**

The effect of the study participants’ sport on athletic identity was further evaluated using a univariate ANOVA statistical technique for each dependent variable in the model. The analysis was conducted to determine if statistically significant differences existed in athletic identity by study participant sport played. The results of the univariate ANOVA analysis were statistically significant \( F(6, 104) = 7.47, p < .001 \), indicating statistically significant differences existed in the construct of athletic identity among the levels of study participant sport played (Table 4.21). The eta-squared value achieved in the analysis was 0.30, indicating the study participants’ sport played explained approximately 30% of the variance in the construct of athletic identity. The means and standard deviations in the analysis appear in Table 4.22.
Table 4.21

**ANOVA Summary: Athletic Identity by Sport Played**

<table>
<thead>
<tr>
<th>Term</th>
<th>SS</th>
<th>df</th>
<th>F</th>
<th>p</th>
<th>$\eta_p^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sport</td>
<td>61.37</td>
<td>6</td>
<td>7.47</td>
<td>&lt;.001</td>
<td>0.30</td>
</tr>
<tr>
<td>Residuals</td>
<td>142.45</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.22

**Mean, Standard Deviation, and Sample Size for Athletic Identity by Sport Played**

<table>
<thead>
<tr>
<th>Combination</th>
<th>$M$</th>
<th>$SD$</th>
<th>$N$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball</td>
<td>5.39</td>
<td>0.95</td>
<td>29</td>
</tr>
<tr>
<td>Women’s basketball</td>
<td>5.66</td>
<td>1.22</td>
<td>20</td>
</tr>
<tr>
<td>Men’s basketball</td>
<td>5.59</td>
<td>1.34</td>
<td>19</td>
</tr>
<tr>
<td>Men's soccer</td>
<td>4.84</td>
<td>1.06</td>
<td>13</td>
</tr>
<tr>
<td>Softball</td>
<td>3.82</td>
<td>1.56</td>
<td>8</td>
</tr>
<tr>
<td>Women’s track &amp; field</td>
<td>2.19</td>
<td>1.81</td>
<td>3</td>
</tr>
<tr>
<td>Women’s volleyball</td>
<td>5.93</td>
<td>1.04</td>
<td>19</td>
</tr>
</tbody>
</table>

**Post-Hoc Analysis: Sport Played and Identity Foreclosure**

Post-hoc analyses using $t$-tests were conducted between each pair of measurements in light of the overall statistically significant finding achieved in the omnibus ANOVA for study participant sport played and the dependent variable of identity foreclosure. Tukey’s (1949) HSD $p$-value adjustments were used to correct for the effect of multiple comparisons on the family-wise error rate in the pairwise comparisons (Field, 2018).
For the main effect of the sport played, the mean of identity foreclosure for baseball ($M = 5.53, SD = 0.77$) was statistically significantly larger ($p < .001$) than for softball ($M = 3.96, SD = 1.00$). For the main effect of the sport played, the mean value of identity foreclosure for baseball ($M = 5.53, SD = 0.77$) was statistically significantly larger ($p < .001$) than for women’s track and field ($M = 2.64, SD = 2.12$). For the main effect of the sport played, the mean value of identity foreclosure for men’s basketball ($M = 5.33, SD = 0.95$) was statistically significantly larger ($p = .01$) than for softball ($M = 3.96, SD = 1.00$). For the main effect of the sport played, the mean value of identity foreclosure for men’s basketball ($M = 5.33, SD = 0.95$) was statistically significantly larger ($p < .001$) than for women’s track and field ($M = 2.64, SD = 2.12$). For the main effect of the sport played, the mean value of identity foreclosure for men’s soccer ($M = 4.97, SD = 0.67$) was statistically significantly larger ($p = .003$) than for women’s track and field ($M = 2.64, SD = 2.12$). For the main effect of the sport played, the mean value of identity foreclosure for softball ($M = 3.96, SD = 1.00$) was statistically significantly smaller ($p < .001$) than for women’s volleyball ($M = 5.78, SD = 0.74$). For the main effect of the sport played, the mean value of identity foreclosure for women’s track and field ($M = 2.64, SD = 2.12$) was statistically significantly smaller ($p < .001$) than for women’s volleyball ($M = 5.78, SD = 0.74$). None of the other pairwise
comparisons manifested at statistically significant levels in the wake of the omnibus ANOVA analysis for the study participants’ sport played and the dependent variable of identity foreclosure.

**Post-Hoc Analysis: Sport Played and Athletic Identity**

Post-hoc analyses using *t*-tests were conducted between each pair of measurements in light of the overall statistically significant finding achieved in the omnibus ANOVA for the study participants’ sports played and the dependent variable of athletic identity. Tukey’s (1949) HSD $p$-value adjustments were used to correct for the effect of multiple comparisons on the family-wise error rate in the pairwise comparisons (Field, 2018). The athletic identity mean score for the men baseball student-athletes ($M = 5.39, SD = 0.95$) was significantly larger ($p = .02$) than the athletic identity mean score for the women softball student-athletes ($M = 3.82, SD = 1.56$). The athletic identity mean score for the men baseball student-athletes ($M = 5.39, SD = 0.95$) was significantly larger ($p < .001$) than the athletic identity mean score for the women track and field student-athletes ($M = 2.19, SD = 1.81$). The athletic identity mean score for the women basketball student-athletes ($M = 5.66, SD = 1.22$) was significantly larger ($p = .005$) than the athletic identity mean score for the women softball student-athletes ($M = 3.82, SD = 1.56$). The athletic identity mean score for the women basketball student-athletes ($M = 5.66, SD = 1.22$) was significantly larger ($p < .001$) than the athletic identity mean score for the women track and field student-athletes ($M = 2.19, SD = 1.81$). The athletic identity mean score for the men basketball student-athletes ($M = 5.59, SD = 1.34$) was significantly larger ($p = .009$) than the athletic identity mean score for the women softball student-athletes ($M = 3.82, SD = 1.56$). The athletic identity mean score for the men basketball
student-athletes \((M = 5.59, SD = 1.34)\) was significantly larger \((p < .001)\) than the athletic identity mean score for the women track and field student-athletes \((M = 2.19, SD = 1.81)\). The athletic identity mean score for the men soccer student-athletes \((M = 4.84, SD = 1.06)\) was significantly larger \((p = .01)\) than the athletic identity mean score for the women track and field student-athletes \((M = 2.19, SD = 1.81)\). The athletic identity mean score for the women volleyball student-athletes \((M = 5.93, SD = 1.04)\) was significantly larger \((p < .001)\) than the athletic identity mean score for the women softball student-athletes \((M = 3.82, SD = 1.56)\). Finally, the athletic identity mean score for the women volleyball student-athletes \((M = 5.93, SD = 1.04)\) was significantly larger \((p < .001)\) than the athletic identity mean score for the women track and field student-athletes \((M = 2.19, SD = 1.81)\).
Chapter 5: Discussion

Introduction

The purpose of this study was to quantitatively describe the levels of athletic identity and identity foreclosure of student-athletes across six DIII NJCAA colleges in New York State. This chapter includes a discussion of the implications of the findings based on the results presented in Chapter 4, followed by a discussion of the limitations that should be considered in interpreting the results. Finally, the chapter presents future research and practice recommendations and the study conclusion.

Implications of Findings

This study’s findings have implications for student-athletes, athletic coaches, and athletic directors in NJCAA DII and DIII colleges. The findings generated from each research question are discussed in light of the relevant research on athletic identity and identity foreclosure in student-athletes.

High Levels of Athletic Identity and Identity Foreclosure

The first key finding is that the junior college athletes who participated in this study reported high levels of athletic identity and high levels of identity foreclosure. This finding was unexpected given that prior research indicating high levels of these constructs only in athletic environments with greater competition (i.e., DI colleges). According to Beamon (2012) and Harrison et al. (2011), an individual’s athletic identity increases with the level of competition. Given the study participants’ participation in DII and DIII junior college athletics, the expectation was that the student-athletes would
report low-to-moderate levels of athletic identity and identity foreclosure. However, research by Pflum et al. (2017) indicates that many student-athletes view community college as a stopgap to the NCAA because they consider it a step closer to being a professional athlete. Given the results of this study, the student-athletes at these community colleges experienced high athletic identity and identity foreclosure levels regardless of their school’s division or level of competition.

This finding has implications for athletic coaches and athletic directors in NJCAA DII and DIII colleges. Given the influence these individuals exert when mentoring student-athletes and scheduling their time in sports, athletic coaches and directors should recognize that DII and DIII student-athletes are just as likely to experience identity foreclosure as those athletes competing in DI schools. Researchers have recognized that the time and energy student-athletes spend on athletics precludes them from exploring other academic and social activities, which impedes their development and progress (Brewer & Petitpas, 2017). After their first year of college, student-athletes often detach from academics and take fewer challenging courses and majors with the sole purpose of maintaining their eligibility to play sports (Sturm et al., 2011).

**Predictive Relationship Between Identity Foreclosure and Athletic Identity**

The second key finding was that a statistically significant positive correlation existed between perceptions of identity foreclosure and athletic identity. Also, athletic identity was a significant predictor of identity foreclosure among these DIII student-athletes. In other words, identity foreclosure increased with increases in athletic identity, and high levels of athletic identity indicated similarly high levels of identity foreclosure. These results contradict Borak’s (2018) research that demonstrates a weaker, but
significant, relationship between athletic identity and identity foreclosure among student-athletes at an NJCAA DI college. This present research shows that student-athletes who compete in an NJCAA DIII program have similar levels of athletic identity and identity foreclosure compared to those at an NJCAA DI level. This study also demonstrates that athletic identity predicts identity foreclosure at a statistically significant level. This finding is consistent with athletic identity being a statistically significant predictor of identity foreclosure. According to Harrison et al. (2011), the level of athletic engagement required to play a sport in college causes athletes to abandon alternative interests. Therefore, the failure to explore other occupations leads to academic isolation (Harrison et al., 2011). According to Brewer and Petitpas (2017), identity foreclosure increases relative to athletic identity, resulting in academic detachment. The existence of academic detachment provides institutions with the impetus for developing a robust advisement program for athletes similar to the University of Kentucky’s program, which administrators designed for the sole purpose of meeting the academic and counseling needs of its student-athletes (Washington, 2016).

Fernandes et al. (2019) posited that most engaged student-athletes had higher levels of athletic identity than student-athletes who were less engaged. An institution’s sport policies may dictate its student-athletes’ level of engagement. For example, Fernandes et al. pointed out that competitive programs may be more engaging than less competitive programs. Therefore, an institution’s sport policies can determine the competitiveness of its athletic programs. Moreover, Fernandes et al. showed that an institution’s sport policies influence a student-athlete’s athletic identity, and student-
athletes who were more engaged because of an institution’s athletics policies had higher levels of athletic identity compared to student-athletes who were less engaged.

Gayles and Hu (2009) posited that colleges must find a balance between the intercollegiate and the institutions’ goals so that student-athletes can feel engaged. Student engagement in nonathletic activities represents an integral part of student learning and personal growth. The results of Gayles and Hu’s research indicates policy and practice implications relating to higher education. Encouraging student-athlete engagement benefits the institution and the student-athlete (Pflum et al., 2017).

This finding has implications for policies directed at supporting student-athletes. NJCAA DII and DIII administrators and athletic directors should consider similar moderating programs and policies that are enacted at NCAA DI colleges. These include career counseling, academic advisement, tutorial services, and mentorship. Given the tendency for student-athletes to foreclose, colleges should adopt a team approach. The team’s goal should focus on college completion and life after college. Life after college may pose adjustment issues because the role of an athlete is no longer prevalent; therefore, colleges should implement transition programs to address life after college.

In terms of demographic differences, a surprising finding is the lack of any gender or years in sport differences in athletic identity and identity foreclosure among the DIII student-athletes. This study reveals similar levels of athletic identity and identity foreclosure among male and female student-athletes. This conflicts with the findings of Beamon (2012) and suggests that gender may not be as strong a factor as previously discussed. Females have recently received greater opportunities for athletic participation. The NCAA has a total of 9,581 women’s intercollegiate teams (Acosta & Carpenter,
Since 2012, an additional 307 NCAA schools began offering women’s intercollegiate teams (Acosta & Carpenter, 2014). This increase can be attributed to the enactment of Title 9, which has been instrumental in the growth of women’s sports (Acosta & Carpenter, 2014). Title 9 legislation is a federal law enacted in 1972 to prevent discrimination based on sex in any institution receiving federal funds for educational programs or activities (Dunn, 2019). Although women’s sports have grown, women have seen only gradual growth in the following areas: head coaching opportunities, assistant coaching opportunities, administrative opportunities, and sports information director opportunities (Acosta & Carpenter, 2014).

When exploring other demographics, there are statistically significant differences in athletic identity and identity foreclosure based on ethnicity and sport played. The African American DIII student-athletes reported significantly higher levels of athletic identity than the Hispanic American DIII student-athletes and similar scores to the White student-athletes. This finding is somewhat similar to previous research when it comes to African American student-athletes having the strongest scores (Anthony & Swan, 2018). However, it seems that most of the previous studies had White student-athletes as the main comparison group (Bimper, 2014; Harrison et al., 2011, Melendez, 2000). The change in demographics provides an opportunity to explore other groups, especially Hispanic student-athletes. Given the diversity in the studied location, there were more Hispanic and White student-athletes to compare with African American student-athletes in this study. Interestingly, the White and Black student-athletes reported similar scores on athletic identity and identity foreclosure. This finding contradicts the previous literature of Harrison et al. (2011) and Houle and Kluck (2015). According to Houle and
Kluck (2015), Black student-athletes measured higher on athletic identity and identity foreclosure compared to their White counterparts. According to Beamon (2010), collegiate academic performance decreased as athletic identity and professional aspiration increased, especially among African American student-athletes. Harrison et al. (2011) showed higher levels of athletic identity and higher levels of identity foreclosure in African American student-athletes compared to White student-athletes. Also, the probability of an African American student-athlete being drafted is very low (Njororai, 2012). If student-athletes aspire to compete professionally, they would have to work harder at their sport, potentially neglecting their academic pursuits and increasing their level of identity foreclosure (Borak, 2018). Therefore, African American student-athletes are disproportionally impacted by high levels of identity foreclosure, which means they are less likely to perform well academically or graduate compared to their White counterparts (Cooper, 2016).

Similar to the Borak (2018) study, this present study also found statistically significant differences in athletic identity and identity foreclosure based on the sport played. According to Borak (2018), football and baseball student-athletes exhibit higher levels of identity foreclosure than athletes in other sports. The sports with student-athletes showing high levels of athletic identity and identity foreclosure were culturally popular sports (i.e., basketball, baseball, volleyball, soccer). Consistent with Borak’s study, two female teams showed low athletic mean scores: volleyball and softball. In this present study, softball and women’s track and field also showed low athletic mean scores. Sports with a higher level of competition tend to be more culturally popular, which has also been linked to higher levels of athletic identity (Rasquinha & Cardinal, 2017).
This study was conducted in DII and DIII junior colleges in New York State; therefore, it was expected that the student-athletes would report low-to-moderate levels of athletic identity and identity foreclosure. Researchers have found that African American student-athletes’ levels of athletic identity and identity foreclosure are much higher than their White counterparts. Also, male student-athletes and student-athletes who participate in sports that are culturally popular (baseball, basketball, football) foreclose at a higher rate compared to other sports, yet only the gender group supported this hypothesis. Therefore, regardless of ethnicity and the sport played, the results of this study demonstrate that student-athletes experience high levels of athletic identity and identity foreclosure at the DIII junior college level.

**Limitations**

A significant limitation of this present study was the fact the sample size was derived from six suburban campuses in New York State. Although these colleges resembled other NJCAA colleges, the results may have differed if the study had been conducted in urban areas. Although the sample was determined to be adequate enough to demonstrate statistically significant results, the sample lacked equal representation across each segment of the population (i.e., sport played, race, and ethnicity).

The timing of data collection presented another limitation. Studies have shown that athletic identity and identity foreclosure correlate strongly with a sport’s season of play. At the time of data collection, the student-athletes were not playing in their sport. Sports such as volleyball, showed a high level of engagement that demonstrates a strong correlation between athletic identity and identity foreclosure. Moreover, volleyball does not generate revenue, but volleyball players in the study reported stronger athletic...
identity and identity foreclosure compared to student-athletes participating in revenue-generating sports like baseball and basketball.

The ongoing COVID-19 pandemic presented an additional constraint on the study. During the pandemic, all sporting activities ceased, and institutions conducted remote instruction. Only e-sport remained active, but it was not included in this study sample. Therefore, the pandemic made it extremely difficult to conduct the survey, and recruiting students became a significant task for the athletic directors. The pandemic also prompted a shift away from the original sample of five urban colleges because these schools would not allow outside researchers access to students or campuses. This limited the time available to generate enough interest for the study. With more time, more comprehensive findings may have resulted.

**Recommendations**

Based on the data collected in this present study, the following are the recommendations for future research and practice with student-athletes.

**Recommendation 1**

*Athletic administrators and educators should set up conditions where student-athletes are required to spend balanced time on both academics and sports to prepare them for life after college.* The first recommendation derived from the first key finding that the junior college student-athletes who participated in this study reported high levels of athletic identity and identity foreclosure. Upon entering college, student-athletes have a dual identity (i.e., athlete and student). Unfortunately, the time demands devoted to the athlete role overshadow the student role, diminishing the emphasis on academics (Huml, 2018).
**Recommendation 2**

*Future researchers should consider conducting a study of student-athletes who compete in nontraditional sports.* The second recommendation comes from the third finding that the sport played generated statistically significant differences in athletic identity and identity foreclosure. Over the last few years nontraditional sports (e.g., e-sports) have grown tremendously in popularity (Cranmer et al., 2021).

**Recommendation 3**

*Future researchers should study NJCAA colleges that offer multiple programs (DI and DII) to determine the differences in levels of athletic identity and identity foreclosure of student-athletes.* The third recommendation is based on the second finding that a statistically significant positive correlation exists between perceptions of identity foreclosure and athletic identity and the finding that perceptions of athletic identity significantly affect identity foreclosure.

**Recommendation 4**

*Athletic administrators and educators should consider eliminating the clustering of student-athletes in academic courses.* The elimination of clustering of student-athletes in academic courses would encourage student-athletes to assimilate into other college programs and groups. These activities and interactions could increase their academic identity, making them less likely to experience foreclosure. This recommendation is based on the first key finding that the junior college student-athletes who participated in this study reported high levels of identity foreclosure and high levels of athletic identity. Previous research indicates DIII student-athletes show a lower level of athletic identity compared to DI and DII student-athletes (Huml, 2018). The lower level of athletic
identity implies that DIII athletes are likely to experience a higher level of academic achievement because they did not focus primarily on athletics (Watson, 2016). The findings of this current study contradict prior research. These findings show there is a positive relationship between athletic identity and identity foreclosure.

**Recommendation 5**

*Athletic administrators should consider developing more specific career counseling workshops for student-athletes.* The final recommendation derives from the second key finding that athletic identity predicts perceptions of identity foreclosure at a statistically significant level. Student-athletes with high levels of athletic identity tend to avoid counseling (Kissinger et al., 2011). Unfortunately, participation in intercollegiate athletics has been associated with low grades and a sense of entitlement (Kissinger et al., 2011).

**Conclusion**

The purpose of this study was to quantitatively describe the levels of athletic identity and identity foreclosure of student-athletes across six DIII NJCAA colleges in New York State. A cross-sectional survey served as the research instrument to collect data from 121 student-athletes across eight sports. Those 121 student-athletes produced an actionable data set of 113 study participants. Though certain sports resulted in a small cell size, the study data arrays were 100% intact, reflecting no missing data. However, the small cell size in certain sports may have contributed to the results of the survey.

Based on the first finding that junior college student-athletes reported high levels of athletic identity and identity foreclosure, it can be concluded that student-athletes in all college settings can experience high levels of athletic identity foreclosure. Therefore, the
competitiveness of the sport and whether the student-athlete received a scholarship or not may be less relevant than prior research suggests.

Based on the second finding that a statistically significant positive correlation existed between perceptions of identity foreclosure and athletic identity, it can be concluded that a positive relationship exists between athletic identity and identity foreclosure in all college settings. Moreover, athletic identity was statistically predictive of study participants’ perceptions of identity foreclosure. Therefore, the divisional structure of the sport (i.e., NJCAA DIII vs. NCAA DI) did not appear to influence the levels of athletic identity and identity foreclosure, which contradict prior research.

Finally, based on the third finding that statistically significant differences in athletic identity and identity foreclosure existed based on ethnicity, sport played, and years in sport, it can be concluded that African American student-athletes tend to foreclose at a higher rate than other ethnic groups. This finding aligned with prior research. Moreover, the sport of volleyball, which does not generate revenue, showed the highest mean average, which may have resulted from the strong sample size compared to revenue-generating sports. Furthermore, the number of years a student-athlete competed matters, but the sample size in the categories should be noted. Student-athletes in the NJCAA, regardless of division, viewed their years in the sport as a stepping-stone to the NCAA and, eventually, to the professional level. Lastly, statistically significant differences in athletic identity and identity foreclosure based on gender did not emerge, suggesting that both male and female participants identified at similar levels with the role of athlete. This finding contradicts previous research, which indicates that male athletes identify and foreclose at higher levels than female athletes. Therefore, researchers and
administrators should reconsider whether female athletes engage in sports as strongly as their male counterparts.

**Summary**

Survey completion rates and internal reliability of the study participant responses to the survey items on the two research instruments were noteworthy. Study participant perceptions of athletic identity and identity foreclosure manifested at statistically significant levels, with a slightly greater degree of response effect evident in the construct of identity foreclosure. The constructs of athletic identity and identity foreclosure related to one another at a statistically significant level, with a huge degree of associative effect. Predictive analysis indicates that the perceptions of athletic identity predicted the study participants’ perceptions of identity foreclosure at a statistically significant level. Statistically significant effects manifested on the perceptions of athletic identity and identity foreclosure according to the study participants’ ethnicity and the sport played.
References


Lupo, C., Mosso, C., Guidotti, F., Cugliari, G., Pizzigalli, L., Rainoldi, A., & Sampaio, J. (2017). The adapted Italian version of the baller identity measurement scale to evaluate the student-athletes’ identity in relation to gender, age, type of sport, and competition level. *Plos One, 12*(1), e0169278–e0169278. https://doi.org/10.1371/journal.pone.0169278


Appendix A
Cross-Sectional Survey

Demographic Questions

1. What gender do you identify as?
   A. Male
   B. Female
   C. Trans
   D. Choose not to report

2. What is your race? (Choose all that apply)
   A. White
   B. Black or African American
   C. American Indian or Alaska Native
   D. Asian
   E. Native Hawaiian or Other Pacific Islander
   F. Other

3. What sport do you currently play in college?
   A. Men’s Basketball
   B. Women’s Basketball
   C. Baseball
   D. Softball
   E. Men’s Soccer
F. Women’s Soccer
G. Women’s Outdoor Track & Field
H. Women’s Tennis
I. Women’s Volleyball
J. Men’s Swimming
K. Men’s Outdoor Track
L. Men’s Indoor Track
M. Women’s Swimming
N. Women’s Indoor Track
O. Men’s Tennis

4. How many years have you played this sport in college?
   A. 1-2 years
   B. 3-6 years
   C. 7-10 years
   D. 10+ years

5. Which campus do you attend?
   A. ACC
   B. BCC
   C. CCC
   D. DCC
   E. ECC
   F. FCC
Sport-Specific Measurement of Identity Foreclosure (SSMIF)

Please answer the following questions based on your level of agreement:

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t expect to change the decision I made to become an athlete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have chosen to be an athlete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have explored non-sport interests as possible opportunities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being an athlete is what I want to achieve in my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have definitely decided that being an athlete is the occupation I want to pursue.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have pursued an interest in roles other than athlete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have gathered information about roles other than athlete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am committed to being an athlete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am sure that I want to be an athlete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have considered adopting roles other than athlete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being an athlete is what I want to do with my future.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being an athlete is the direction I want to follow in life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Athletic Identity Measurement Scale (AIMS)**

Please answer the following questions based on your level of agreement:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strongly Disagree</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strongly Agree</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Survey Questions**

I consider myself an athlete.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I have many goals related to sport.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Most of my friends are athletes.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sport is the most important part of my life.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I spend more time thinking about sport than anything else.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I feel bad about myself when I do poorly in sport.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I would be very depressed if I were injured and could not compete in sport.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>