

SELF-EFFICACY AND CAREER DEVELOPMENT AMONG NCAA DIVISION I
STUDENT-ATHLETES: EXAMINING CAREER DECISION-MAKING
CONFIDENCE AND CAREER ENGAGEMENT

by

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To my mother and father

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ABSTRACT

EXAMINING CAREER DECISION-MAKING AND CAREER ENGAGEMENT AMONG NCAA DIVISION 1 STUDENT-ATHLETES: ATHLETIC IDENTITY, SELF- EFFICACY, AND CAREER DEVELOPMENT

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Student-athletes navigate demanding athletic and academic responsibilities while also preparing for life after sport. Although self-efficacy has been widely linked to persistence, goal setting, and performance, less is understood about how student-athletes' confidence influences the career development process—particularly their readiness to make career decisions and their engagement in career preparation activities. The purpose of this quantitative study was to examine the relationship between self-efficacy and career development among NCAA Division I student-athletes

Chickering's Identity Development Theory served as a lens for understanding how identity development during the college years may relate to career exploration and postcollege planning. Using a cross-sectional survey design, data were collected from NCAA Division I student-athletes across sports and academic levels. Participants completed an online survey that assessed athletic identity, self-efficacy, extrinsic motivation factors, and career development-related constructs, including career decision-

making confidence and career engagement behaviors connected to the student-athlete experience.

Overall, these athletes showed high self-efficacy, high athletic identity, and strong intrinsic motivation to be successful off the field, which challenges the idea that athletes are automatically behind in career development. Most athletes had clear career goals, and the main anxiety was not choosing a career, but feeling confident about alternative options beyond their first choice. Some also showed uncertainty in career preparation basics like résumé building and understanding career field trends, which are likely connected to limited exposure and the time demands of sport. These findings suggest that career development should be integrated into the student-athlete experience early. This should strengthen career confidence through practical skill development and structured opportunities.

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CHAPTER ONE

INTRODUCTION

College athletes represent a unique intersection of academic commitment and athletic dedication, making their experiences particularly important to discuss. Their journeys regularly highlight the difficulties of balancing rigorous training schedules with educational obligations, as well as the pressures of competition and scholarship pursuit. These experiences affect student-athletes academically, personally, and professionally. Following the stories of these student-athletes provides insight into the sacrifices they make and offers a broader perspective on the impact of collegiate sports on their continued personal development and future opportunities. Therefore, institutions should hold vital discussions about the development and achievement of student-athletes and provide access to academic, career-related, and personal support resources connected to the distinctive challenges they face (Broughton & Neyer, 2001; Howard-Hamilton & Sina, 2001; Navarro & McCormick, 2017; Umbach et al., 2006).

College students today face rising costs, elevated dropout rates, changing curricula, and challenges to their identity and feeling of belonging. In addition to these issues, student-athletes experience the pressures of playing a sport, including intense practice and competition schedules, combined with the aforementioned challenges. In recent years, collegiate leaders, scholars, and athletic departments have sought to alleviate these matters by increasing efforts to support and develop student-athletes holistically. Many researchers and scholars have focused on athletes' academic success, graduation, time management, social skills, and psychosocial factors (Navarro &

McCormick, 2017). In spite of these efforts, few studies have explored how former college athletes struggle to maintain confidence during career transitions (Navarro & McCormick, 2017). There is still a significant gap in research aimed at fully understanding why athletes continue to meet challenges with career readiness and what can be done to improve the transition into their careers.

Just like their peers in college, student-athletes step onto campus with hopes of completing their degrees and pursuing rewarding careers. However, unlike their non-athlete counterparts, they face additional challenges connected to the demands and structure of college athletics (Broughton & Neyer, 2001; Howard-Hamilton & Sina, 2001; Umbach et al., 2006).

While numerous studies over the past decade have examined academic performance, social engagement, and other developmental aspects of student-athletes, the literature continues to emphasize the need for stronger career-transition support. Active and systematic preparation for the transition from college sports to the workforce remains an important area for continued institutional attention (Navarro & McCormick, 2017; Stambulova et al., 2009; Stambulova et al., 2021).

Given the central role they play in the daily lives of college athletes, athletic administrators, counselors, and academic support teams should help facilitate career preparation regardless of an individual student's success in sport. When athletes are not prepared for the eventual transition out of sport, the experience can become more difficult. Therefore, this dissertation examined how self-efficacy influences career development among student-athletes (Shurts & Shoffner, 2004; Stambulova et al., 2009; Van Raalte et al., 2017).

Background on College Student Athletics

National Collegiate Athletic Association

The National Collegiate Athletic Association (NCAA) is a governing body of more than 500,000 student-athletes across over 1000 members schools within three divisions. Several studies have examined the National Collegiate Athletic Association (NCAA) and student-athletes. This section will provide information on the NCAA's functions and the structure of its relationship with institutions. Over the past 30 years, the NCAA has implemented a variety of methods to help student-athletes achieve academic success across three phases (NCAA, 2021). The first phase took place in 1983, setting academic standards and minimum GPAs for athletes before college, known as Proposition 48. The second Phase in 1990 was known as the Federal Graduation Rate, which required institutions to report graduation rates to the NCAA and the federal government, limited to first-year and full-time student-athletes. The third phase in 2002 was known as the graduation success rate, which considered multiple factors, for instance, transferring students, defining good academic standing, and a more precise model than the previous federal system. As a result, the NCAA created a structure and autonomy for independent governance in three divisions. Division 1 athletes represent the most prestigious level of sports competition at four-year institutions. Division 1 typically has the largest athletic budgets, the largest schools, and the most athletic scholarships. There are more than 170,000 Division 1 student-athletes, and 57% of them receive athletic aid, full scholarships, or stipends (NCAA, 2021). In Addition, according to the NCAA, 9 out of 10 athletes are earning their bachelor's degrees, the highest it has ever

been. The graduation rates of African American student-athletes have also increased by 21% since 2002, bringing their percentage to 77%, the highest ever (NCAA, 2021).

In a study conducted by the NCAA and the Gallup-Purdue Index Report, a national survey of about 74,385 adults with a bachelor's degree or higher was conducted from 1975 to 2019. The study compared the graduate and undergraduate experiences of both the student-athletes and non-athlete peers to determine engagement, well-being, and several related outcomes (NCAA, 2021). The results showed that graduates who were student-athletes (39%) are more likely to earn an advanced degree than their non-athletic peers (32%) (NCAA, 2021). The positive association between pursuing an advanced degree and African American student-athletes is even greater, at 49%, compared to their non-athletic peers (39%) (NCAA & Gallup, 2020). By gender, male athletes' families, on average, had higher expectations for the type of athlete they would be than female student-athletes' families. The report also found that student-athletes lead their non-athletic peers in three engagement categories and are more likely to (a) strongly agree that their professor care about them, (b) had a mentor in college with a positive influence in accomplishing their goals, and (c) they had at least one professor that impacted their happiness while learning in school (NCAA & Gallup, 2020).

Moreover, these authors found that postgraduate and employment outcomes tend to be more favorable for student-athletes compared to non-student-athletes (NCAA & Gallup, 2020). They argue that student-athletes are 1.3 times more likely to earn a graduate degree (39%) than their non-athletic counterparts (32%). Among African American athletes, the distance is even greater at 49% versus 39% among black non-athletes (NCAA, 2021). In addition, the NCAA found that student-athletes are slightly

more likely to have a good job waiting for them after graduating, at 33% compared to their non-athletic peers at 30%. They indicated that both groups defined good jobs as having a mission and purpose (24%), pay (21%), learning and development (17%), and possibilities for growth within a company (16%) (NCAA, 2021). They found that employment engagement is similar between student-athletes (36%) and non-athletic peers (35%). However, male student-athletes are more likely to be engaged (36%) than their non-athletic peers (33%). Still, they did not find any differences in employment engagement by race or ethnicity. Yet, they found a noticeable difference between student-athletes (44%) and non-athletes (41%) in their level of support for the current work. Student-athletes (29%) are also slightly more likely to strongly agree that they have the ideal job for them compared to non-student-athletes (27%). NCAA, 2021, found that student-athletes with no loan debt are slightly equal to their non-athlete peers at 42% and 41%, respectively. However, when it comes to college loan debt of 40,000 or more, athletes are likely to owe more at 20% than their non-athletic counterparts at 18%. Student athletes are also slightly more likely to have debt of 10,000-20,000 owed to the institution.

Additionally, student athletes struggle because they have not identified or defined interests or a clear feeling of purpose when making career choices (Edwards, 2000). Athletes do not spend the time thinking about what they would like to do after graduation or their career interests. This mindset may make job searching frustrating for athletes with little knowledge of the process. Finally, athletes struggle in the limited networks available, and not understanding the power of connections can impact the job search process. The same can be said of athletes who have no connections to role models in that

career field, as they may feel less confident there (Edwards, 2000). Also, finding a preferred major or topic is important, but some student-athletes have no idea what interests them or what major to select (Harrison, Harrison, & Moore, 2002). As a result, these various factors, holistic development, limited experiences, networking skills, and role models need to be further explored and examined. The end goals for these student-athletes are to find careers that allow them to support themselves and their families after playing sports.

Another reason student-athletes struggle is that they have not identified or defined interests or a clear feeling of purpose when making career choices (Edwards, 2000). Athletes do not spend the time thinking about what they would like to do after graduation or their career interests. This mindset may make job searching frustrating for athletes with little knowledge of the process. Finally, athletes struggle in the limited networks available, and not understanding the power of connections can impact the job search process. The same can be said of athletes who have no connections to role models in that career field, as they may feel less confident there (Edwards, 2000). Also, finding a preferred major or topic is important, but some student-athletes have no idea what interests them or what major to select (Harrison et al., 2002). As a result, these various factors, holistic development, limited experiences, networking skills, and role models need to be further explored and examined. The end goals for these student-athletes are to find careers that allow them to support themselves and their families after playing sports.

In conclusion, for student-athletes to achieve holistic development in both roles as college students and athletes, institutions will need to provide formal support on and off the field (Broughton & Neyer, 2001; Navarro & McCormick, 2017; Shurts & Shoffner,

2004). The literature on college athletes covers a variety of experiences, topics, and issues within the education setting. However, one of the biggest issues facing student-athletes today is the career development gap, which is essential for athletes who want to have positive career goals. For example, college students who have difficulty with career decision-making may experience negative outcomes, such as unemployment, lower wages, and stunted career growth (Feldman, 2003). Other researchers suggest that athletes experience role conflict or campus isolation that can impact career development (Adler & Adler, 1987).

Conceptual Framework

The challenges student-athletes face in career development point out the importance of addressing both competence and athletic identity during college (Brown et al., 2000; Murphy et al., 1996). By examining how self-efficacy influences identity and career development, institutions are able to develop targeted strategies to help athletes build successful careers beyond sports (Navarro & McCormick, 2017; Van Raalte et al., 2017). Therefore, my dissertation will contribute to this discussion by examining how self-efficacy affects the career development of student-athletes and by investigating how institutions may better support these individuals as they transition from sports to professional careers. This entails assessing the roles of athletic support systems, guidance programs, and career resources in promoting both individual and career growth. Additionally, adopting a more holistic perspective, I want to explore how identity influences an individual's development during college. Understanding the role of identity is critical to understanding how student-athletes navigate personal and career development in college. Identity theory delivers a framework for examining how these

individuals manage their dual roles as students and athletes, shaping their self-perceptions and affecting their career paths beyond sports (Chickering and Reisser, 1993; Stryker & Burke, 2000).

Identity Theory

The origin of identity theory, derived from Erikson (1958, 1963, 1968), was developed as a psychosocial stage. Erikson perceived identity as a series of psychosocial stages that individuals experience from adolescence to adulthood. Additionally, he found that during these stages, a physical crisis occurred when the individual's needs conflicted with those of society (Erikson, 1963). In support of this interpretation, Chickering & Reisser (1993) created seven identity vectors: developing successful habits, controlling emotions, independence, advancing relationships, establishing identity, creating purpose, and having good character. They found that each student experiences these vectors differently. For example, a student might cycle through managing emotions and establishing identity before another student, who could struggle with their identity. In other words, these vectors are used to understand how students develop at university as they form their identity. In 2000, Stryker and Burke defined identity as a combination of an internal perception of oneself and external identities in society. They found that these internal and external factors that make up identity make up an individual's perceptions, or how others perceive them. In support of this interpretation, some would argue that a part of a person's identity or self-concept derives from the groups to which they belong (Tajfel, 1981).

Many different psychosocial perspectives are important for understanding identity related to being a social member or engaging in intergroup behavior. (Deaux, 1994;

Spears, 2011; Tajfel, 1981). Social identity is defined as a part of an individual's concept of self that derives from awareness of the community or group to which that individual belongs (Tajfel, 1981). In Hornsey's 2008 framework, the social identity approach consists of both self-categorization and social identity theories. He stated that "Categorization also changes the way people see themselves, in the sense that it activates it activates a different level of one's self-concept At the interpersonal end of the spectrum, people's self-concept will mostly comprise the attitudes, memories, behaviors, and emotions that define them as idiosyncratic individuals, distinct from other individuals one's personal identity" (p. 206). In other words, self-categorization is particularly strong when individuals develop cognitive self-representations through multiple social groups. In addition, another concept in social identity theory is the idea that social identity becomes more important than individual identity in certain circumstances (Hornsey, 2008; Spears, 2011).

In the context of social identity, it is important to understand that individuals belong to different social circles, and certain identities have stronger consequences for how we define ourselves (Deaux, 1994). Deaux (1994) argued that societal identity comprised five distinct categories: ethnic, religious, diplomatic, career, and personal relationships, as well as stigmatized groups. He found that social identity is more than simply a set of categories but also includes values, emotional connections, and motivational cognitions. Hornsey (2008) examined that social identity has moved towards unique individuals, group belonging, and self-advancement. He argued that social identity is both individual and group, mutually affecting each other. Finally, Spears (2011) concluded that self-definition and intergroup processes can be associated with

identity concepts and hierarchies for salient identities. In general, empirical research has suggested that student-athletes have struggled with psychosocial salience, stereotypes, and social similarities (Yopyk & Prentice, 2005). They found that athletes changed identity, depending on the goal at hand. In other words, athletes may cycle through different identities to complete a task, highlighting the most productive identity. Thus, identity is particularly salient in this context within the student-athlete social circle, since it highlights a stronger connection to the group.

Additionally, identity foreclosure is another essential element of identity development, particularly for student-athletes. Identity foreclosure can occur when individuals become so focused on one role that they do not sufficiently explore other possible identities or career options (Brown et al., 2000; Murphy et al., 1996). Self-exploration is therefore a key part of career development for student-athletes. When student-athletes explore different fields and careers, they are better positioned to identify interests, build career confidence, and prepare for opportunities beyond sport (Brown et al., 2000; Navarro & McCormick, 2017).

Self-efficacy

Self-efficacy theory, pioneered by psychologist Albert Bandura, suggested that an individual's belief in their own capabilities strongly influences their behavior, motivation, and success (Bandura, 1977). This theory suggests that people with high self-efficacy are more likely to set challenging goals, persevere in the face of obstacles, and exhibit greater resilience. Furthermore, according to Bandura, self-efficacy influences many aspects of human behavior, including the choices individuals make, the effort they put forth in given endeavors, and their persistence in the circumstance of adversity (Bandura, 1977).

In addition, Bandura also identified four principal sources from which self-efficacy beliefs are derived: mastery experiences, vicarious experiences, verbal persuasion, and physiological and emotional conditions (Bandura, 1994). Mastery experiences are most effective in enhancing self-efficacy, as successful task completion strengthens an individual's belief in their capabilities, whereas repeated failures may weaken this belief (Bandura, 1994). Vicarious experiences, where individuals observe others completing tasks, especially those they identify with, can also substantially strengthen self-efficacy. This mechanism emphasizes the social dimension of self-efficacy, in which peers' achievements serve as benchmarks and motivators for similar success (Bandura, 1986).

Furthermore, verbal persuasion involves others encouraging an individual to believe that they can overcome challenges and succeed at tasks, providing a motivational boost that, although less influential than direct experiences, still plays a role in building self-efficacy (Bandura, 1997). Additionally, physiological and emotional responses, including anxiety, stress, and mood states, can affect self-efficacy beliefs. Positive emotional and physiological states can enhance self-efficacy, making an individual more likely to engage in and persist with a task, whereas negative emotions can diminish self-efficacy and may lead to withdrawal and reduced effort (Bandura, 1997).

In the realm of sports psychology, self-efficacy theory has been applied to understand athletes' performance, motivation, and psychological well-being. Athletes with firm self-efficacy beliefs in their abilities are more likely to set ambitious goals, persist in training efforts, and sustain focus during competition (Feltz & Lirgg, 2001).

Moreover, self-efficacy has been linked to athletes' confidence in their skills, their ability to handle pressure, and their resilience in the face of setbacks (Vealey & Chase, 2008).

When considering the career development of student-athletes, self-efficacy theory becomes particularly relevant. Research on athlete career development and transitions emphasizes that athletes' self-beliefs about their capabilities can influence their career aspirations, decision-making processes, and transition out of sport (Stambulova et al., 2009; Stambulova et al., 2021). Understanding the role of self-efficacy in the career development of student-athletes can inform interventions and support programs that improve their career readiness and facilitate a successful transition beyond their athletic careers.

Self-efficacy and career development are two of the more popular psychosocial constructs in the study of student-athletes' transition into career development (Navarro & McCormick, 2017). Studies have shown that self-efficacy is associated with career development and positive academic outcomes (Solberg, Good, Fischer, Brown, & Nord, 1995; Taylor & Betz, 1983). In this dissertation, I will examine the concepts of career development and self-efficacy as they relate to student-athletes. Career development and self-efficacy were chosen because they are among the more popular constructs describing student-athletes' career development outcomes (Janosko, 2018; Van Raalte et al., 2017). For example, Van Raalte et al. (2017) found that student-athletes who participated in career exploration showed significantly higher levels of self-efficacy in career development than athletes who did not participate. Janosko (2018) defined career development self-efficacy as an individual's ability or confidence in selecting a career.

Student-athletes with higher levels of self-efficacy had more positive experiences with their career development (Janosko, 2018).

Career Development

The traditional definition of career development has been modified over the years. Savickas (1994, 1998), using Super's (1990) model, defined career development as comprising the career exploration and establishment stages. The four stages that framed Super's model were attitudes toward planning and exploration, competence in career knowledge, and decision making. Furthermore, Savickas (2002a, 2005) expounded on the career development definition, calling it a career construct. They assert that career construct is defined as an individual process of exploring career goals, career maturity, and career opportunities. In other words, individuals' career development is determined by environmental factors and life experiences.

In 2002, Savickas followed up on this theoretical framework by asserting that career development is more about occupation than development. For example, he stated that, "The essential point here is that career denotes a reflection on the course of one's vocational behavior; it is not vocational behavior. Occupation and vocational behavior both refer to interaction with the environment, whereas career refers to reflection about the course of this interaction" (p. 383). In support of this interpretation, Fouad (2007) suggested that when choosing a career path, individuals should recognize that their identity and personal interests will intersect. For example, if students want to become career professionals, they may benefit from practical experiences such as internships, job shadowing, and planning for alternative career paths (Fouad, 2007; Haslerig & Navarro, 2016).

The traditional definition of career development has been modified over the years. Savickas (1994, 1998) defined career development as comprising the career exploration and establishment stages. The four stages that framed Super's model were attitudes toward planning and exploration, competence in career knowledge, and decision-making. Furthermore, Savickas (2002, 2005) expounded on the career development definition, calling it a career construct. They assert that career construct is defined as an individual process of exploring career goals, career maturity, and career opportunities. In other words, individuals' career development is determined by environmental factors and life experiences.

Savickas (2002b) distinguished career from vocational behavior in his theoretical framework, asserting that career development is more about occupation than development. He stated that, "The essential point here is that career denotes a reflection on the course of one's vocational behavior; it is not vocational behavior. Occupation and vocational behavior both refer to interaction with the environment, whereas career refers to reflection about the course of this interaction" (p. 383). In support of this interpretation, Fouad (2007) suggested that when choosing a career path, individuals should recognize that their identity and personal interests will intersect. For example, if students want to become career professionals, they may benefit from practical experiences such as internships, job shadowing, and planning for alternative career paths (Fouad, 2007; Haslerig & Navarro, 2016).

Research Questions

In this study, I examine the relationship between self-efficacy and four achievement psychosocial variables: (a) athlete identity, (b) academic motivation,

(c) career development, and (d) the many challenges experienced by student-athletes. It is important to explore, understand, and define career development as it relates to these individuals' career self-efficacy. As a result, I developed the following research questions.

1. What are their individual career experiences and aspirations?
2. What influences these student-athletes' efficacy: (a) career self-exploration; (b) experience career maturity, and (c) prepare for life beyond sports?

Significance

This research examines student-athletes' self-efficacy in career readiness and preparation for life beyond sports to enhance individual outcomes and institutional support. By investigating self-efficacy, I intend to bolster student-athletes' success throughout their collegiate and professional careers. As collegiate athletics continues to change, understanding the factors that shape student-athletes' career trajectories is becoming increasingly important. The National Collegiate Athletic Association (NCAA) reports that over 500,000 student-athletes participated in collegiate sports, highlighting the vast population affected by this field of study (NCAA, 2021). Despite the popularity of athletic programs and support services, many student-athletes still face major challenges in career planning and transitioning out of sports (Navarro & McCormick, 2017; Stambulova et al., 2021). Recent changes in college athletics, including name, image, and likeness opportunities, can also be understood as transition issues that affect student-athletes' stress, decision-making, and professional development (Economou & Gamble, 2025).

Findings from this study will help bridge the gap between student-athletes' self-efficacy and psychosocial variables, including athletic identity, academic motivation,

career development, and the multiple challenges they face. By examining the influences on student-athletes' career development, this research intends to give valuable insights that can inform and enhance institutional support systems. Additionally, the individual applied the theoretical framework of self-efficacy, as proposed by Albert Bandura (1977), which offered a lens through which to study these influences. Bandura's theory suggests that an individual's beliefs about their capabilities strongly influence their behavior, motivation, and ultimate success. In the context of student-athletes, understanding how their athletic experiences shape their self-efficacy in career-related tasks could identify key intervention stages for career development programs.

Additionally, the findings from this research have the potential to contribute to the field of career development focused on self-exploration, particularly in the context of student-athletes balancing multiple identities and responsibilities. By investigating the specific factors influencing student-athletes' career self-efficacy, this study may identify pathways to enhance career readiness among this unique population (Brown et al., 2000; Navarro & McCormick, 2017; Van Raalte et al., 2017). Furthermore, the knowledge obtained from this research could support the development of more targeted interventions and support systems for student-athletes and other students navigating intensive commitments. Ultimately, this study intends to bridge the gap between college student-athletes' transitions and long-term career success, adding to a more comprehensive understanding of career development in intense, multifaceted environments (Stambulova et al., 2021). In sum, this study aims to deepen our understanding of how student-athletes develop their careers and prepare for life after sports. By examining the challenges student-athletes face and the factors that influence their success, this study intends to

provide colleges with important insights that can help institutions formulate more effective support systems for student-athletes, improve their college experiences, and ease their transition into professional lives beyond athletics (Navarro & McCormick, 2017; Shurts & Shoffner, 2004).

CHAPTER TWO

LITERATURE REVIEW

Student-athletes may encounter both academic and social challenges in higher education. They can be stereotyped and perceived as falling short of the college standards set for non-athletes. This problem can lead to a culture that views athletes as academically less equipped to compete with other students. These standard expectations may be even lower in revenue-generating sports than in non-revenue-generating sports. Furthermore, the intense spotlight on athletic performance often overshadows these individuals' academic potential. As a result, many institutions are now striving to implement comprehensive support systems that increase academic achievement and career development (Broughton & Neyer, 2001; Howard-Hamilton & Sina, 2001; Umbach et al., 2006).

In general, students who had positive experiences with family tend to do better in academic self-regulation, which, in turn, has a positive effect on school variables related to academic success (Xia, Fosco, & Feinberg, 2016). College athletics at the highest level have increasingly emphasized the importance of academic success for teams and individual players. For instance, the NCAA announced it would donate millions to institutions where student-athletes have achieved notable levels of academic success, high graduation rates, and degree attainment rates that surpass those of their non-athletic peers (Hosick, 2016). A similar study found that student-athletes in their first semester with high levels of community involvement, individual support, and positive self-image are likely to have higher GPAs (Brecht & Burnett, 2019). Additionally, they found that

athletes who had positive feelings toward themselves and their school were more likely to succeed academically. Research also indicates that academic self-efficacy is associated with study-related skills, learning-related emotions, and academic success (Putwain et al., 2013). Additional studies have shown that, in athletics, factors that impact student-athletes' career development include academic involvement, self-efficacy, motivation, and athletic identity (Coffin, Stokowski, Paule-Koba, & Godfrey, 2021).

Research on Athletic Identity

Athletic Identity

Several studies have examined the association between athletics and identity (Brewer et al., 1993; Brown et al., 2000; Yopyk & Prentice, 2005). Brewer et al. (1993) found that athletic identity is defined as an individual embracing their athletic identity and athletic role. Brown et al. (2000) had a similar definition of athlete identity, stating that student-athletes who believe in or identify with their athletic role. They argued that students' career development is affected and limited by two interrelated factors: identity foreclosure and athlete identity. Stokowski et al. (2019) found that athletes with a strong athletic identity have difficulty transitioning out of sports. In addition, they found that athletes' transition out of sports is negative because they neglect other identities. As a result, student-athletes with lower athletic identity tend to do better at transitioning out of sports than those with high identity (Stokowski et al., 2019). However, athletes with social support reported a positive transition out of sports and felt prepared.

In another study, Webb et al. (1998) found that an athlete's identity comprises two concepts: private and public athlete identity. Private athletic identity refers to an individual's perception of self, their morals and values (Webb et al., 1998). Public

athletic identity refers to an individual's social roles or how others perceive them (Webb et al., 1998). Brewer et al. (1993) concluded that athletes with strong identities who were very successful in their sport were more likely to experience difficulty making career-related decisions. In addition, gender had an impact on identity, with it being higher in men. They also found that having an exclusively high athletic identity could lead to identity foreclosure. Previous research has supported a meaningful relationship between athlete identity and student-athlete academic performance.

In a previous study, Adler and Adler (1987) found, in a longitudinal study of men's basketball, that over time, student-athletes increasingly identified with their athletic role rather than their social and academic identities. They argued that this decrease in role association stems from internal and external factors within the athletic team environment. Student-athletes are forced to delegate more time to the team to meet its high demands, which increases their indoctrination into the athletic subculture and decreases their connection with the academic experience, leading to lower academic performance. For example, a cycle is created that ensnares student-athletes by reinforcing the idea that they are unable to meet academic and social standards and that they should focus an increasing amount of time on athletics. Ultimately, this cycle creates space for student-athletes to feel conflicted about their collegiate experience and their identity. In a subsequent study, Adler and Adler (1991) similarly found that student-athletes' non-athletic roles decreased throughout their college careers because of little to no reinforcement for their academic performance. The results of previous studies have provided evidence that a stronger identity leads to less energy towards career development. In addition, they found that student-athletes with less identity foreclosure

gained greater confidence in their capacity to make career decisions. They further argued that student-athletes with more hours of sports participation would have lower career decision-making self-efficacy. In addition, student-athletes who have a strong affinity for their athlete role and/or are identity foreclosed demonstrate low self-efficacy for career decision-making tasks.

The Athletic Identity Measurement Scale (AIMS), developed by Brewer et al. (1993), remains a fundamental tool in assessing the degree to which individuals identify with their athletic roles. This 10-item scale, rated on a Likert scale from 1 (strongly disagree) to 7 (strongly agree), provides a quantitative measure of athletic identity, with higher scores indicating stronger identification. The AIMS is widely used in research to explore the implications of athletic identity on athletes' psychological well-being and career transitions. This paragraph will delve into the measurement of athletic identity and the significance of the AIMS in contemporary research. The AIMS is a well-established instrument in sport psychology, used to assess how strongly individuals identify with their athletic roles. It has been validated across diverse populations and sports, demonstrating its robustness and reliability (Lochbaum et al., 2022).

The AIMS remains a well-established instrument in sport psychology and has been used to assess how strongly individuals identify with their athletic roles. Its continued use across studies underscores its importance for examining athletic identity, transition concerns, and student-athlete well-being (Lochbaum et al., 2022).

As of Late, studies have called into question how student-athletes perceive their identity (Graupensperger et al., 2020). For example, Graupensperger et al. (2020) used a social subscale to examine student-athletes' positive perceptions of self rather than a

negative image. As mentioned before, early researchers conceptualized athlete identity as a continuum of negative experiences or isolation within a group (Adler & Adler, 1991; Brewer et al., 1993). In contrast, they measured and observed athletic identity using a social scale, focusing on the positive aspects of self-image. For instance, athletes have the support and encouragement of a teammate to complete homework assignments.

In another study, Murphy et al. (1996) examined athletic identity and career development among 124 student-athletes. They investigated the hypothesis that college athletes with a strong attachment to their athletic identity may struggle to develop mature career plans because of the significant time and energy required for their athletic pursuits. The study revealed an inverse relationship between identity foreclosure, athletic identity, and career development. They concluded that a high and exclusive athletic identity without exploring alternative roles can lead to lower career development. Researchers Murphy et al. (1996) highlighted male student-athletes in revenue-generating sports as especially at risk for poor career decision-making skills.

In summary, athletic identity is a concept that describes the degree to which individuals identify with their athletic role and how it impacts their other identities (Brown et al., 2000). Athletic identity is a concept that has been extensively studied among student-athletes. Researchers have found that having a strong athletic identity can have both positive and negative effects (Brown et al., 2000; Stokowski et al., 2019). On the one hand, a strong identity with one's athletic role can lead to a greater sense of belonging and social support within the athletic community. On the other hand, a strong athletic identity can also lead to identity foreclosure, where the individual feels limited in their career development due to a lack of exploration of other identities (Brewer, Van

Raalte, & Linder, 1993). Furthermore, a high and exclusive athletic identity, without exploring alternative roles, can lead to lower career development, particularly among male student-athletes in revenue-generating sports (Murphy et al., 1996; Stokowski et al., 2019). Stambulova et al. (2021) noted that, in the long term, it is important for an athlete's holistic development across the academic, psychological, psychosocial, and vocational domains. They suggested that psychosocial support can facilitate a positive transition out of sports, as athletes feel better prepared (Stambulova et al., 2021). In addition, they found that having a high athletic identity can lead to conflict with the student's role, which may decrease academic performance and increase difficulty in transitioning out of sports. However, having social support and a positive self-image can mitigate these negative effects (Graupensperger et al., 2020). Overall, understanding athletic identity can help support student-athletes in their transition out of sports and promote their overall well-being (Stambulova et al., 2021).

General Self-Efficacy

Self-efficacy generally refers to a person's beliefs about their ability to complete a specific task or achieve a specific goal. Academic self-efficacy has been extensively studied in the literature and is closely related to academic achievement (Zimmerman, 2000). Research by Putwain et al. (2013) reported a positive relationship between academic self-efficacy, study-related skills, learning-related emotions, and academic success. In addition to academic success, self-efficacy has been found to play a role in student-athlete career decision-making and transition. Navarro and McCormick (2017) conducted a study to explore the relationships among athletic identity, self-efficacy, and career decision-making among student-athletes. They found that higher levels of athletic

identity were negatively associated with self-efficacy for career decision-making, suggesting that student-athletes who strongly identify with their athletic roles may have lower self-efficacy in career decision-making.

Several studies have found that self-efficacy is positively associated with career development and positive academic outcomes (Solberg et al., 1995; Taylor & Betz, 1983). Taylor and Betz (1983) suggested that self-efficacy beliefs were likely positively related to career exploration behavior and career decision-making self-efficacy among college students. They also found that students with higher levels of self-efficacy were more likely to choose careers that aligned with their interests and values. In another study, Solberg et al. (1995) found that students with higher levels of self-efficacy were more likely to engage in career exploration and were more confident in their career decision-making abilities. These findings suggest that individuals with higher self-efficacy tend to achieve more positive career outcomes.

In conclusion, self-efficacy is a critical factor in both academic success and career development for student-athletes. By developing and enhancing their self-efficacy beliefs, student-athletes can increase their academic performance and make more informed decisions about their future career paths. It is important to explore, understand, and define career development as it relates to career self-efficacy from an athlete's perspective. Several studies, when referring to athletes transitioning, have used a variety of terms career decision, career development, career readiness, career self-efficacy career maturity, career self-exploration, career transition, career construction, or life beyond sports (Janosko, 2018; Navarro & McCormick, 2017; Van Raalte et al., 2017).

Research on Athletes' Career Development

In this dissertation, I will examine the concepts of career development and self-efficacy as they relate to student-athletes. Career development and self-efficacy were chosen because they are among the more popular constructs describing student-athletes' career development outcomes (Janosko, 2018; Van Raalte et al., 2017). For example, Van Raalte et al. (2017) found that student-athletes who participated in career exploration had significantly higher levels of self-efficacy in career development than athletes who did not participate. Janosko (2018) defined career development self-efficacy as an individual's ability or confidence in selecting a career. Student-athletes with higher self-efficacy reported more positive experiences in their career development (Janosko, 2018). In conclusion, understanding the relationship between career development and self-efficacy among student-athletes can provide valuable insights for athletic departments, coaches, and academic advisors to support student-athletes' holistic development.

Several researchers have asserted that career development involves distinct stages over an extended period. When discussing career development, we should consider career maturity, personal influences, and the individual process (Whiston et al., 2013). Savickas (2002, 2005) described career development as a process through which individuals construct career goals, explore opportunities, and adapt to changing vocational contexts. As a result, in this dissertation, I will define career development as the process of self-exploration that leads to the development of career choices and goals to pursue vocational opportunities.

Career Preparation

Several studies have examined career preparation for student-athletes and their positive outcomes (Harris, Altekruise, and Engels, 2003; Bell, 2009; Jolly, 2008). Harris, Altekruise, and Engels (2003) conducted a study that aimed to explore the career development needs of student-athletes. They argued that college athletes face unique challenges in career preparation, including limited time and competing demands between athletics and academics. They found that specific group-based learning experiences tailored to the needs of student-athletes had positive benefits. For example, athletes were more likely to increase their self-efficacy and motivation when instruction was paired with group discussion and interactive activities. They suggested that psychoeducational group interventions.

was likely to foster peer support, reduce stress, and facilitate career-related planning. In support of this interpretation, Bell (2009) and Jolly (2008) have contributed to the academic support and career services benefit for college athletes. Jolly (2008) argued that student-athletes benefit from specific career development programs that address their unique challenges and experiences. Jolly suggested that these programs should include individualized career counseling, mentorship, and opportunities to network with alums who have pursued similar career paths. Bell (2009) argued that student-athletes are often neglected in terms of career preparation and support, and that specialized resources could help them succeed beyond their athletic careers. However, some researchers have raised concerns about the hypothesized association between career preparation and student-athletes' outcomes (Broughton & Neyer, 2001; Howard-Hamilton & Sina, 2001; Navarro, 2012). Broughton and Neyer (2001) argued that

providing separate resources for student-athletes could lead to their isolation from faculty and peers, thereby hindering their academic and social development. Howard-Hamilton and Sina (2001) also suggested that separate support systems could perpetuate the stereotype that athletes are academically inferior to other students. In a similar study, Navarro (2012) suggested that specialized resources could create a sense of entitlement among athletes and perpetuate the notion that athletics are more important than academics. Umbach et al. (2006) conducted a study that found that college athletes reported feeling more isolated from their peers and faculty than non-athletes. The authors suggested that this isolation could be due to the demands of athletics and the culture of college sports, which can create a separate identity for athletes.

In conclusion, several studies have emphasized the importance of career preparation programs tailored to the unique needs and challenges faced by student-athletes (Broughton & Neyer, 2001; Howard-Hamilton & Sina, 2001; Navarro, 2012). These programs have been shown to impact self-efficacy and motivation to pursue career goals positively. However, some researchers have raised concerns about potential negative consequences, such as isolation from faculty and peers and the perpetuation of stereotypes about athletes. Therefore, it is important to design career preparation programs that integrate student-athletes with the rest of the student body while addressing their unique needs.

Career Decision Making and Transition

Transitioning from college athletics to a career is a major life change that can be both exciting and stressful for student-athletes. Several studies have hypothesized that athletes' confidence in their ability to make career decisions is related to career

development (Brown et al., 2000). Brown et al. (2000) investigated the relationships among 189 collegiate student-athletes' self-efficacy in making professional decisions, career locus of control, identity foreclosure, and athletic identity. They found that reduced self-efficacy for career decision-making tasks is connected with several factors, including long hours spent participating in sports, failing to consider other careers, and believing that one's activities influence one's career outcomes. They also concluded that sports participation hours, identity foreclosure, and career locus of control all affect how effective student-athletes are at choosing a career.

It is also important to note that a mentor's influence can be long-lasting, affecting the athlete's career beyond the transition period (Harrison et al., 2002). Student-athletes may benefit when career support is paired with guidance, discussion, and opportunities to connect academic planning with career goals. For example, sending a student-athlete to a career fair without any student affairs assistance may not provide the structured support needed to make that experience meaningful.

In conclusion, student-athletes face unique challenges as they transition from college athletics to professional careers. Student affairs professionals must provide meaningful support to student-athletes for their career decision-making and transition. Having a mentor and developing self-efficacy are important factors that can positively influence the experience of transitioning from college athletics to a professional career (Harrison et al., 2002). Understanding these factors can help universities and student affairs professionals better support student-athletes during this significant life transition.

Factors that Impact Student Athletes' Career Development

In 2003, Feldman found that individuals should be allowed to evaluate and fully investigate their employment options. College students who have trouble choosing a career experience financial losses, underemployment, and bad perceptions of entry-level jobs. Adler and Adler (1987) discussed that athletes among students may be particularly at risk for a lack of professional abilities to make career decisions, due to competing roles and possible campus isolation. Burns et al. (2013) examined the association between assessments of academic assistance programs and student-athletes' self-efficacy in career decision-making. They researched student-athletes' satisfaction with academic support services, general efficacy, locus of control, and career decision-making self-efficacy. The study consisted of 158 NCAA athletes (68% male) from 11 Division I teams, who provided their responses. They found that academic support services had a positive impact on athletes' career decision-making efficacy. Results suggested that student-athletes with lower levels of general self-efficacy and an internal locus of control benefited from consistent engagement with academic support services. In other words, athletes with lower self-efficacy and an internal locus of control experienced a greater impact from academic support services than their peers with high self-efficacy and an external locus of control.

Several studies have focused on the relationship between support systems and student-athletes' career development. Mentoring in this context can be understood as a supportive process that assists students across educational, career, and personal development. Educational mentoring may help students improve academic competencies, while career mentoring may help students set short-term and long-term career goals.

Personal and professional mentoring can also provide guidance as students prepare for employment, graduate study, or other postcollege opportunities (Harris et al., 2003; Navarro & Malvaso, 2016; Shurts & Shoffner, 2004).

In another study, Navarro and Malvaso (2016) examined how student affairs could assist a variety of student bodies on college campuses and prepare them for employment after college or for professional skills. They conducted a qualitative study with 29 senior student-athletes, whom they identify as millennials. Their goal was to investigate the selection of bachelor's degree fields and professional objectives among student-athletes at major institutions. They found that a large proportion of college athletes in the study typically received degree-selection recommendations from close friends or family members. They caution that millennials should be aware of the difficulty of making essential life decisions, including career and life direction choices. As a result, they recommend that student affairs professionals have a more productive impact on student-athletes' bachelor's degree selection. For example, a counselor assists student-athletes in gaining insight and guidance on choosing a major and career goals.

In a similar article, Shurts and Shoffner (2004) found that being a collegiate student-athlete entails particular challenges in career development. They suggested that college student-athletes can benefit from career counselors who incorporate professional counseling's learning method into their practice by learning new approaches to career exploration. For example, they suggest counselors can help foster student-athletes' strengths, talents, values, morals, and individual traits by collaborating with them to create learning opportunities. Counselors can help athletes address issues related to identity foreclosure, social isolation, problem-solving, and decision-making. In addition,

student-athletes can benefit from such growth by learning to cope with problems such as identity loss and social estrangement, and by developing a set of skills for decision-making and problem-solving that will be useful to them throughout their lives.

Stambulova et al. (2009) found that, according to the ISSP Official Stance on Athletes' Professional Development and Adjustments, athletes should be considered in both their professional and personal growth. They argue that student-athletes who cope are better prepared for transition inside and outside of their sport. In addition, they found that there is an inverse relationship between student-athletes who do not cope with transitions and their likelihood of having negative experiences (Stambulova et al., 2009). The negative experience of not coping with positive transitions.

Race Differences

Evidence supports a causal relationship among student-athletes' race, academic achievement, career readiness, and overall development. One area of difference is the impact of racial bias that combines with bias against athletes. For example, Comeaux and Harrison (2007) found that college environmental factors affected Black and White student-athletes differently. They found that a white student-athlete was more likely to receive faculty assistance with study skills than their Black counterparts. Not only is there a disconnect for Black student-athletes previously mentioned, but their academic experience is negative compared to that of white athletes (Allen, 1992; Comeaux & Harrison, 2007). In support of this interpretation, Cooper (2016) emphasized that Black male student-athletes benefit from holistic support systems that strengthen educational experiences and outcomes. Campus experiences, such as part-time jobs, volunteering, and internships, are important for developing knowledge and transferable skills for career

building. Student-athletes are limited in knowledge, time, and flexibility, which can make it difficult to develop these career skills.

The experiences of Black males at predominantly White institutions (PWIs) and Historically Black Colleges and Universities (HBCUs) have been the subject of several studies, revealing a complex intersection of race, identity, and institutional culture (Cooper & Hawkins, 2014; Harper, 2006). Watson et al. (2002) found that Black males at PWIs often reported feelings of isolation and alienation, which can negatively impact their academic success and overall college experience. Black males at PWIs often reported feeling unsupported and misunderstood by faculty and staff, which can negatively impact their academic persistence (Palmer et al., 2009). At PWIs, Black males often encounter various forms of covert and overt racism, leading to negative college experiences (Cooper & Hawkins, 2014). These experiences, rooted in the foundations of PWIs in America, are often characterized by institutional and cultural racism (Hawkins, 2010).

Harper and Quaye (2007) found that Black males at HBCUs reported a greater sense of belonging and community, which often resulted in higher levels of academic engagement and success. In support of this interpretation, Strayhorn (2012) suggested that a sense of belonging was a crucial factor in the success of Black males in college, regardless of the type of institution. In addition, he argued that when Black males felt a sense of belonging, they were more likely to be academically successful. This sense of belonging was often available at HBCUs due to the cultural familiarity and supportive environment (Strayhorn, 2012). Black males at HBCUs were also more likely to persist

in their studies due to supportive environments that often include mentorship from faculty and staff (Palmer et al., 2009).

In conclusion, while both PWIs and HBCUs offer unique experiences for Black males, the sense of belonging and supportive environment often found at HBCUs can play a crucial role in their academic success (Harper & Quaye, 2007; Strayhorn, 2012; Palmer, Davis, & Hilton, 2009). However, it's important to note that individual experiences can vary widely depending on factors such as personal resilience, social support networks, and institutional resources (Cooper & Hawkins, 2014; Hawkins, 2010). This reality is particularly evident among Black male student-athletes, who often face additional challenges related to their athletic status (Harper, 2009).

Gender Differences

Several studies have examined gender in athletic identity. In a recent study, Sturm et al. (2011) found that female student-athletes identified more with being a student than their male counterparts. However, male student-athletes reported higher levels of athlete identity than female student-athletes. In a similar study, Brewer et al. (1993) found that men have stronger athletic identities than women. In addition, gender influenced identity, with higher levels in men (Brewer et al., 1993).

The exploration of gender differences in career development among college students has been the focus of numerous studies, each contributing unique insights into this complex issue (Su & Rounds, 2015; Leaper & Brown, 2020; Wong et al., 2017). Leaper and Brown (2020) found that women in college often encounter more obstacles in their career development compared to their male peers. These hurdles include gender stereotypes, a lack of role models, and gender bias, all of which can restrict women's

career choices and opportunities for growth (Leaper & Brown, 2020). On the other hand, college men often face pressure to adhere to masculine norms, which can influence career choices and development (Wong et al., 2017).

In conclusion, these studies collectively suggest that gender differences in career development among college students may be shaped by individual interests, societal expectations, career interests, gender stereotypes, masculine norms, and career self-efficacy. These elements can significantly shape the career paths that men and women choose for career advancement (Leaper & Brown, 2020; Wong et al., 2017).

Career Development Self-Efficacy

Several studies have examined career development and self-efficacy (Janosko, 2018; Sandstedt et al., 2004; Van Raalte et al., 2017). Betz et al. (1996) developed a short-form scale to measure career development self-efficacy, based on Taylor and Betz (1983). The Taylor and Betz (1983) scale was a 50-item, 10-level response option scale. In a similar study, Betz et al. (1996) developed a shorter, more efficient measure of Career Development Self-Efficacy. They used a 25-item, 5-level response option measurement form to gauge the individual's belief in their ability to consistently complete important tasks critical to career-making decisions (Betz et al., 1996). The framework they used was based on Crites's model of career maturity, which consisted of five career competences (Crites, 1978). The five factors that measured Career Development Self-Efficacy are (1) accurate self-appraisal (e.g., "accurately assessing self abilities"), (2) vocational information (e.g., "search out employment information and trends), (3) goal selection (e.g., "select a particular employment from a list of employment), (4) future planning (e.g., "set career goals for the next five years"), (5) problem solving (e.g., "the

ability to adjust to employment task if need”). They found that the goal section and vocational information had the most impact on each individual, similar to the original Career Development Self-Efficacy scale, which consisted of 10 tasks to measure confidence.

Empirical research has consistently suggested that career development and self-efficacy are related to career readiness among college students (Lent et al., 2000). Lent et al. (2000) employed a social cognitive framework to explore the influences of self-efficacy and career development on career choices. Their findings suggested that college students with higher self-efficacy are more likely to set and achieve challenging goals. Similarly, Wright et al. (2013) conducted a regression analysis using a sample of 401 undergraduate students to examine the relationships among multiple variables, including self-efficacy and career development. They discovered that students with higher college self-efficacy during their college years may positively impact their early career development, improving their readiness for the workforce and for career-related challenges. In terms of self-efficacy and career development, these findings suggest that students' belief in their ability to succeed in college is crucial to their academic success (Wright et al., 2013).

There has also been research linking self-efficacy to career development, specifically addressing the issues facing student athletes. In a study conducted by Sandstedt et al. (2004), the researchers sought to investigate the career situation of student-athletes by measuring five factors. Career: These five factors were career development self-efficacy, career versus sports identity, locus of control, barriers to career development, and the sport-to-work relationship. Typically, career development is

measured using the Career Decision-Making Self-Efficacy Scale (Van Raalte et al., 2017). In addition, they found that student-athletes with higher levels of external locus of control had greater levels of CDSE, even with lower levels of general self-efficacy. Although career services programming is available on most campuses, studies have found that as few as 25% of student-athletes visited their career development center, and 83% selected their major or career during childhood without further exploration (Navarro & McCormick, 2017). Navarro and McCormick's (2017) mixed-methods study of 125 postgraduate athletes found that 92% of participants reported not understanding the need for career development programming until after they graduated. Athletes are not utilizing their institutions' career services and do not understand the importance of being trained to be a professional until they are post-graduates in the career search process. Moreover, 90% of these student-athletes were dissatisfied with their first job post-graduation. In support of this interpretation, Cooper et al. (2017) found that student-athletes are graduating unprepared for their careers, leading to confidence struggles in their fields due to insufficient experience.

My dissertation contributes to this conversation by focusing specifically on the role of self-efficacy in the career development of student-athletes. I aim to explore whether the self-efficacy built through athletic participation can be utilized to enhance career outcomes. In addition, I want to discover how institutions can better support these students in transitioning from the world of sports to professional careers. The literature indicates that student-athletes often face unique challenges that can affect their performance both on and off the field, underscoring the need for tailored support systems (Broughton & Neyer, 2001; Navarro & McCormick, 2017; Shurts & Shoffner, 2004).

These barriers can include time management, academic responsibilities, athletic commitments, and career development. Furthermore, I have analyzed the literature and data around student-athletes to explore whether the self-efficacy built through athletic participation can be utilized to enhance career outcomes. This research will offer practical recommendations for integrating career development programs into athletic departments and academic advising systems.

My dissertation also contributes to this conversation by focusing specifically on the roles of self-efficacy in the career development of student-athletes. I want the research to guide institutions in better supporting these student-athletes as they transition from the world of sports to professional careers. This will involve examining athletic support systems, mentorship programs, and the availability of career resources, which the literature has identified as important components of student-athlete career support (Bell, 2009; Navarro & McCormick, 2017; Shurts & Shoffner, 2004). Ultimately, this study addresses how institutions can foster environments in which athletes holistically develop on a personal and career level. This holistic approach may enhance their self-efficacy and empower them to navigate life after sports.

In this part of the study, I explored the psychological constructs that shape individual students' goal orientations and learning strategies. Ames (1992) found that depending on what drives students intrinsically, from mastery or performance goals, will have direct implications for their motivation and learning across various contexts. This framework suggested that understanding students' goal orientations and their environment is crucial for addressing the challenges they face (Ames, 1992). For example, someone with mastery goals might keep pushing themselves to understand a complex topic or

master a difficult sports skill because they love the challenge. In contrast, someone with performance goals might work hard to get good grades or win medals because that success makes them feel valued by others, including in academic and athletic endeavors. In support of this interpretation, Elliot and McGregor (2001) presented a similar framework that categorized achievement goals into four distinct types. The goals were mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance (Elliot & McGregor, 2001). This sheds light on the underlying motivations that drive individuals towards learning and achievement, suggesting that the foundation of one's goals can significantly influence their approach to tasks, persistence, and resilience in the face of challenges (Elliot & McGregor, 2001).

Understanding these dynamics is crucial for educators and psychologists seeking to foster environments that support positive learning and achievement (Ames, 1992; Elliot & McGregor, 2001). This framework applies to student-athletes who seek to succeed in both academics and athletics. Moreover, this refers to examining how students' beliefs about their capabilities to succeed in both areas are associated with their goal orientations and approaches to self-directed learning (Bandura, 1977; Zimmerman, 2000).

CHAPTER THREE

METHODS

The primary objective of this research was to explore the relationship between self-efficacy and career development among student-athletes. The aim was to learn more about the connections between these areas, in the hope that the information would enable improved vocational opportunities for these students. Based on the research of Janosko (2018) and Van Raalte et al. (2017), I formulated the following research question to frame this study: "How does self-efficacy influence career development among student-athletes?" This chapter outlines the quantitative research and the methodology for answering this question. I examine the study's framing through design, participants, setting, instruments, procedures, and data analysis methods.

Research Design

This study used a quantitative research design, focusing on the collection and analysis of numerical data to understand the relationship between self-efficacy and career development among student-athletes (Creswell, 2014). The population of interest was student-athletes affiliated with the National Collegiate Athletic Association (NCAA), Division I. The sample frame included female and male student-athletes aged 18 to 24, in their freshman, sophomore, junior, or senior year of college.

The choice of a quantitative model was motivated by the need for objective, generalizable data that can be statistically analyzed to identify patterns and relationships. This approach enables precise measurement of variables, facilitating comparisons across groups and identifying trends over time (Creswell, 2014). In this study, this systematic

method examines the relationship between self-efficacy and career development among student-athletes. It helps explain the influences on their efficacy as they explore, develop, and transition into career fields.

Participants

The population of interest in this study was college student-athletes who participated in National Collegiate Athletic Association (NCAA) Division I sports across various sports and academic levels. The study included student-athletes currently enrolled at a university who were actively participating in a sport. I collected demographic information on participants, including age, gender, sport, and academic level, as part of the study. The sample population for this study consisted of male and female athletes ages 19 to 24, in their freshman, sophomore, junior, senior, or fifth year of college. The reason for focusing on these particular college years was that they encompass the age range when student-athletes are transitioning toward the completion of their college journey, as outlined in Chickering's Identity Development Model (Chickering, 1969).

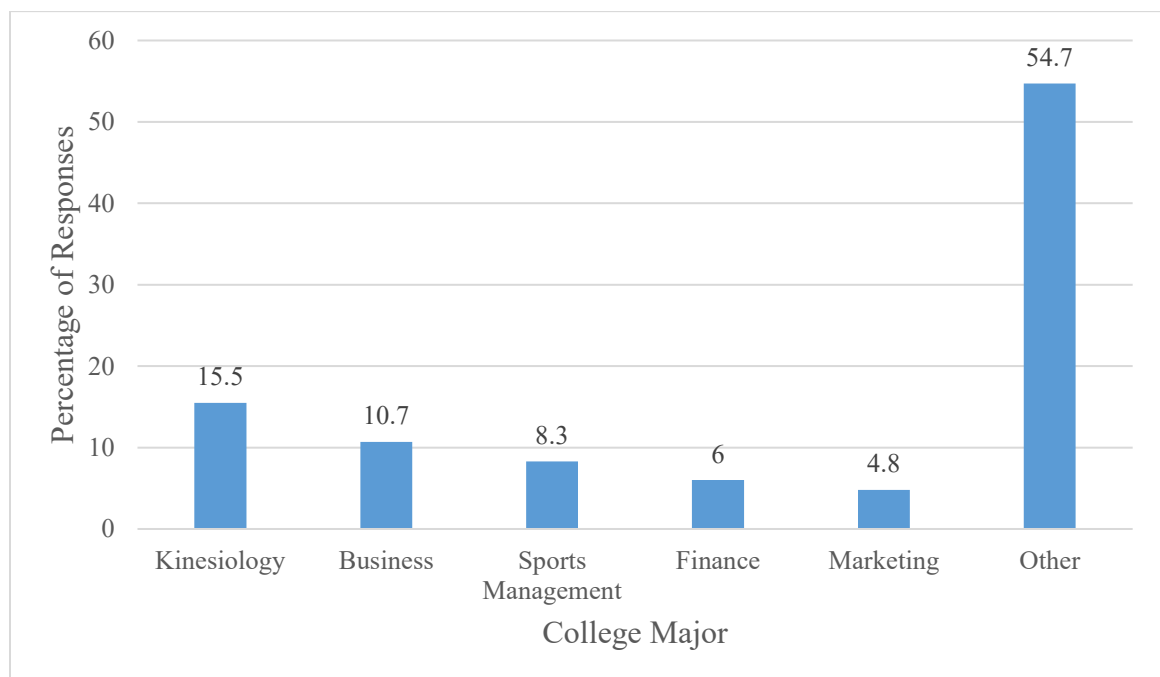
A total of 108 student-athletes responded to the survey, of whom 84 provided valid responses to the question about their academic major. Among these respondents, 33.3% (28 individuals) indicated majors in business-related fields, including Business Administration, Marketing, and Finance. The second most popular category was health and sciences, encompassing majors such as Nursing, Biochemistry, and Exercise Science, chosen by 26.2% (22 individuals).

Majors in the social sciences, such as Psychology, Communications, and Criminology, accounted for 21.4% of responses (18 individuals). STEM fields, including Engineering and Environmental Sciences, were selected by 11.9% of individuals (10

individuals). Finally, 7.1% (6 individuals) were undecided or chose majors outside of the predefined categories. These results show business-related majors as the most popular, followed by health and science majors, then social science majors. This trend highlights student-athletes' preference for fields aligned with career stability and personal interests, with business and health dominating their selections.

Figure 3.1

Distribution of College Majors Among Participants



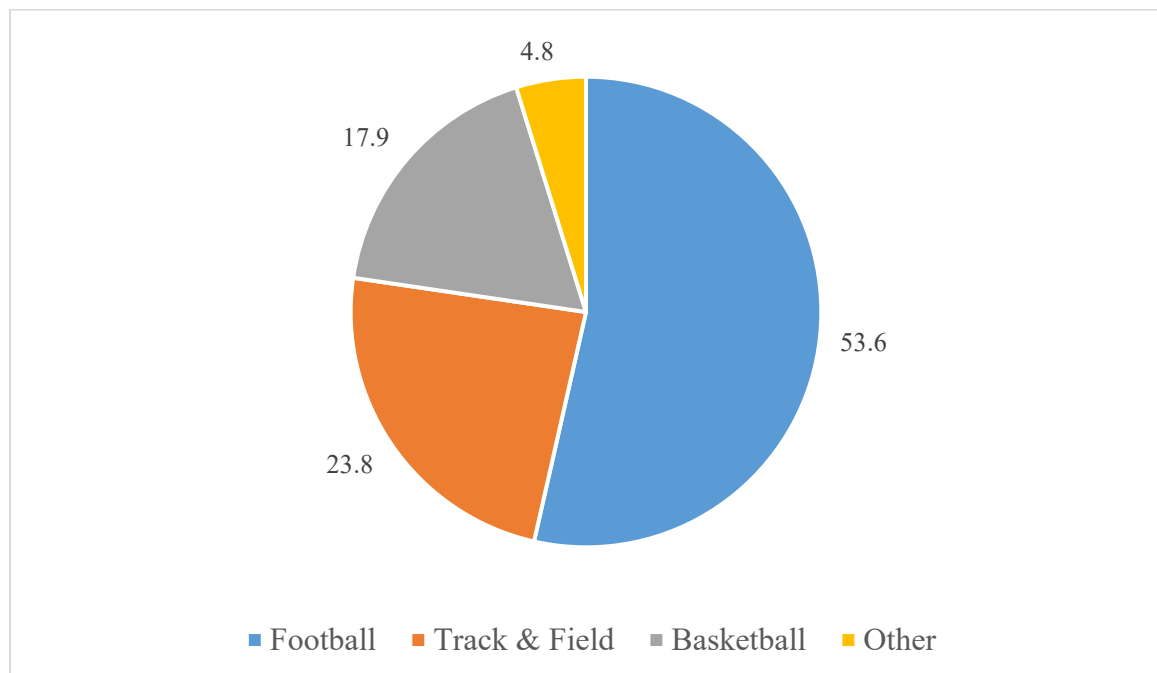
It is interesting to note in Figure 3.1 that over half the athletes who responded fell into the other major category, the highest percentage among all the college majors. This result suggested a culture shift: athletes had diverse interests across majors and chose from a wide range of unique majors. However, it is not surprising that Kinesiology was the single most popular named major, possibly because athletes usually have majors closely tied to sports and physical performance. Another notable point was that the

business ranked third among athletes' top choices, suggesting that NIL is changing how athletes make career decisions.

Figure 3.2 shows the primary sports among participants, based on their responses: football (blue), track and field (orange), basketball (grey), and other (yellow).

Figure 3.2

Distribution of Primary Sports Among Participants



An interesting fact in Figure 3.2 is that over half of the athlete respondents were associated with football, making it the largest single group, followed by track and field athletes. Among these respondents, 61.9% (52 individuals) participated in revenue-generating sports. This category includes Football, Men's Basketball, and Women's Basketball—with Football overwhelmingly leading at 40 participants, while both Men's and Women's Basketball contributed 6 participants each. Conversely, 38.1% (32 individuals) reported involvement in non-revenue-generating sports. Within this group,

Track & Field/Cross Country emerged as the most popular sport, engaging 20 participants. Baseball and Soccer each accounted for 4 individuals, and smaller groups participated in Tennis (2), Volleyball (2), Golf (2), as well as individual sports like Swimming (1), Wrestling (1), and Softball (1). Overall, these findings highlight a strong leaning toward revenue-generating sports, particularly Football, among the student-athletes.

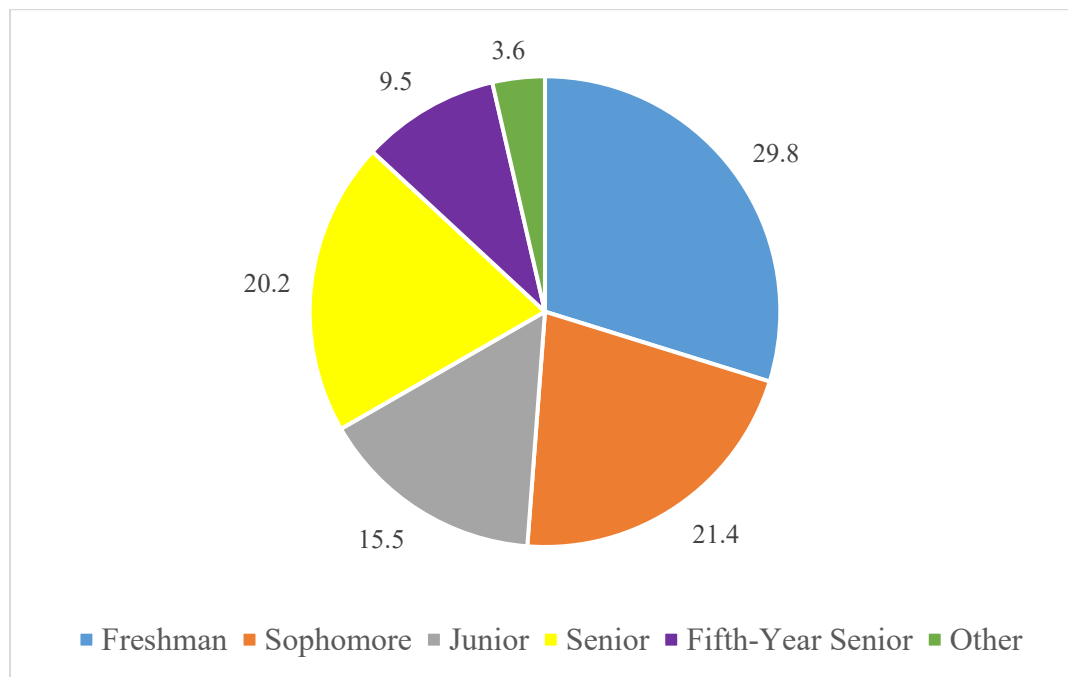
Athletes also responded to the question regarding their racial/ethnic background. Among these 84 respondents, 55.9% (47 individuals) identified as Caucasian/White, making up the largest group. In contrast, 34.5% (29 individuals) identified as Black/African American. A smaller segment of the sample identified as belonging to Two or More Racial/Ethnic Groups (4.8%, 4 individuals) and Hispanic/Latino (3.6%, 3 individuals), while 1.2% (1 individual) selected Other. The highest number of participants were White and Black, nearly 90%

Overall, these findings reflect a diverse population of student-athletes, with Caucasian and Black/African American respondents forming the predominant groups, aligning with broader demographic trends in collegiate athletics.

Figure 3.3 presents the distribution of athletes' academic classifications in a pie chart, showing percentages for freshmen (blue), sophomores (orange), juniors (grey), seniors (orange), fifth-year seniors (purple), and others (green). These results are based on participants' responses regarding their academic classification.

Figure 3.3

Distribution of Academic Classifications Among Participants



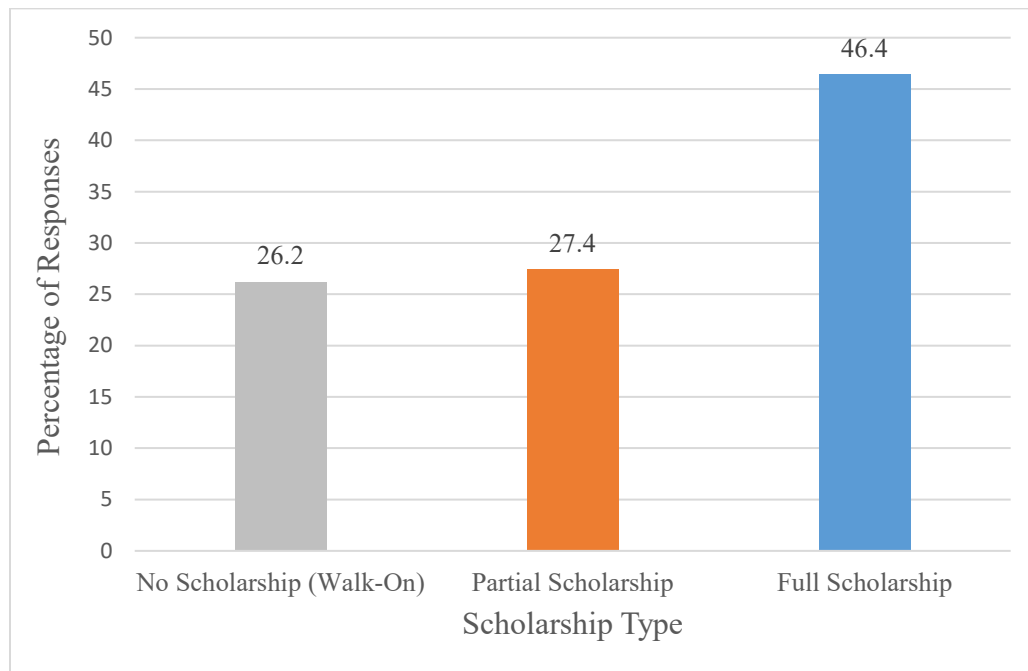
Among these respondents, the largest group was classified as Freshmen. Sophomores followed closely (21.4%), with a similar portion being Seniors (20.2%). A small segment of the sample selected “Other,” indicating non-traditional academic categorization. Overall, these findings highlight a relatively even distribution of academic classifications among student-athletes, with a slightly higher concentration among underclassmen, suggesting active engagement in balancing academic and athletic commitments throughout their collegiate journey.

Figure 3.4 shows the distribution of athletic scholarships in a bar chart. This bar chart shows the percentage of participants by athletic scholarship status: full athletic scholarship (blue), partial athletic scholarship (orange), and walk-ons (grey). Participants

also responded to the question about their academic classification. Figure 3.4 shows the results from this information.

Figure 3.4

Distribution of Athletic Scholarship Status Among Participants



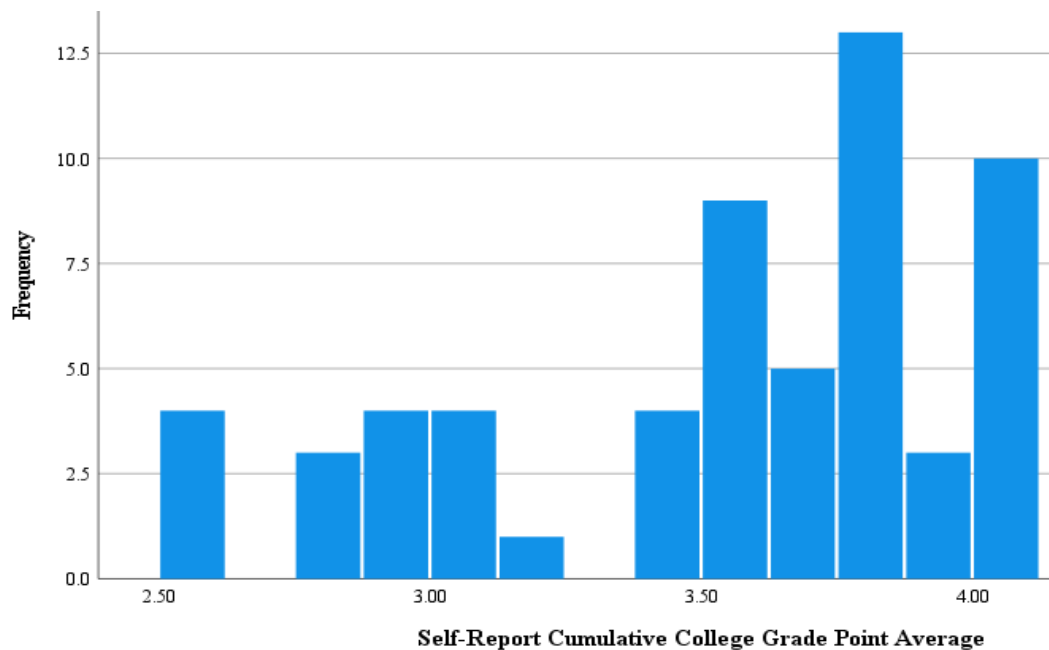
Among these respondents, the largest group, 46.4% (39 individuals), reported receiving a full athletic scholarship. Nearly half of the respondents (46.4%) receive a full athletic scholarship, suggesting that a substantial portion of the athlete population is completely funded by their institution. The remaining group is almost equally split between partial-scholarship recipients (27.4%) and walk-ons (26.2%), indicating a balanced distribution between athletes receiving some aid and those receiving none. Overall, these results demonstrate that nearly half of the respondents receive full financial support for their athletic participation, whereas the remaining participants receive either partial aid or no athletic scholarship.

A total of 108 student-athletes responded to the survey, with 83 providing valid responses to the question regarding their starter status. Among these respondents, 55.4% (46 individuals) indicated that they were not starters, while 44.6% (37 individuals) reported being starters on their respective teams. Overall, this near-even split suggests that the survey captured insights from both key players and role players, offering a balanced perspective on the athletic experience.

Figure 3.5 shows the distribution of cumulative college GPA among participants in a bar chart. This bar chart illustrates the distribution of self-reported cumulative college GPAs, ranging from 2.5 to 4.0. Participants provided responses to a question regarding their cumulative college GPA. The distribution of this information is shown in Figure 3.5.

Figure 3.5

Distribution of Cumulative College GPA Among Participants



It is interesting to note in Figure 3.5 that among these respondents, nearly half (46.4%) reported a GPA between 3.5 and 3.9, indicating that the most common academic performance among student-athletes is quite strong. What might be even more impressive is that 15.5% of the participants achieved a perfect 4.0, showcasing excellent academic success alongside their athletic commitments. Additionally, 46.4% of respondents are in the 3.5–3.9 range, and an additional 26.2% are in the 3.0–3.4 range; about 72.6% of respondents have a GPA of 3.0 or higher. Overall, the data suggest that the majority of student-athletes maintain strong academic performance alongside their athletic commitments, with an average GPA of approximately 3.5.

Data Source

This survey, with 108 respondents who agreed to participate, was structured around items designed to provide a comprehensive view of the student-athlete experience. Organized into six distinct sections, the survey assessed various dimensions of the athletes' lives and set the stage for an in-depth study. The first section focused on obtaining informed consent, ensuring that all participants agreed to contribute to the study. The second section gathered demographic and background information, including academic major, primary sport, ethnicity, academic classification, eligibility status, and scholarship details. In the third section, respondents evaluated their own academic and athletic performance, including their tendencies to compare themselves with peers. The fourth section used the Athletic Identity Measurement Scale (AIMS) to gauge how strongly participants identified as athletes and the extent to which sports played a role in their lives. The fifth section addressed career self-efficacy, assessing how the athletes felt about making career decisions, accessing career resources, and planning for their future.

Finally, the sixth section examined their engagement in career development activities, including attending job fairs, completing internships, and meeting with career counselors. Overall, the survey provides a detailed picture of how academic pursuits, self-efficacy, athletic identity, and career aspirations intersect in these individuals' lives.

Understanding the career development framework and exploring various opportunities at different stages are crucial for students' professional growth. To examine this topic, I focused on survey question 20, which asked about career engagement and career-oriented activities. The survey addressed a broad set of career-development tools, including business etiquette training, resume critiques, engagement with career services, attendance at job fairs, participation in internships or externships, meetings with career counselors, gaining career-related job experience, exploring career opportunities online, conducting research on careers, and networking. This breadth of topics underscores the complex nature of career development and the varied activities that can shape career readiness.

In the survey, I also asked participants about the psychological constructs that shape a student athlete's individual identity and career decision-making processes. This part of the survey focused on two established data-collection instruments: the Athletic Identity Measurement Scale (AIMS) and the Career Decision-Making Self-Efficacy Scale (CDMSE). The AIMS, developed by Brewer, Van Raalte, and Linder in 1993, is an esteemed tool in the realm of sports psychology, uniquely designed to measure the degree to which individuals identify with being athletes but also the impact that this identity has on them (Brewer, Van Raalte, & Linder, 1993; Brewer & Cornelius, 2001). In other words, the AIMS is an instrument that stands out for its capacity to measure the extent

and intensity of an individual's identification with the role of an athlete. This scale consists of ten items, each designed to explore a specific aspect of athletic identity. For my survey participants, I asked them to rate these items on a 10-point scale ranging from 1 (Strongly Disagree) to 10 (Strongly Agree), allowing for precise quantification of their athletic self-concept (Brewer & Cornelius, 2001).

An equally critical data collection tool that was selected was the CDMSE Scale. The CDMSE Scale is a questionnaire designed to assess an individual's belief in their capability to successfully engage in tasks related to career decision-making (Janosko, 2018). Originally developed in light of Albert Bandura's theory of self-efficacy (Bandura, 1977), the CDMSE Scale probes individuals' confidence in their ability to execute behaviors associated with career choice. The initial form of the CDMSE Scale was developed by Taylor and Betz in 1983 and consisted of 50 items. These items were clustered into five categories that mirrored distinct competencies in career decision-making: self-appraisal, occupational information gathering, goal selection, planning, and problem-solving (Taylor & Betz, 1983).

In 1996, a revised 25-item short form, the CDSE-SF, was developed, offering an efficient yet equally reliable alternative (Betz et al., 1996). This form uses a Likert scale with responses ranging from 1 (no confidence) to 5 (complete confidence). The cumulative scores thus range from 25 to 125, with higher scores indicating stronger self-efficacy in career decision-making (Betz et al., 1996). In my study, however, I have further refined this approach by adopting a 10-point sliding scale for consistent measurement across variables. The 10-point sliding scale serves the purpose of efficiency and streamlined analysis, maintaining robust reliability and capturing a comprehensive

range of career decision-making efficacies (Taylor & Betz, 1983; Betz, Klein, & Taylor, 1996; Betz et al., 1996). This blend of tools for athletic identity and career decision-making self-efficacy offers a diverse perspective, which is crucial to my research objectives.

Data Collection Procedures

This section outlines the details that I used for data collection. I cover the criteria of selecting potential participants, as well as how I shared the surveys to collect the information from student-athletes. All contact with participants was through blind-copied emails. The data collection itself was private, conducted through Qualtrics. Participants completed the online survey at a time and place of their choosing, thus ensuring their own privacy. Participants' emails were not stored after the recruiting email was sent. I utilized online surveys as the primary method for gathering data. Participants were expected to complete the survey within approximately 15 minutes, which represent their sole involvement in the study. I forwarded the surveys to the respective athletic department leaders. They, in turn, distributed the survey link to the athletes. Upon providing their consent, participants can access and complete the surveys online. There were no additional screening procedures, randomization, or group assignments. The survey link is disseminated to the athletes via email, and no subsequent follow-up is required from them.

Data Analysis Procedures

To answer the research questions, I analyzed the data using quantitative statistical procedures. Before conducting the analyses, I screened the dataset for missing responses, incomplete surveys, and data entry errors. I removed incomplete responses to ensure the

accuracy and reliability of the findings. I coded categorical variables such as scholarship status (full, partial, walk-on), GPA ranges, and sport participation prior to analysis. I calculated descriptive statistics to summarize the sample's characteristics. Frequencies and percentages were reported for sport participation, scholarship status, and cumulative GPA. I calculated the means and standard deviations for athletic identity, self-efficacy, and career-readiness scores.

To determine the internal consistency of the survey instruments, I conducted reliability analyses using Cronbach's alpha. This procedure ensured that the scales measuring athletic identity, self-efficacy, and career readiness demonstrated acceptable reliability. I used Pearson correlation analyses to examine the relationships among athletic identity, self-efficacy, GPA, and career readiness. These analyses identified the strength and direction of associations between the study variables. I conducted independent-samples t-tests to examine differences in career readiness by scholarship status and other grouping variables, as appropriate. Finally, I conducted multiple regression analysis to determine whether athletic identity and self-efficacy significantly predicted career readiness among student-athletes. I set statistical significance at $p < .05$ for all analyses.

CHAPTER FOUR

FINDINGS

Descriptive Results from Individual Survey Sections

In this section, I have summarized the results learned from examining individual survey items within each of the main constructs described in Chapter Three. Each is presented in the order that they appear in the analytic model.

Athletic Identity

The first part of the model is athletic identity. Table 4.1 shows average responses to the athletic identity measurement scale on these items again ranged from Strongly Disagree (1) to Strongly Agree (10). This table shows the statements in the first column, the average response in the second column, and the standard deviation in the third column

Table 4.1

Average Responses to the Athletic Identity Measurement Scale

Statement	Mean	Standard Deviation
I consider myself an athlete	9.39	1.36
I have many goals related to my sport	9.16	1.44
Most of my friends are athletes	8.30	2.35
I feel bad about myself when I do poorly in my sport	7.64	2.62
I spend more time thinking about sports than anything else	6.79	2.77
Playing sports is the most important part of my life	6.58	3.00
I would be very depressed if I were injured and could not compete in sport	6.43	2.92

The results from Table 4.1 show an average response to the athletic identity measurement scale. The table revealed that student-athletes place their greatest emphasis on their profession, foundation, and identity as athletes. The student-athletes ' highest rating and

similar feeling came from “I consider myself an athlete,” “I have many goals related to my sport” and, “most of my friends are athletes”. These indicate a strong shared commitment to how these athletes identify. Equally significant but in contrast the athletes had scored lower and had varied responses when speaking towards life outside of sports. The lowest rated responses recorded with high variety within the athletes was “I would be very depressed if I were injured and could not compete in sport”, which means some athletes would be emotional distresses if sidelined from sports. The other two responses were not as low but pretty similar which was “Playing sports is the most important part of my life” and “I spend more time thinking about sports than anything else”. Together these responses reveal some athletes have a strong connection to their sport, while other are balanced in life outside of sports.

Motivational Constructs

The next section of the model included three constructs concerning motivation. These were academic efficacy, athletic efficacy, and extrinsic motivation. Table 4.2 shows student-athletes’ beliefs about academic efficacy. Responses on these items again ranged from Strongly Disagree (1) to Strongly Agree (10). This table is formatted in the same manner as Table 4.1.

Table 4.2

Student athletes’ Beliefs about Academic Efficacy

Statement	Mean	Standard Deviation
I can understand the basic concepts taught in my classes	8.97	1.43
I am doing well in my classes	8.41	1.58
I want to learn as much as possible from my classes	8.29	2.06
It is important for me to understand my coursework as thoroughly as possible	8.01	1.98
I can understand the most challenging content of my coursework	6.55	2.25

The results from Table 4.2 revealed that student-athletes placed the highest emphasis on mastering the basic concepts taught in their classes. Equally significant was their strong confidence in doing coursework, reflecting a belief that they were performing well academically. Although not highly rated, they consistently expressed a desire to learn as much as possible from each class. They also prioritized understanding their coursework as thoroughly as they could. However, there was a noticeable drop in endorsement when it came to tackling the most challenging content, indicating that this area did not receive the same level of confidence or focus.

Table 4.3 shows student athlete's athletic efficacy Responses on these items ranged from Strongly Disagree (1) to Strongly Agree (10). This table is formatted in the same manner as Table 4.1.

Table 4.3

Athletic Efficacy

Statement	Mean	Standard Deviation
It is important for me to master all aspects of my performance in my sport	9.03	1.53
It is important for me to perform better than others in my sport	8.62	1.99
I can understand the most difficult strategies and skills for my sport	8.16	1.82
I feel bad about myself when I do poorly in my sport	7.64	2.62
I am performing well in my sport	7.42	2.11

The results from Table 4.3 revealed that student-athletes prioritized mastering every aspect of their performance. Student-athletes also found significant value in outperforming their peers as a benchmark of success. Moreover, they expressed strong confidence in grasping the most advanced strategies and skills required for their sport. Conversely, athletes responded less positively to discouragement and negative feelings toward themselves after perceived poor performance. Finally, their own assessment of

“performing well” had the lowest score, indicating low confidence in current sport efficacy.

Table 4.4 shows average responses to the performance orientation on these items again ranged from Strongly Disagree (1) to Strongly Agree (10). This table is formatted in the same manner as Table 4.1

Table 4.4
Performance Orientation – Extrinsic Motivation

Statement	Mean	Standard Deviation
When playing, I worry that I may not perform as well as I possibly can	7.51	2.80
In my sport, I just want to avoid performing worse than other athletes	6.34	3.22
In class, I just want to avoid performing worse than other students	5.43	3.08
In classes, I worry that I may not learn all that I possibly can	5.30	2.86

The findings reported in Table 4.3 revealed that student-athletes placed the highest emphasis on concerns about underperforming within their sport. Equally noteworthy is the finding that athletes report feeling satisfied with their production as long as they outperform their athletic peers. In contrast, measures of classroom confidence returned slightly lower averages. Specifically, the classroom confidence had a low score and responses varied on trying to avoid performing worse than other students. The lowest score came from the classroom worry that athletes will not complete their learning in an academic setting.

Career Efficacy Constructs

The next section of the model included three constructs concerning career efficacy. These were overall career efficacy, efficacy for specific aspects of career development, and psychological preparedness for career decisions.

Table 4.5 shows efficacy in career decisions Responses on these items ranged from No Confidence (1) to Total Confidence (10). This table is formatted in the same manner as Table 4.1.

Table 4.5

Athlete's Level of Efficacy in Career Decisions

Statement	Mean	Standard Deviation
I can identify the type of lifestyle I would like to live	8.55	1.73
I know what major/courses I need to pursue a career	7.88	2.48
I know how to choose a major or career that will fit my interests	7.69	2.20
I can make a plan of my goals for the next five years	7.50	2.35
I know what I value most in an occupation	7.43	2.33
I know how to choose a career that will fit my preferred lifestyle	7.28	2.30
I can identify some reasonable major or career alternatives if I am unable to get my first choice	6.51	2.46

The results from Table 4.5 capture student-athletes' efficacy in career- decisions. They placed the greatest emphasis on having a vision for their future lifestyle both short and long term. The highest and most consistent responses came from "I can identify the type of lifestyle I would like to live" showing the athletes' strong belief future beyond sports. Equally noteworthy, the other athlete's statements that had similar results placed a value on knowing exactly which majors and courses will lead to their chosen career and selecting academic and professional paths that align with their personal interests. However, there was one item that had low engagement which was "I can identify some reasonable major or career alternatives if I am unable to get my first choice". These results suggest that athletes did not have the highest confidence in an alternative plan or exploring backup pathways.

Table 4.6 shows efficacy in specific career decisions Responses on these items ranged from No Confidence (1) to Total Confidence (10). This table is formatted in the same manner as Table 4.1

Table 4.6

Efficacy in Specific Career Decisions Making– tasks and activities

Statement	Mean	Standard Deviation
I know what steps to take if I am having academic trouble with an aspect of my chosen career	7.90	2.20
I know what I value most in an occupation	7.43	2.33
I can select one occupation from a list of potential occupations I am considering	7.38	2.73
I know how to choose a career that will fit my preferred lifestyle	7.28	2.30
I will change occupations if I am not satisfied with the one I enter	7.00	2.34
I know how to prepare a good resume	6.93	2.35
I can find out the employment trends for my occupation over the next ten years	6.61	2.83
I can identify some reasonable major or career alternatives if I am unable to get my first choice	6.51	2.46
I can find information in the library about careers I am interested in	6.41	2.74
I know how to successfully manage the job interview process	6.18	2.61
I can make a career decision and then not worry about whether it was right or wrong	6.10	2.64

The findings from Table 4.6 reveal that student-athletes place their greatest emphasis on their profession, foundation, and identity as athletes. Student-athletes reported the highest efficacy with “I know what steps to take if I am having academic trouble with an aspect of my chosen career”. This result shows that nearly every athlete felt clear about how to get assistance when they struggle. It suggests that student-athletes felt high efficacy and resilience when facing academic issues within their chosen careers. The next highest responses were around student-athletes knowing what they value in a career, which also was clarity around personal values. Another significant item with slightly lower efficacy centered on career decision-making, confidence, and life goals. In contrast, three areas emerged as struggles for athletes. The lowest rated efficacy was in response to the item

stating, “I can make a career decision and then not worry about whether it was right or wrong.” These results showed that, on average, when making career decisions athletes typically were worried if they made the right or wrong choice. Another issue of concern was the job interview process. Some athletes reported low efficacy in response to the item about the experience.

Table 4.7 shows efficacy in the psychology of preparing for a career on these items ranged from No Confidence (1) to Total Confidence (10). This table is formatted in the same manner as Table 4.1

Table 4.7

Efficacy in the Psychology of Preparing for a Career– Mental and Emotional

Statement	Mean	Standard Deviation
I am ready to do what it takes to achieve my career goals	8.45	1.94
I persistently work at my major even when I get frustrated	7.88	2.25
I know what my ideal job would be	7.75	2.62
I persistently work at my career goals even when I get frustrated	7.68	2.31
I will change occupations if I am not satisfied with the one I enter	7.00	2.34
I can make a career decision and then not worry about whether it was right or wrong	6.10	2.64

The table revealed that student-athletes place their greatest emphasis on proactive dedication and perseverance in their career development. The highest ratings and most consistent responses came from “I am ready to do what it takes to achieve my career goals,” which suggests these athletes were mentally motivated and ready to handle career objectives. Equally noteworthy was the responses to the items stating, “I persistently work at my major even when I get frustrated,” and “I know what my ideal job would be.” These items indicated a persistent shared commitment to setting and pursuing clear career objectives.

In contrast, the athletes responded with lower efficacy and showed greater spread in the cluster on items related to decisiveness and long-term career confidence. The lowest average efficacy was in response to the statement, “I can make a career decision and then not worry about whether it was right or wrong,” suggesting many athletes continue to second-guess their choices. The other two slightly lower responses were “I will change occupations if I am not satisfied with the one I enter” and “I persistently work at my career goals even when I get frustrated.” Together, these findings suggest that these student-athletes exhibited high drive and clarity around their professional aims. In addition, they still struggled with uncertainty when it came to committing to and being satisfied within their chosen career paths.

Career Engagement

The final section of the model focused on the athlete’s self-reported engagement or involvement with various career preparation activities. Table 4.8 shows *Responses to participation in career development activities*. Responses on these items ranged from Not At All (1) to A Great Deal (10). This table is formatted in the same manner as Table 4.1.

Table 4.8

Responses to Participation in Career Development Activities

Statement	Mean	Standard Deviation
Talk with people in your career of interest	7.38	2.79
Conduct research on career of interest	7.09	2.61
Explored career opportunities online	6.52	2.74
Resume review/critiques	5.80	2.83
Get career-related job experience	5.68	3.35
Meet with campus career counselor	5.25	2.98
Business Etiquette training	5.20	2.63
Participate in internship/externship	5.12	3.32
Job Search workshop	4.63	2.41
Visit Career Services for applications	4.51	2.65
Attend job fairs	3.82	2.27

The information from Table 4.8 represents average responses to the career-development activities engagement scale. The table revealed that student-athletes placed their greatest emphasis on personal networking, career preparation, and independent research. The highest level of engagement and most consistent responses came from “Talk with people in your career of interest” indicating these participants had strong confidence in leveraging professional connections for firsthand insights. Equally noteworthy were the solid responses of “Conduct research on career of interest” and “Explored career opportunities online,” which both emphasized a proactive, self-directed approach to gathering information. This result suggests that the athletes felt confident in career exploration and gathering information on a subject of interest.

Equally important when considering their professional careers, they are clearly at ease when it comes to gathering firsthand data and insights. These student-athletes used the internet when it comes to career exploration, most of these athletes are engaged or agree that they research or engage in finding out information about their career of interest. In contrast, the athletes showed lower engagement and greater variability on items related to activities tied to formal support services. Taken together, these athletes were proactive on their own but struggled and may have required assistance from the university or academic support. Either may be systemic issues that prevent athletes from engaging.

Relationship between Athletic Identity and Student Motivation

Table 4.9 shows the results from analyzing the relationship between participants’ athletic identity and the three areas of motivation – athletic efficacy, academic efficacy, and extrinsic or performance motivation. In this table, the results for the regression

analyzing athletic efficacy are given in the first column, the results analyzing academic efficacy in the second column, and the results analyzing extrinsic motivation in the third column.

Table 4.9

Relationships between Athletic Identify and Student Motivation

	Athletic Efficacy	Academic Efficacy	Extrinsic Motivation
Athletic Identify Coefficient	0.50 ($t = 4.37, p < .001$)	0.02 ($t = 0.18, p = .86$)	0.22 ($t = 2.11, p = .03$)
R-Square	0.25 ($F = 19.1, p < .001$)	0.001 ($F = 0.03, p = .86$)	.05 ($F = 4.06, p = .03$)

On average, participants' athletic identity predicted 25% of the variability in their athletic efficacy. Specifically, for every one standard deviation increase in participants' athletic identity score, their athletic efficacy increased by about a half of a standard deviation. Participants' athletic identity was also related to their extrinsic motivation, accounting for about 5% of the overall variance. For every standard deviation increase in athletic identity, their extrinsic motivation increased by .22 of a standard deviation. However, participants' athletic identity had no relationship to their academic efficacy.

Relationship between Athletic Identity, Student Motivation, and Career Efficacy

Table 4.10 shows the results from analyzing the relationship between participants' athletic identity and the three areas of motivation discussed above on the three measures of career efficacy – overall career efficacy, efficacy in specific career decision making, and psychological/emotional career efficacy. In this table, the results for the regression analyzing overall career efficacy are given in the first column, the results analyzing

specific career decision making in the second column, and the results analyzing psychological/emotional career efficacy in the third column.

Table 4.10

Relationships between Athletic Identity, Student Motivation, and Career Efficacy

	Overall career efficacy	Efficacy in specific career decision making	Psychological career efficacy
Athletic identify coefficient	-0.08 ($t = -0.44, p = .66$)	0.19 ($t = 2.14, p = .03$)	-0.04 ($t = -0.25, p = .81$)
Athletic efficacy coefficient	0.23 ($t = 2.36, p = .02$)	0.02 ($t = 0.12, p = .91$)	0.32 ($t = 2.92, p = .004$)
Academic efficacy coefficient	0.22 ($t = 2.48, p = .01$)	0.33 ($t = 2.77, p = .006$)	0.19 ($t = 2.03, p = .81$)
Extrinsic motivation coefficient	-0.01 ($t = -0.08, p = .94$)	-0.06 ($t = -0.41, p = .68$)	0.12 ($t = 0.82, p = .04$)
R-Square	0.11 ($F = 5.43, p = .03$)	0.16 ($F = 5.23, p = .02$)	0.17 ($F = 6.33, p = .01$)

The combination of athletic identity, athletic efficacy, academic efficacy, and extrinsic motivation accounted for 10.9% of the variability in overall career efficacy, 16% of the variability in specific career decision-making efficacy, and 17% of the variability in psychological/emotional career efficacy. Athletic identity was significantly and positively related only to efficacy in specific career decision-making. Every standard deviation increase was related to 0.19 of a standard deviation increase in this area. On the other hand, athletic efficacy was positively related to overall career efficacy and psychological career efficacy, but not to specific career decision-making. For these two areas, each standard deviation increase in athletic efficacy was related to .23 SD increase in overall

career efficacy and a .32 SD increase in psychological career efficacy. Academic efficacy was positive and significantly related to all three areas of career efficacy, with its strongest association with specific career decision-making. Extrinsic motivation was unrelated to any of the three areas of career efficacy.

Relationship between Athletic Identity, Student Motivation, Career Efficacy, and Career Engagement

Table 4.11 shows the results from analyzing the relationship between participants' athletic identity, the three areas of motivation, and the three measures of career efficacy on career engagement. In this table, the standardized regression coefficients are given in the first column, the t-test value in the second column, and the probability level in the third column.

Table 4.11

Relationships between Athletic Identity, Student Motivation, and Career Efficacy on Career Engagement

	Standardized Coefficient	T-value	P-value
Athletic identify	.51	3.45	.001
Athletic efficacy	.08	0.54	.592
Academic efficacy	.03	0.25	.801
Extrinsic motivation	.07	0.57	.572
Overall career efficacy	.20	2.13	.033
Efficacy in specific career decision making	.34	2.43	.016
Psychological career efficacy	.10	0.50	.621
<i>R-Square</i> = 0.49, <i>F</i> = 16.05, <i>p</i> < .001			

The combination of athletic identity, athletic efficacy, academic efficacy, extrinsic motivation, and the three aspects of career efficacy accounted for 49% of the variability in career engagement, which was a significant portion of the variance ($F=16.05$, $p < .001$). Of the seven variables in the model, athletic identity had the strongest relationship with career engagement, followed by efficacy in specific career decision-making and overall career efficacy. For every standard deviation increase in athletic identity, career engagement increased by 0.51 of a standard deviation ($t=3.45$, $p = .001$). Every standard deviation increase in specific career efficacy was associated with an increase of 0.20 of a standard deviation in career engagement ($t=2.43$, $p = .02$). Finally, for every standard deviation increase in overall career efficacy, career engagement increased by 0.20 of a standard deviation in career engagement ($t=2.13$, $p = .03$). Athletic efficacy, academic efficacy, extrinsic motivation, and psychological/emotional career efficacy showed no significant relationship after taking the other measures into account.

CHAPTER FIVE

CONCLUSIONS

Overview

Student-athletes struggle to develop their careers because athletics monopolizes their time and energy. The barriers they encounter highlight the need to address student-athletes' efficacy and athletic identities (Brown et al., 2000). By examining how self-efficacy influences identity and career development, institutions can create targeted strategies to help athletes build fulfilling careers beyond sports. Equally important, this study seeks to understand how identity shapes the personal development of student-athletes during their college years.

Identity theory can be particularly helpful for studying how student-athletes integrate their roles as athletes and students while developing a self-concept and shaping their future career paths after athletics (Chickering & Reisser, 1993; Stryker & Burke, 2000). The purpose of this study was to help determine what is happening when student-athletes prepare for future careers, build confidence in career decisions, and balance the identity demands of college sport. The study further examined whether self-efficacy contributes to career readiness, career confidence, and career engagement among NCAA Division I student-athletes (Bandura, 1977; Lent et al., 2000; Van Raalte et al., 2017).

The research findings are significant for both career development and career exploration. The results of this study can serve as a foundation for identifying strategies to improve the career development of athletes and other students facing similar competing demands. Prior literature has emphasized the importance of career exploration,

career decision-making confidence, and structured support for student-athletes (Brown et al., 2000; Navarro & McCormick, 2017; Van Raalte et al., 2017). The findings are also significant for understanding how student-athletes can use the confidence, discipline, and structure developed through sport in broader educational and career contexts.

Summary and Implications of Findings

This research specifically focused on four areas: (a) athletic identity, (b) academic motivation, (c) career efficacy, and (d) career development. The goal was to explore how these factors interact to shape career self-efficacy, because understanding that relationship is key to helping athletes prepare for life beyond sports.

To guide this work, the work centered on three main research questions:

1. What are the overall levels of athletic identity, athletic and academic self-efficacy, career efficacy, and career involvement for these athletes?
2. How is athletic identity related to each of these other aspects?
3. What is the overall relationship between athletic identity, athletic and academic self-efficacy, career efficacy, and career involvement for these athletes?

The results made clear that athletic identity acts as a central core identity for many of our students. For example, when respondents rated statements like "I consider myself an athlete," "I have many goals related to my sport," and "Most of my friends are athletes," their strong responses showed that athletic identity plays a major role in how they understand themselves. This finding is consistent with athletic identity research showing that the athletic role can become a highly salient part of student-athletes' self-concept (Brewer et al., 1993; Brown et al., 2000; Murphy et al., 1996).

It makes sense that athletic identity was such a focus for these participants, given the organizational structure of college sport. Intensive practice schedules under coaches and within teams constitute constant sources of review, with coaches reinforcing many of the sport-based behaviors, expectations, and commitments that shape the student-athlete role. Prior research has similarly described how the athletic environment can reinforce role commitment and shape student-athletes' academic, social, and identity experiences (Adler & Adler, 1987; Adler & Adler, 1991; Bell, 2009).

The term athletic identity as a core self-schema was used by Brewer et al. (1993), and Brown et al. (2000) found that strong athlete role identification may limit exploration of alternative identities, while Stokowski et al. (2019) found that high athletic identity may limit career transitions out of sport. Items on life beyond sport scores had lower averages and greater variation than the consistently positive items; high means denoted athletic identity. "I would be very depressed if I were injured and could not compete in sport" was lowest on the mean of any item overall. For some athletes, injury and time away from sport may trigger emotional distress. "Playing sports is the most important part of my life" and "I spend more time thinking about sports than anything else" accrued slightly higher means and likewise indicate some athletes are able to retain a deeper relationship with their sport, while others have transitioned their time, energy, and ultimately identity to other pursuits. Coupled with these results, these results may indicate component factors that these individual athletes are beginning to experience while having an athletic lifestyle

When a student-athlete pours many hours into training, preparation, and team obligations, sport can become the dominant lens through which success is interpreted. Prior research

has connected strong athletic identity with identity foreclosure, role conflict, and challenges in career development when other roles are underexplored (Adler & Adler, 1987; Brown et al., 2000; Murphy et al., 1996). The findings in this study should therefore be understood within the broader literature on athletic identity and career preparation rather than as evidence that athletes lack ambition or motivation.

Supporting this explanation, Webb et al. (1998) suggested that individuals have both a private and a public identity. In context, individuals with a public identity align with how society perceives them as athletes. The identity is very high and single focus on sports only, which can lead to factors that the athletes struggled with in this section, such as anxiety or other mental health issues. In addition, Brewer et al. (1993) found that identity foreclosure may explain why those responses had low scores and low means. These strong identities suggest that these athletes still have room for growth and that they positively shape their identities. Stokowski et al. (2019) reported that athletes with high social support are likely to perform better than those with low social support. In a similar study, Adler and Adler (1991) found that student-athletes with less identity foreclosure gained greater confidence in their capacity to make career decisions.

The present study found that higher athletic identity was strongly associated with greater athletic self-efficacy, unrelated to academic self-efficacy, and somewhat associated with higher extrinsic motivation. Specifically, the results suggest that athletic identity serves as a powerful lens through which student-athletes view their capabilities. Those who most strongly embrace the athlete identity report markedly higher athletic self-efficacy. In other words, high identity translates into an important boost in confidence on the field. In support of this interpretation, Brewer et al. (1993) and Brown et al. (2000) defined

athletic identity as the degree to which an individual embraces the athlete role and its influence on an athlete's sports confidence.

The present study's results offer concrete evidence that a strong sense of athletic identity likely translates into greater confidence on the field. The findings also demonstrated that athletic identity correlated negatively with academic self-efficacy, with no relationship between athletic identity and academic self-efficacy. Adler and Adler (1987, 1991) and Stokowski et al. (2019) suggested membership in a sport, or high athletic identity, detracted from academic endeavors. However, these results suggest that athletic self-efficacy and academic self-efficacy may be somewhat independent, with identity in one domain not spilling over to the other. Interestingly, this obsession with sports does not extend to the classroom; rather, academic self-efficacy is entirely tied to athletic identity.

The study also found a modest but significant link between athletic identity and extrinsic motivation. While past studies have examined the costs of identity foreclosure, few have explored how athletic identity relates to different types of motivation (Murphy et al., 1996; Stokowski et al., 2019). This finding adds a new layer to the discussion, indicating that athletes with stronger identities may experience slightly more extrinsic than intrinsic motivation.

The next part of the analysis focused on career efficacy factors, particularly how athletes described their overall career decisions and what motivated their internal experiences. The results indicated that the main intrinsic motivators identified by athletes centered on lifestyle, career selection, and goal direction. Lifestyle consistently emerged as the most important factor in shaping their decisions. In other words, many athletes first

think about the life they want after sport and then use that to inform their career decisions.

Beyond lifestyle, athletes placed strong value on identifying the career they want, selecting a path that aligns with their interests, and setting five-year goals to achieve it. These findings challenge stereotypes that frame student-athletes as uninterested in career preparation. Instead, the findings suggest that many participants were developing career readiness through research, intentional goal-setting, and selecting fields in which they believe they can thrive. These patterns also reflect the changing context of college athletics, including NIL opportunities, which can require student-athletes to make decisions about branding, business opportunities, contracts, and professional identity while still enrolled in college (Economou & Gamble, 2025).

Existing research in this area has provided supporting observations. Savickas (2002, 2005) described career development as a process of exploring career goals, constructing career meaning, and adapting to changing opportunities. Both the findings from my study and the previous research indicate that adaptation, self-exploration, and structured goal setting are essential qualities for athletes transitioning into new roles beyond sport. This research supports existing research, showing that these athletes are beginning to recognize the importance of adapting, developing, and setting structured goals to build sustainable careers beyond athletics.

At the same time, the results of this study also revealed gaps. Although athletes are motivated by lifestyle and long-term goals, the survey indicated that many still struggle when their first career option is unavailable. That said, it points to a lack of depth in career exploration, suggesting that while athletes may be setting goals and considering

lifestyle, they are not always developing a sufficiently broad understanding of alternative pathways. While motivation exists, the preparedness is uneven, signifying an area where additional career education and support could make a major difference to be sure the athlete is prepared, not just for his first choice, but for multiple opportunities beyond the game.

This information suggests that while athletes are starting to think more intentionally about their futures, many are still doing so with a limited scope. For example, they may have a clear picture of the lifestyle they want but not the full roadmap to get there. The findings point to a need for deeper career exploration possibilities for athletes to learn about different industries and develop career skills. It also highlights the importance of exposing athletes to career planning as early as their first and second years of college, rather than only after their eligibility ends. In other words, the findings suggest that these athletes do not need motivation to select a career. However, they do need career guidance, support, and mentorship throughout their career exploration. In the research described in Chapter Two, Stambulova et al. (2021) noted the importance of understanding an athlete's holistic career transition and how well athletes cope with the demands during this process. They emphasized that athlete career development involves academic, psychological, psychosocial, and vocational domains (Stambulova et al., 2021). The results of this study indicate that motivation is not the issue; rather, structured guidance is needed to help athletes navigate their career paths. Similarly, Van Raalte et al. (2017) found that student-athletes who participated in a career self-exploration workshop showed significantly higher career self-efficacy than those in the control group. These findings support the need for programming that helps athletes

identify transferable skills, explore multiple career options, and build confidence in making informed decisions beyond sport (Stambulova et al., 2021; Van Raalte et al., 2017).

The results also suggest that student-athletes want to make strong career decisions and demonstrate ambition; however, they may still need structured guidance to navigate those choices effectively (Navarro & McCormick, 2017; Shurts & Shoffner, 2004; Van Raalte et al., 2017).

In this study, self-efficacy was found to be associated with several key aspects of the student-athlete experience. The findings showed that self-efficacy plays a meaningful role in shaping career development among student-athletes. Higher confidence is associated with stronger career decision-making and increased engagement in career-related behaviors. Results indicated that student-athletes were more likely to engage in informal career exploration activities (e.g., seeking advice and learning from others) than in formal career development opportunities (e.g., structured career events), suggesting an opportunity to strengthen support for informal career exploration.

However, the most significant finding from the study was that athletic identity actually predicted career engagement, which emerged as the strongest predictor. The only other factors that predicted career engagement were overall career efficacy and efficacy in specific career decisions. The variables made a meaningful difference in predicting career engagement. In other words, self-efficacy mattered most for overall career confidence and for confidence in specific career decisions because these factors affect career engagement.

The findings suggest that student-athletes in this sample exhibit high self-efficacy and a strong athletic identity, indicating that they believe in themselves both on and off the field. The research suggests that, with respect to motivational factors, athletes exhibit strong intrinsic motivation to perform well and succeed off the field, challenging claims in the literature about athletes. Confidence can be higher when athletes are performing well and lower when performance is not where they want it. Even with strong intrinsic motivation, external factors still affect these athletes, and for some, those pressures manifest as worry. That is an area where better support could improve performance both on and off the field, as managing pressure is integral to development.

In making overall career decisions, many of these athletes knew their goals, from short-term to long-term. One surprising factor was that many of them were knowledgeable about their careers and already had career goals, which again challenges the common assumption that athletes with a strong athletic identity are automatically behind their non-athletic peers in career development. Where anxiety was most evident was not in selecting a career, but in choosing an alternative career or in feeling confident about options beyond the first choice.

When it came to career efficacy in specific decisions, athletes had high confidence but were not always as decisive as they were about their overall career direction. Many felt informed about their career interests but had similar issues selecting alternative careers. Another theme that emerged was anxiety or uncertainty around the fundamentals of career preparation. Some lacked confidence in résumé creation, and others in details such as understanding career trends over time. That may relate to limited exposure to the full career development process for researching a career field. It may also

be related to how these athletes use the information to think critically about their next career steps. At the same time, the findings align with the literature, suggesting that many athletes do not develop at the same pace as their peers in career exploration skills. Some may be reactive rather than proactive, not because they lack care, but because the structure and time demands of sport make career experiences harder to access.

Limitations

This study includes several limitations that readers should consider when interpreting the findings. In particular, the sampling approach limits the generalizability of the results. The sample consisted of NCAA Division 1 student-athletes aged 18 to 24, recruited through athletic departments and through voluntary participation. As a result, the findings may not generalize to non-athletes and student-athletes in other divisions, community colleges, or smaller institutions. through athletic departments and participated voluntarily. By focusing on this population, the study addressed the research questions but limited its generalizability to Division I athletics. Other student-athletes competing at different levels (DII or DIII), in community colleges, or at smaller colleges, may face different conditions that affect their academic, athletic, and career development.

Additionally, non-athlete college students may demonstrate different patterns of self-efficacy, identity development, and career engagement that this study did not capture.

Second, a limitation of this study is that it collected data only from a particular region in the Midwest. Collegiate athletic culture, institutional resources, and social expectations can vary considerably across regions. As a result, student-athletes attend universities across the country. Different places have different answers or approaches that

differ greatly from those of the sample school. The findings reflect the context of the sampled institutions rather than the experiences of student-athletes nationwide.

A third limitation of this study was that data were collected based solely on self-reports. This process could introduce bias into responses and into how participants viewed themselves, leading them to respond in socially desirable ways. Additionally, self-report measures are perceptions rather than observed behaviors and are not always aligned. Although validated measures were used, relying solely on self-report data in this context limits our ability to capture the breadth of educational, athletic, and career experiences.

Finally, the correlational research design of this study is an important limitation. The analysis examined relationships among athletic identity, self-efficacy, motivation, and career-related outcomes, but it does not establish causal relationships. In other words, while certain variables were related, it was not clear whether changes in one variable directly cause changes in another. For future implications, other studies replicate the data and rerun these analyses using psychological experience to determine whether each variable affects the others.

Directions for Future Research

Future research could address this limitation by using longitudinal or experimental designs that incorporate psychological experiences over time. These approaches could help clarify how identity and self-efficacy develop and influence career decisions throughout the student-athletes' collegiate experience. Future research should examine the validity and usefulness of the measures used in this study. At the same time, constructs such as self-efficacy, athletic identity, and career development provide

valuable insight. Tracking these psychological factors over time through a longitudinal design would provide insight into how career decision-making is shaped during an athlete's collegiate career. Longitudinal data with qualitative interviews could provide researchers with a better opportunity to understand how athletes make sense of their experiences.

Another important direction for future research is to explore the wide range of career-readiness experiences among college student-athletes. In this study, participants showed a nearly even distribution of career readiness, with some identified as career-ready, others as not career-ready, and a group falling in between. This finding is noteworthy because it challenges much of the existing literature, which often emphasizes identity foreclosure, confusion, and delayed career development among student-athletes. Future studies should further investigate why some athletes feel prepared for post-college careers while others do not, and what individual, contextual, or institutional factors contribute to these differences.

Findings from this study can also inform the development of larger-scale research efforts that move beyond regional samples. Future research should be conducted on a national or multi-institutional study. This will provide insight into student-athlete experiences across divisions, conferences, and institutional types. A Broader data sample would improve generalizability and clarify how career readiness varies across collegiate athletic environments.

Future research should consider potential differences in career readiness between male and female student-athletes. Prior research has found gender differences in athletic identity and broader career-development patterns, suggesting that gender may shape how

student-athletes experience athletic identity, self-efficacy, and access to career resources (Brewer et al., 1993; Leaper & Brown, 2020; Sturm et al., 2011; Wong et al., 2017).

Examining these distinctions would help institutions design more responsive and equitable career support systems that better meet the needs of all student-athletes.

Finally, future research must account for the rapidly evolving NIL landscape and its impact on student-athletes' career readiness. NIL has changed the college athletics environment by allowing many student-athletes to monetize their name, image, and likeness while also navigating new stressors tied to contracts, branding, regulation, and professional identity (Economou & Gamble, 2025). Future studies should examine how NIL opportunities, transfer decisions, and institutional priorities influence student-athletes' long-term career planning, career self-efficacy, and engagement with formal career development services (Economou & Gamble, 2025; Navarro & McCormick, 2017; Stambulova et al., 2021).

Conclusions for the Field

The complicated process that every college student faces in figuring out the next step into the world of work can be particularly challenging for collegiate athletes. For example, job shadowing can be difficult for an active athlete to complete, and internships may conflict with summer training, camps, or sport-specific obligations. Prior student-athlete career development literature has emphasized that athletic time demands, identity issues, and limited career exploration can complicate career preparation (Brown et al., 2000; Navarro & McCormick, 2017; Shurts & Shoffner, 2004).

The findings indicate that student-athletes are not lacking ambition. Many of them have strong confidence, clear goals, and real motivation to succeed beyond sport.

The issue is not that they lack concern. The issue is that some of them may not fully understand the steps required to achieve career success, and they may lack consistent access to the experiences that translate career goals into tangible outcomes. This study also clarifies the direction for administrators. Since athletic identity was the strongest predictor of career engagement, higher education leaders should not treat career development as something separate from athletics. Career development should be embedded in the athletic department's culture, centered on athletes and their operations. Consistency, focus, and accountability should be integral to early exposure and sustained career support, as athletes are integrated into the university experience from the outset, not only when eligibility ends.

One practical step is to create a department or committee dedicated to student-athlete career development. This team should include athletic counselors, career services staff, and key campus partners. The primary objective should be to ensure that every athlete is identified and consistently exposed to career service programming, not only those who are already comfortable seeking support independently.

That type of programming should focus on building strong career fundamentals and real confidence through practice. This program includes résumé development, interviewing, networking, and deep career research. Athletes need support that extends beyond career choice and helps them learn how to search, apply, interview, and make informed decisions. Prior research on student-athlete career counseling and career self-efficacy supports structured programming that builds practical career skills and confidence (Shurts & Shoffner, 2004; Van Raalte et al., 2017).

The implication for practice is to embed career development earlier and more consistently within the student-athlete experience. The goal is for athletic management to strengthen collaboration between athletics and campus career services. Earlier and more intentional career preparation aligns with research emphasizing the need for student-athlete career support across advising, counseling, and career programming (Broughton & Neyer, 2001; Navarro & McCormick, 2017; Shurts & Shoffner, 2004).

In athletic management, student-athletes need to hear clearly and consistently from their coaches and support staff that career development is important and that sport participation is not a permanent career plan for most college athletes. This message cannot be occasional or assumed. The careers of these athletes should be intentionally supported through advising, career services, and athlete-centered programming (Bell, 2009; Navarro & McCormick, 2017; Shurts & Shoffner, 2004).

These findings suggest a practical direction for athletic management and centered on athletic identity. Since athletic identity was the strongest predictor of career engagement in this study, athletic management should leverage that identity as a strength and connect it directly to life after sports. Career support should help athletes translate their discipline, leadership, teamwork, and competitive habits into career behaviors. This recommendation aligns with research connecting athletic identity, career development, and the need for intentional support in student-athlete transitions (Brown et al., 2000; Stambulova et al., 2021; Van Raalte et al., 2017).

That support should include consistent opportunities built into the calendar, not optional extras. Athletes need access to guest speakers who can speak directly to life after sports and to annual career workshops that emphasize real skills. Just as athletes have

time set aside in their schedule for practice, weight training, and competition, institutions should build protected time for career development and mentorship. Prior literature supports structured, student-athlete-specific career programming that addresses the unique time demands and transition needs of this population (Navarro & McCormick, 2017; Shurts & Shoffner, 2004; Van Raalte et al., 2017).

APPENDIX A
IRB EXEMPTION



Institutional Review Board

Date: April 20, 2022

Study #: IRB-FY2022-337

Study Title: Athletic Identity and Self Efficacy

Submission Type: Initial

IRB Decision: Exempt

Research Team:

Marcus Webb

Julia Smith

Based on applicable federal regulations, the above referenced study has been determined to be Exempt, with the following categories:

Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Letter and Consent Document:

This letter along with the two IRB approved (date-stamped) consent documents can be found in Cayuse in the [Submission Details](#) page under [Letters](#) and [Attachments](#), respectively. Please make sure to use the most recent IRB approved version of the consent forms in consenting participants.

Permission from Research Sites:

Please note the following:

- This IRB exemption determination letter means that this research has met one or more of the federal criteria for exemption per 45 CFR 46.104- Exempt Research.
- Before the research is initiated, permission to conduct research at a given site must be obtained from all research locations listed in the IRB submission. You must keep copies of all such permission letters for your files.
- It is the responsibility of each researcher to follow all applicable policies and procedures of any outside institution where the research will be conducted.

Modifications:

Any changes to this exempt project must be reviewed by the IRB prior to initiation by submitting a MODIFICATION request. Do not collect data while the changes are being reviewed. Data collected during this time cannot be used in research.

Record Retention:

Exempt projects will be retained by the IRB office for three years after the last action on the project.

You are approved to start the research. Please retain a copy of this notification for your records.

If you have any questions, please contact the IRB office.

Thank you.

The Oakland University IRB

REFERENCES

- Adler, P. A., & Adler, P. (1987). Role conflict and identity salience: College athletics and the academic role. *The Social Science Journal*, 24(4), 443-455.
- Adler, P. A., & Adler, P. (1991). *Backboards and blackboards: College athletes and role engulfment*. Columbia University Press.
- Allen, W. R. (1992). The color of success: African-American college student outcomes at predominantly White and historically Black public colleges and universities. *Harvard Educational Review*, 62(1), 26-44.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), 261-271. <https://doi.org/10.1037/0022-0663.84.3.261>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <https://doi.org/10.1037/0033-295X.84.2.191>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). Academic Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Bell, L. F. (2009). Examining academic role-set influence on the student-athlete experience. *Journal of Issues in Intercollegiate Athletics*, Special Issue, 19-41.

- Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment*, 4(1), 47-57. <https://doi.org/10.1177/106907279600400103>
- Brecht, A. A., & Burnett, D. D. (2019). Advising student-athletes for success: Predicting the academic success and persistence of collegiate student-athletes. *Educational Leadership & Workforce Development Faculty Publications*, 56.
- Brewer, B. W., & Cornelius, A. E. (2001). Norms and factorial invariance of the Athletic Identity Measurement Scale. *Academic Athletic Journal*, 15, 103-113.
- Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology*, 24(2), 237-254.
- Broughton, E., & Neyer, M. (2001). Advising and counseling student-athletes . *New Directions for Student Services*, 2001(93), 47-53.
- Brown, C., Glastetter-Fender, C., & Shelton, M. (2000). Psychosocial identity and career control in college student-athletes. *Journal of Vocational Behavior*, 56(1), 53-62. <https://doi.org/10.1006/jvbe.1999.1691>
- Burns, G. N., Jasinski, D., Dunn, S. C., & Fletcher, D. (2013). Academic support services and career decision-making self-efficacy in student-athletes . *The Career Development Quarterly*, 61(2), 161-167. <https://doi.org/10.1002/j.2161-0045.2013.00044.x>
- Chickering, A. W. (1969). *Education and identity*. Jossey-Bass.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). Jossey-Bass.

- Coffin, K., Stokowski, S., Paule-Koba, A. L., & Godfrey, M. (2021). "I have grown": A case study of student-athlete career development at Clemson University. *Sports Innovation Journal*, 2, 56-72. <https://doi.org/10.18060/25196>
- Comeaux, E., & Harrison, C. K. (2007). Faculty and male student-athletes : Racial differences in the environmental predictors of academic achievement. *Race Ethnicity and Education*, 10(2), 199-214.
- Cooper, J. N. (2016). Excellence beyond athletics: Best practices for enhancing Black male student-athletes ' educational experiences and outcomes. *Equity & Excellence in Education*, 49(3), 267-283.
<https://doi.org/10.1080/10665684.2016.1194097>
- Cooper, J. N., & Hawkins, B. (2014). The transfer effect: A critical race theory examination of Black male transfer student-athletes ' experiences. *Journal of Intercollegiate Sport*, 7(1), 80-104. <https://doi.org/10.1123/jis.2013-0033>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE.
- Crites, J. O. (1978). *Career Maturity Inventory: Theory and research handbook*. CTB/McGraw-Hill.
- Deaux, K. (1994). Social identity. In A. S. R. Manstead & M. Hewstone (Eds.), *The Blackwell encyclopedia of social psychology* (pp. 593-597). Blackwell.
- Edwards, H. (2000). Crisis of Black athletes on the eve of the 21st century. *Society*, 37(3), 9-13.
- Economou, P. J., & Gamble, A. (2025). Navigating an intercollegiate athletes' transition related to the Name, Image, and Likeness (NIL) interim policy. *Journal of Sport*

Psychology in Action, 16(2), 155-164.

<https://doi.org/10.1080/21520704.2024.2348153>

Elliot, A. J., & McGregor, H. A. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80(3), 501-519. <https://doi.org/10.1037/0022-3514.80.3.501>

Erikson, E. H. (1958). *Young man Luther: A study in psychoanalysis and history*. W. W. Norton.

Erikson, E. H. (1963). *Childhood and society* (2nd ed.). W. W. Norton.

Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton.

Feldman, D. C. (2003). The antecedents and consequences of early career indecision among young adults. *Human Resource Management Review*, 13(3), 499-531.

Feltz, D. L., & Lirgg, C. D. (2001). Self-efficacy beliefs of athletes, teams, and coaches. In R. N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), *Handbook of sport psychology* (2nd ed., pp. 340-361). Wiley.

Fouad, N. A. (2007). Work and vocational psychology: Theory, research, and applications. *Annual Review of Psychology*, 58, 543-564.

Graupensperger, S., Benson, A. J., Kilmer, J. R., & Evans, M. B. (2020). Social (un)distancing: Teammate interactions, athletic identity, and mental health of student-athletes during the COVID-19 pandemic. *Journal of Adolescent Health*, 67(5), 662-670.

Harper, S. R. (2006). *Black male students at public flagship universities in the U.S.: Status, trends, and implications for policy and practice*. Joint Center for Political and Economic Studies.

- Harper, S. R. (2009). Race, interest convergence, and transfer outcomes for Black male student-athletes. *New Directions for Community Colleges*, 2009(147), 29-37.
- Harper, S. R., & Quaye, S. J. (2007). Student organizations as venues for Black identity expression and development among African American male student leaders. *Journal of College Student Development*, 48(2), 127-144.
- Harris, H. L., Altekruze, M. K., & Engels, D. W. (2003). Helping freshman student-athletes adjust to college life using psychoeducational groups. *Journal for Specialists in Group Work*, 28(1), 64-81.
- Harrison, C. K., Harrison, L., & Moore, L. N. (2002). African American racial identity and sport. *Sport, Education and Society*, 7(2), 121-133.
- Haslerig, S. J., & Navarro, K. M. (2016). Aligning athletes' career choices and graduate degree pathways: Implications for 21st century career development professionals. *Journal of Career Development*, 43(3), 211-226.
<https://doi.org/10.1177/0894845315597472>
- Hawkins, B. (2010). *The new plantation: Black athletes, college sports, and predominantly White NCAA institutions*. Palgrave Macmillan.
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204-222.
<https://doi.org/10.1111/j.1751-9004.2007.00066.x>
- Hosick, M. B. (2016, October 27). DI to distribute revenue based on academics. National Collegiate Athletic Association.
- Howard-Hamilton, M. F., & Sina, J. A. (2001). How college affects student-athletes . *New Directions for Student Services*, 2001(93), 35-45.

- Janosko, A. E. (2018). The relationship between professional development engagement, career decision-making self-efficacy, and athletic identity in college students vs. college student-athletes [Doctoral dissertation, Montclair State University]. Montclair State University Digital Commons.
- Jolly, J. C. (2008). Raising the question #9: Is the student-athlete population unique? And why should we care? *Communication Education*, 57(1), 145-151.
- Leaper, C., & Brown, C. S. (2020). Sexism in schools. In L. S. Liben & R. S. Bigler (Eds.), *Advances in child development and behavior* (Vol. 58, pp. 189-223). Academic Press.
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology*, 47(1), 36-49. <https://doi.org/10.1037/0022-0167.47.1.36>
- Lochbaum, M., Zanatta, T., Kirschling, D., & May, E. (2022). The Athletic Identity Measurement Scale: A systematic review with meta-analysis from 1993 to 2021. *European Journal of Investigation in Health, Psychology and Education*, 12(9), 1391-1414.
- Murphy, G. M., Petitpas, A. J., & Brewer, B. W. (1996). Identity foreclosure, athletic identity, and career maturity in intercollegiate athletes. *The Sport Psychologist*, 10(3), 239-246. <https://doi.org/10.1123/tsp.10.3.239>
- National Collegiate Athletic Association. (n.d.-a). NCAA.org: The official website of the NCAA. Retrieved July 27, 2026, from <https://www.ncaa.org/>

National Collegiate Athletic Association. (n.d.-b). Graduation & academic success rates.

Retrieved July 27, 2026, from [https://www.ncaa.org/what-we-](https://www.ncaa.org/what-we-do/research/graduation-academic-success-rates/)

[do/research/graduation-academic-success-rates/](https://www.ncaa.org/what-we-do/research/graduation-academic-success-rates/)

National Collegiate Athletic Association, & Gallup. (2020). A study of NCAA student-athletes: Undergraduate experiences and post-college outcomes.

https://ncaaorg.s3.amazonaws.com/research/other/2020/2020RES_GallupNCAAOutcomes.pdf

Navarro, K. M. (2012). Toward an understanding of career construction in the 21st century: A phenomenological study of the life experiences of graduating student-athletes at a large highly-selective Midwestern university (Publication No. 3508437) [Doctoral dissertation, University of Wisconsin-Madison]. ProQuest Dissertations & Theses Global.

Navarro, K. M., & Malvaso, S. (2016). Millennial student-athletes and career development: Toward an understanding of academic, athletic and parental spheres of influence on career aspirations and undergraduate major choices. *College Student Affairs Journal*, 34(3), 30-47. <https://doi.org/10.1353/csaj.2016.0017>

Navarro, K. M., & McCormick, H. (2017). Outcomes-based career preparation programs for contemporary student-athletes. *Journal of Applied Sport Management*, 9(1), Article 12. <https://doi.org/10.18666/JASM-2017-V9-I1-7593>

Palmer, R. T., Davis, R. J., & Hilton, A. A. (2009). Exploring challenges that threaten to impede the academic success of academically underprepared Black males at an HBCU. *Journal of College Student Development*, 50(4), 429-445.

- Putwain, D., Sander, P., & Larkin, D. (2013). Academic self-efficacy in study-related skills and behaviours: Relations with learning-related emotions and academic success. *British Journal of Educational Psychology*, 83(4), 633-650.
- Sandstedt, S. D., Cox, R. H., Martens, M. P., Ward, D. G., Webber, S. N., & Ivey, S. (2004). Development of the Student-Athlete Career Situation Inventory (SACSI). *Journal of Career Development*, 31(2), 79-93.
- Savickas, M. L. (1994). Measuring career development: Current status and future directions. *The Career Development Quarterly*, 43(1), 54-62.
- Savickas, M. L. (1998). Career style assessment and counseling. In T. Sweeney (Ed.), *Adlerian counseling: A practitioner's approach* (4th ed., pp. 329-360). Accelerated Development.
- Savickas, M. L. (2002a). Career construction: A developmental theory of vocational behavior. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed., pp. 149-205). Jossey-Bass.
- Savickas, M. L. (2002b). Reinvigorating the study of careers. *Journal of Vocational Behavior*, 61(3), 381-385. <https://doi.org/10.1006/jvbe.2002.1880>
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). Wiley.
- Shurts, W. M., & Shoffner, M. F. (2004). Providing career counseling for collegiate student-athletes: A learning theory approach. *Journal of Career Development*, 31(2), 95-109.

- Solberg, V. S., Good, G. E., Fischer, A. R., Brown, S. D., & Nord, D. (1995). Career decision-making and career search activities: Relative effects of career search self-efficacy and human agency. *Journal of Counseling Psychology*, 42(4), 448-455.
- Spears, R. (2011). Group identities: The social identity perspective. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 201-224). Springer.
- Stambulova, N. B., Alfermann, D., Statler, T., & Côté, J. (2009). ISSP position stand: Career development and transitions of athletes. *International Journal of Sport and Exercise Psychology*, 7(4), 395-412.
<https://doi.org/10.1080/1612197X.2009.9671916>
- Stambulova, N. B., Ryba, T. V., & Henriksen, K. (2021). Career development and transitions of athletes: The International Society of Sport Psychology Position Stand revisited. *International Journal of Sport and Exercise Psychology*, 19(4), 524-550. <https://doi.org/10.1080/1612197X.2020.1737836>
- Stokowski, S., Paule-Koba, A. L., & Kaunert, C. (2019). Former college athletes' perceptions of adapting to transition. *Journal of Issues in Intercollegiate Athletics*, 12, 403-426.
- Strayhorn, T. L. (2012). *College students' sense of belonging: A key to educational success for all students*. Routledge.
- Stryker, S., & Burke, P. J. (2000). The past, present, and future of identity theory. *Social Psychology Quarterly*, 63(4), 284-297. <https://doi.org/10.2307/2695840>

- Sturm, J. E., Feltz, D. L., & Gilson, T. A. (2011). A comparison of athlete and student identity for Division I and Division III athletes. *Journal of Sport Behavior*, 34(3), 295-306.
- Su, R., & Rounds, J. (2015). All STEM fields are not created equal: People and things interests explain gender disparities across STEM fields. *Frontiers in Psychology*, 6, Article 189.
- Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (2nd ed., pp. 197-261). Jossey-Bass.
- Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*. Cambridge University Press.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22(1), 63-81. [https://doi.org/10.1016/0001-8791\(83\)90006-4](https://doi.org/10.1016/0001-8791(83)90006-4)
- Umbach, P. D., Palmer, M. M., Kuh, G. D., & Hannah, S. J. (2006). Intercollegiate athletes and effective educational practices: Winning combination or losing effort? *Research in Higher Education*, 47(6), 709-733.
- Van Raalte, J. L., Andrews, S. R., Cornelius, A. E., Brewer, B. W., & Petitpas, A. J. (2017). Student-athlete career self-efficacy: Workshop development and evaluation. *Journal of Clinical Sport Psychology*, 11(1), 1-13. <https://doi.org/10.1123/jcsp.2016-0015>
- Vealey, R. S., & Chase, M. A. (2008). Self-confidence in sport. In T. S. Horn (Ed.), *Advances in sport psychology* (3rd ed., pp. 65-97). Human Kinetics.

- Watson, J. C., Terrell, M. C., Wright, D. J., Bonner, F. A., Cuyjet, M. J., Gold, J. A., Rudy, D., & Person, D. R. (2002). How minority students experience college: Implications for planning and policy. Stylus.
- Webb, W. M., Nasco, S. A., Riley, S., & Headrick, B. (1998). Athlete identity and reactions to retirement from sports. *Journal of Sport Behavior*, 21(3), 338-362.
- Whiston, S. C., Tai, W. L., Rahardja, D., & Eder, K. (2013). School counseling outcome: A meta-analytic examination of interventions. *Journal of Counseling & Development*, 91(1), 37-55.
- Wong, Y. J., Ho, M.-H. R., Wang, S.-Y., & Miller, I. S. K. (2017). Meta-analyses of the relationship between conformity to masculine norms and mental health-related outcomes. *Journal of Counseling Psychology*, 64(1), 80-93.
- Wright, S. L., Jenkins-Guarnieri, M. A., & Murdock, J. L. (2013). Career development among first-year college students: College self-efficacy, student persistence, and academic success. *Journal of Career Development*, 40(4), 292-310.
- Xia, M., Fosco, G. M., & Feinberg, M. E. (2016). Examining reciprocal influences among family climate, school attachment, and academic self-regulation: Implications for school success. *Journal of Family Psychology*, 30(4), 442-452.
- Yopyk, D. J. A., & Prentice, D. A. (2005). Am I an athlete or a student? Identity salience and stereotype threat in student-athletes. *Basic and Applied Social Psychology*, 27(4), 329-336. https://doi.org/10.1207/s15324834basp2704_5
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25(1), 82-91. <https://doi.org/10.1006/ceps.1999.1016>