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THE STUDENT-ATHLETE PERSPECTIVE: IDENTIFYING THE TENETS OF STUDENT-
ATHLETE DEVELOPMENT THAT ENHANCE CAREER READINESS

by

Tywanna D. Smith

A Dissertation

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Liberal Arts

Major: Liberal Studies

University of Memphis

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Dedication

I would like to dedicate this work to my mother, Brenda Smith. Although you are now in Heaven, you planted the intellectual seeds that have produced this gratifying reward. You saw something scholarly inside of me before I realized the passion that I possessed for learning. All the books, all the spelling bees, quiz bowls, math competitions, and basketball games enriched my life. You challenged me; yet, you believed in me when I did not believe in myself. You have always been my loudest cheerleader (literally), and I will cherish those moments forever. You were the first person to call me “Dr.” I miss you, and I thank you for seeing me through the finish line!

I also dedicate this dissertation to my father and children. You each have motivated me to stay focused on my goals. I cherish your unconditional love and support, and I am grateful to share this moment with you. Thank you for encouraging me. I love you more than you know. I pray that the legacy I am building is one that makes you proud!

Finally, I dedicate this dissertation to my sister, Tandra. There is no way I could have completed this journey without your listening ear, your encouragement, and your willingness to occupy my children when I needed to study. In many ways, it feels as if we earned this degree together. I could never repay you for being my rock during some of the most stressful moments of my life. I love you!

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Abstract

As studies highlight the career transition struggles of collegiate student-athletes (Hansen et al., 2019; Payne & Driska, 2020; Woods, 2017), researchers have called for more investigation into the influence of various environmental factors on student-athlete outcomes (Navarro & Malvaso, 2015; Navarro et al., 2019). Collegiate student-athletes often face excessive time demands that may necessitate programming interventions to support their holistic development needs beyond academic matriculation. For instance, prior studies (Haslerig & Navarro, 2016; Lochbaum et al., 2022; Poux & Fry, 2015) have concluded that student-athletes may require additional support with identity formation and career preparation. In recent years, the field of student-athlete development has emerged as an influential facilitator of life skills enrichment for student-athletes (N4A, 2022). Yet, because NCAA-member institutions possess a great deal of autonomy in the way that they implement suggested student-athlete development programming, there can be a wide range of academic, personal, life skills, professional, and career outcomes.

In this quantitative study, current and former student-athletes were surveyed to provide feedback on specific tenets of the student-athlete development experience. The objective of this study was to examine the reflections of both current and former collegiate student-athletes on their student-athlete development experience and to assess whether specific student-athlete development tenets enhanced their perceptions of career readiness. The theoretical framework used in this investigation was Conley's College and Career Readiness Model (Conley, 2012; Conley, 2018; Conley & French, 2013). This framework was utilized to provide a foundational definition of career readiness and to inform survey questions around student-athlete development's facilitation of perceived "career-ready" outcomes.

A multiple logistic regression analysis was performed to explore statistically significant correlations between the dichotomous dependent variable (a student-athlete's perception of career readiness) and multiple independent variables related to the student-athlete development programming experience. Findings imply that a student-athlete's intentions to play professional sports may be statistically correlated with their perceptions of career readiness. Of practical significance, the researcher recommends targeted engagement with student-athletes through an "athletics" degree program, professional development courses, and career services collaborations to improve student-athlete career readiness outcomes. Implications for future research are also discussed.

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Chapter I: Introduction

Background of Study

Since its inception in 1906, the National Collegiate Athletic Association (NCAA) has been forced to address the ever-expanding needs of its collegiate student-athletes (NCAA, n.d.c). Some of its most profound legislative changes have dealt with the physical safety, academic eligibility, and fair play of its student-athletes (Bass et al., 2015; Covell & Walker, 2021; Smith, 2021). However, in recent years, researchers have found that many student-athletes face additional pressures from intercollegiate athletics—such as time demands and identity conflict—which may require more support than the general student body (Kelly & Dixon, 2014; Cutler & Dewey, 2020, as cited in Saxe et al., 2022, p. 559). The NCAA responded to this empirical research by launching the CHAMPS/Life Skills programming curriculum, with a focus on the areas of “academics, athletics, personal life, career, and community service” (NCAA, 1999, p. 5). Although this student-athlete developmental resource has evolved from its original framework, substantial programming gaps continue to exist (Navarro et al., 2019). As the NCAA continues to adapt its framework to meet its student-athletes’ needs and to combat the exploitative nature of commercialized athletics, the primary question to be answered is: How, specifically, should intercollegiate athletics enhance the “student” experience?

Researchers assert that the purpose of the modern student collegiate experience is to prepare students for the workforce (Alfeld & Smerdon, 2018, p. 1; Johannsen & Felton, 2014, p. 2; Zakaria, 2015). Decades of research show that workforce preparation is accomplished by assisting students in becoming career-ready through degree attainment and skill acquisition (Conley, 2012). Several research-based definitions of career readiness suggest that student outcomes include the attainment of career-based knowledge and the demonstration of certain

career-related skills (Alfeld & Smerdon, 2018, p. 1; Conley, 2012; Conley, 2018, pp. 13-14; NACE, n.d.). According to several studies (Hansen et al., 2019; Kelly & Dixon, 2014; Tyrance et al., 2013), college student-athletes face unique struggles when transitioning out of sports and into the workforce. As NCAA leadership continues to tout the priority of the “student” role in the student-athlete experience, they must accept more responsibility for meeting the career readiness needs of their student-athletes.

The NCAA intercollegiate athletics arm responsible for supporting student-athlete education and readiness is called student-athlete development. In 2018, the National Association of Academic Advisors for Athletics (N4A) collective officially became the primary organization responsible for the “daily oversight and operation of programming for student-athletes and life skills professionals at NCAA member institutions” (NCAA, 2015). Under this framework, the N4A leadership provides professional development for NCAA-member practitioners and outlines a core curriculum for use with its student-athletes. Because member institutions possess a great deal of autonomy in the way that they implement the N4A’s suggested curriculum, there can be a wide range of academic, personal, life skills, professional, and career outcomes. Recent findings assert that research is lacking in student-athlete development programming (Hansen et al., 2019; Navarro, 2014; Navarro et al., 2019; N4A, 2022) and that student-athlete feedback should be an integral component of programming assessment and enhancement (Clontz, 2019; Forester et al., 2020; Stokowski et al., 2019; Woods, 2017). This study will examine the reflective perspectives of current and former student-athletes on specific components of their student-athlete development experience to determine if the programming tenets enhance their perception of career readiness. In addition, this study will seek to explore a comparative analysis

of the feedback from current and former student-athletes to determine if there are significant associations or differences between their perceptions of career readiness.

Historical Context of the NCAA

One of the most influential governing bodies in collegiate sports is the NCAA. According to Winkler (2021), this non-profit organization is responsible for ensuring that its membership of over one thousand colleges and universities operates by the same rules (p. 220). Representatives from each school “serve on committees that propose rules and policies surrounding college sports” (Kinghorn, 2021, p. 80). Historically, the need for standardization and organization around intercollegiate athletics dates to the growth of student-organized athletic activities in the 1800s (Covell & Walker, 2021). As the popularity of sports competitions between institutions continued to grow, the violence in football brought a sense of urgency to needed regulatory efforts. In 1906, the NCAA—formerly the Intercollegiate Athletic Association of the United States (IAAUS)—was formed at the direction of President Theodore Roosevelt to address safety concerns in football and to establish amateurism rules for participating student-athletes (Bass et al., 2015, pp. 4-5; Covell & Walker, 2021).

As the reputation of intercollegiate athletics grew, the NCAA frequently found itself responding to calls to preserve the academic missions of educational institutions and to ensure fairness in recruiting. Smith (2011) asserts that the regulatory organization recommended policies to urge member programs to align with the goals of higher education in its early years (p. 61). Yet, in 1929, the respected Carnegie Foundation for the Advancement of Education published a report—referred to as the “Carnegie Report”—that accused many institutions of prioritizing the commercialization of athletics over the integrity of higher education (Smith, 2021, p. 79). The report also alleged that many intercollegiate athletic programs recruited

athletes, gave them comfortable jobs, and paid them (Kinghorn, 2021, p. 82). After that report was published, the NCAA made several other legislative attempts to reform intercollegiate athletics. Nonetheless, the NCAA continued to struggle to prioritize academics over athletics amongst its member institutions.

In 1948, the NCAA adopted the “Sanity Code” to align athletics financial aid for student-athletes with the academic standards of the institution (Bass et al., 2015, p. 7). This code became one of the first pieces of legislation that the NCAA attempted to enforce at a national level; previously, reform efforts were left to individual institutions and conferences (Smith, 2011, p. 89). Initially, the vote on this code passed; however, many member schools did not comply with its guidelines. This attempt at intercollegiate athletics reform was unsuccessful, as its adoption relied on the acceptance of most representatives from member institutions. Although many scholars may view the NCAA as a compliance organization with rulemaking and enforcement authority (Grow & Haugh, 2021), its framework has historically delegated much decision-making authority to its members. Figure 1 (NCAA, n.d.b) illustrates the organizational chart of the NCAA. Following the Sanity Code fiasco, the NCAA sought to exercise its powers to implement national reform in many other areas.

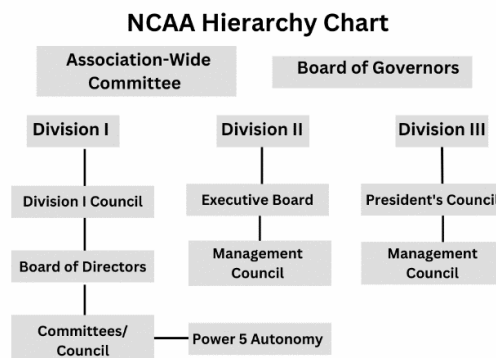


Figure 1

NCAA Organizational Chart

While early regulatory activities involved fairness in recruiting between member schools, the NCAA also had to confront issues of fairness amongst its student-athletes. One legislative milestone related to student-athlete fairness was the introduction of the term “student-athlete.” In 1955, the NCAA’s first executive director—Walter Byers—conferred with the NCAA’s legal team to derive the term “student-athlete” for NCAA athletes (Bass et al., 2015, p. 8). This effort carried significant ramifications for student-athletes as it classified them as amateurs who were not eligible for compensation or workers’ compensation in the event of injury (Smith, 2021, p. 158). Winkler (2021) maintains that this term would “define and restrict compensation for NCAA athletes for generations to come” (p. 229). According to Smith (2021), this move was neither ethical nor fair.

The issue of fairness for student-athletes was reignited when college sports’ first television broadcasting deal was secured in 1957. Intercollegiate athletics have long been categorized as more of a revenue-producing entertainment medium than an educational asset (Covell & Walker, 2021). To some, this exploitative arrangement derives revenue for athletic departments at the expense of the student-athlete’s academic and post-sport transition needs. Despite raising legitimate arguments for compensation, student-athletes have long been unsuccessful in gaining the right to profit from their success (Bartlett, 2022, p. 191). Although some may claim that student-athletes receive an education and the experience of intercollegiate athletics in exchange (Pamlanye, 2022, p. 531), Miller (2012) argues that the issue of exploitation is not if the amateur student-athletes are making any gains but if they are receiving what they ought to receive. Are student-athletes being fairly rewarded if their short-term academic gains do not translate into a long-term benefit (Pamlanye, 2022, p. 532)?

Although the NCAA has taken other legislative actions to promote fairness in intercollegiate athletics—such as the passing of Title IX and Name, Image, and Likeness (NIL) bills—scholars have continued to explore what a “fair exchange” entails for student-athletes. According to Smith (2021), Title IX of the Educational Amendments Act of 1972 prohibited discrimination in education based on one’s sex (p. 172). This law has been used to promote more equitable funding between men’s and women’s intercollegiate sports. Additionally, the NCAA has been forced to combat the exploitative nature of the commercialized state of intercollegiate athletics. In recent years, state legislators have passed bills that require the NCAA and higher education institutions to allow student-athletes to receive compensation from third parties for the use of their name, image, and likeness (Bartlett, 2022; Pampanye, 2022). This NIL ruling is significant, as it allows student-athletes to receive pay-for-play, brings into question the concept of amateurism, and questions the validity of the term “student-athlete.” Nonetheless, another question remains: Is this financial compensation the only thing that student-athletes should receive in a “fair exchange?”

In 1999, the NCAA acknowledged that student-athletes also need enhanced life skills support. In response to empirical research, the NCAA’s executive team developed a CHAMPS/Life Skills curriculum to guide its membership programming for student-athletes in the areas of “academics, athletics, personal life, career, and community service” (NCAA, 1999, p. 5). Although the NCAA established a national framework, it maintained its practice of delegating implementation authority to member institutions. The present-day “official community of practitioners” responsible for what is now recognized as NCAA student-athlete development is the National Association of Academic and Student-Athlete Development Professionals or N4A (NCAA, 2015). This unit is responsible for student-athlete development

programming and the professional development and education of student-athlete development staff (N4A, n.d.). Leading researchers agree that poor student-athlete post-sport transition outcomes are evidence that vast improvements are needed in the student-athlete development programming curriculum, implementation, and evaluation (Bjornsen-Ramig et al., 2020; Forester et al., 2020; Hansen et al., 2019; Navarro, 2014; Navarro et al., 2019; N4A, 2022; Stokowski et al., 2019; Tyrance et al., 2013). At the time of this study, the NCAA and N4A organizations continue to search for ways to enhance and standardize their programming framework across their membership (N4A, 2022).

Research Objectives

The purpose of this quantitative research study is to examine and compare the reflections of both current and former collegiate student-athletes on their perceptions of career readiness and to assess whether specific student-athlete development tenets enhance their readiness. There are three specific objectives of this study. The first objective of this research is to gather meaningful evaluation feedback from current and former student-athletes about their student-athlete development experience. For instance, the survey instrument used in this study lists questions about specific elements of the student-athlete development process, such as what information is covered and how effectively workshop sessions were administered. The second research objective is to determine if significant statistical relationships exist between certain demographic markers, tenets of the student-athlete development experience, and a student-athlete's perception of career readiness. For example, do any of the independent variables—the student-athlete development programming tenets—predict career readiness? Finally, this study's third objective is to determine if significant differences exist between the perspectives of current student-athletes as compared to former student-athletes. As practitioners and researchers collect survey

data from current student-athletes, this study can be used to identify gaps in data collection methods when omitting former student-athletes from the survey pool.

Significance of Study

This study offers a valuable contribution to existing research in student-athlete development in three ways. First, this study focuses on an under-researched environmental factor that can influence a student-athlete's perception of career readiness—the student-athlete development experience. Although many personal factors can simultaneously impact one's perception of career readiness, this research highlights the influence of a specific factor in a student-athlete's ecosystem that may play a substantial role in facilitating learning and development. Bronfenbrenner (2005) explains that individual characteristics may position a student for learning, but various interrelated ecosystems and contextual factors may also influence the speed and manner of their development. More specifically, Bronfenbrenner's ecological model of human development identifies school as an influential factor in a student-athlete's learning environment (Bronfenbrenner, 2005). Although student-athlete development topics and implementation are beyond a student-athlete's control, this programming experience can have a substantial impact on facilitating career readiness. Findings from this study can inform the professional development and education of student-athlete development practitioners.

In addition, this research underscores the need for standardization in student-athlete development, such as setting clear programming objectives (i.e. career readiness), establishing an appropriate programming metric (i.e. student-athlete self-efficacy, specific knowledge, and/or skill outcomes), and soliciting meaningful evaluation feedback from student-athletes about the student-athlete development experience. Leading researchers contend that the field of student-athlete development needs a standardized implementation model (N4A, 2022; Tyrance et al.,

2013) and that studies with a focus on the areas of programming assessment and evaluation are lacking (Navarro et al., 2019). This study allows student-athletes to become active participants in the programming evaluation process and to reflect on specific aspects of their student-athlete development experience and career readiness. Findings from the study can be used to inform future programming assessment and evaluation research in student-athlete development.

Finally, this study seeks to explore a unique comparative analysis of the reflections of both current and former student-athletes on their student-athlete development experience. Previous studies have either sought to gather data from current student-athletes (August, 2020; Forester et al., 2020; Hansen et al., 2019) or former student-athletes (Barcza-Renner et al., 2020; Stokowski et al., 2019) concerning their student-athlete development experience or perceptions of career readiness. While studies involving either population of student-athletes can provide meaningful data, a comparative analysis may assist scholars in uncovering additional gaps in the design, implementation, assessment, and evaluation of an effective student-athlete development program. In many ways, former student-athletes who have already transitioned into a career may be more qualified to discern in what ways the student-athlete development experience can be improved. A comparative analysis within the data set can be used to identify tenets of the student-athlete development experience that require further research or analysis and provide evidence of the value of the former student-athlete's voice in programming development.

Scope of Study

This study examines a specific angle of research within student-athlete development. First, it covers the influence of student-athlete development on a student-athlete's career preparation experience. More specifically, this study explores if specific content or programming facilitation strategies can enhance student-athletes' perceptions of career readiness. In addition,

this study seeks to explore potential statistically significant career readiness differences between the perceptions of current student-athletes and former student-athletes. The survey pool is limited to student-athletes who currently participate in athletics at the University of Memphis or those who have exhausted eligibility from the University of Memphis in the past five academic years. Student-athletes from all sports were invited to participate.

Finally, this study investigates perceptions of career readiness through the theoretical lens of Conley's College and Career Readiness Model. According to Conley (2012), career readiness encompasses certain cognitive strategies, content knowledge, transition skills, and learning techniques (p. 2). According to Conley's (2018) "four keys" of College and Career Readiness Model, career-ready individuals must possess certain knowledge and skills to perform certain tasks independently. The survey instrument is designed to explore the effectiveness of the student-athlete development staff's facilitation of knowledge and skills that align with career-ready students.

There are several research angles that are omitted from this study. This research does not cover personal qualities of the student-athlete that may impact their perception of career readiness aside from athletic identity. It identifies a single environmental factor—the student-athlete development experience—that affects a student-athlete's perception of career readiness. Next, the study does not cover academic advising experiences. Student-athlete development is often a separate unit and programming experience from academic advising (Navarro, 2014), and it may have a different goal. Thus, the influence of academic counselors is not a primary focus of the study. Finally, this study does not focus on academic performance or graduation statistics in assessing the career readiness of student-athletes. Research findings (Eckard, 2020; Gurney et al., 2015; Navarro, 2014) have shown that academic progress rates (APR) and graduation success

rates (GSR) are inherently flawed and omit several other important variables. As student-athletes transition into their respective career fields, their identity and perceptions of readiness may be more reliable predictors of success.

Limitations of Study

Although the best effort has been made to prepare for the collection of randomized data that is representative of the general current and former student-athlete population, there are several limitations of the study. One limitation of the study is the focus on the student-athlete development influence on a student-athlete's perception of career readiness. It is acknowledged that other factors—such as personal factors or socioeconomic factors—may impact the effectiveness of career readiness programming (August, 2020; Haslerig & Navarro, 2016). A second limitation of the study is the potential inability to apply the results of the analysis to different institutions or different levels of intercollegiate athletics. This study is conducted at a mid-major Division I athletic program in the mid-southern geographic area of the United States. The student-athlete development tenets that emerge from the analysis may not be applicable to other institutions and programs with staffing constraints or differing institutional philosophies. It may be easier to apply findings at larger institutions but not smaller ones. Lastly, a third limitation of this study is the nature of the quantitative survey instrument. Many previous studies on student-athlete career preparation have utilized a qualitative interview method or mixed-methods approach to collect data from student-athletes (Forester et al., 2020; Haslerig & Navarro, 2016; Lally & Kerr, 2013; Navarro, 2014; Payne & Driska, 2020). Although the survey instrument used in this study is designed to record focused responses to specific student-athlete development questions, the quantitative data collection method may limit replies from student-athletes and censor more meaningful feedback.

Organization of Paper

In Chapter One (Introduction), readers are introduced to background information about the research topic and learn the objectives and significance of the study. The Introduction chapter also outlines the scope of this study and any limitations. Chapter Two, the Literature Review section, will cover foundational theories, prior studies, and concepts that have informed this study—such as athletic identity, career transition, career readiness, student-athlete development, ecological theories, and programming evaluation. Next, a description of the study’s sample population, study design, data collection procedures, and statistical analysis methods will be explained in Chapter Three, the Methodology chapter. In Chapter Four (Results), findings from the data analysis will be investigated to answer the research question: Are certain student-athlete development programming tenets statistically correlated with a student-athlete’s perception of career readiness? The Results chapter will also identify any statistically significant correlations or associations between the responses of current student-athletes as compared to former student-athletes. Finally, Chapter Five (Discussion and Recommendations) will outline pertinent discussion sparked by the study and data analysis. The Discussion chapter will draw conclusions from the research findings and offer recommendations for future research and applied practice.

Definitions of Terms

Intercollegiate Athletics - the administration and regulation of sports between collegiate institutions.

Student-Athlete - a college athlete with dual responsibilities as a student and as an athlete.

Career Readiness - the state of encompassing certain cognitive strategies, content knowledge, transition skills, and learning techniques to successfully transition into the workforce (Conley, 2012).

Student-Athlete Development - the arm of intercollegiate athletics responsible for the life skills, career, and personal development of collegiate student-athletes.

Athletic Identity - the degree to which student-athletes “identify” with their roles as athletes as opposed to their roles as students (Brewer et al., 1993).

Academic Progress Rate (APR) - a direct measure of retention and an indirect measure of student-athlete eligibility, including both minimum grade point average and satisfactory progress toward a degree (Gurney et al., 2015, p. 16).

Graduation Success Rate (GSR) - an NCAA adaptation of the Federal Graduation Rate to measure student-athlete graduation rates. This metric is for student-athletes only (Gurney et al., 2015).

Exploitation - the act of an individual gaining something by taking unfair advantage of another individual (Wertheimer, 2007, as cited in Miller, 2012, “Exploitation Defined”).

Amateur - in athletics, an individual who does not receive remuneration for their athletic services (Miller, 2012).

Chapter II: Literature Review

Identifying the underlying theories involved in scientific research is essential to provide the appropriate context to other researchers. Kerlinger (1979, as cited in Creswell & Creswell, 2018) defines *theory* as “a set of interrelated constructs (variables), definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables, to explain natural phenomena (p. 52). Two groups of theories and models form the foundation of this proposed research. Several of these foundational works were constructed specifically within the athletics environment. Thus, the conclusions and implications from this first group of studies may be applied directly within athletics with little adaptation. The second group of studies was constructed amongst a different population of individuals and applied within the athletics setting. Due to the dearth of literature on student-athlete development evaluation, this study seeks to integrate these theories and models to identify which tenets of student-athlete development enhance perceptions of career readiness.

Athletic Identity

One foundational theory that is frequently relied upon to understand student-athlete thoughts, expectations, and behaviors in preparing for careers beyond sports is athletic identity. Athletic identity, first introduced by Dr. Britton Brewer, refers to the degree to which student-athletes “identify” with their roles as athletes as opposed to their roles as students (Brewer et al., 1993, p. 237). The initial study was comprised of a survey of 243 student-athletes and two follow-up surveys of a combined 449 student-athletes. The survey data were analyzed to determine the level to which these student-athletes identified with their athletic roles and the impact that this over-identification had on other developmental areas. Oftentimes, this “role conflict” occurs when the demands of one role are incompatible with another role (Chartrand &

Lent, 1987, p. 164). The researchers found that athletic identity can both positively and negatively influence student-athletes. On the one hand, scholars have found that having a high athletic identity can produce positive outcomes such as greater self-esteem and a higher goal orientation (Brewer et al., 1993; Rhomberg, 2021, p. 5). On the other hand, several scholars have implied that student-athletes are at elevated risk for career-development deficiencies due to the extensive time commitment of sports and enhanced athletic identity (Cabrita et al., 2014; Clontz, 2019; Forester et al., 2020). According to related studies, many athletes form such strong athletic identities that it can lead to identity foreclosure and limit their exploration of areas outside their sport experience (Brewer et al., 1993; Poux & Fry, 2015, p. 361).

Since the introduction of the athletic identity theory, additional studies have been conducted to explore athletic identity from various constructs such as identity development, career development, motivation, role conflict, and student-athlete stereotypes (Lochbaum et al., 2022, p. 1393). Surprisingly, some studies (Facio, 2020) have concluded that there is no significant correlation between a student-athlete's athletic identity and career readiness. This range of findings has led to a call for more targeted research in athletic identity, sports transition, and evidence-based interventions (Smith & Hardin, 2020, p. 143). These conflicting conclusions (positive, negative, and non-existent correlations) suggest that athletic identity can shape a student-athlete's perception and influence various outcomes depending on the investigation focus.

While sufficient literature on athletic identity is available, certain research angles are underdeveloped. This study contributes to existing research by directly examining the link between a student-athlete's level of athletic identity and career readiness as influenced by their student-athlete development experience. Robinson (2015) states that most programming

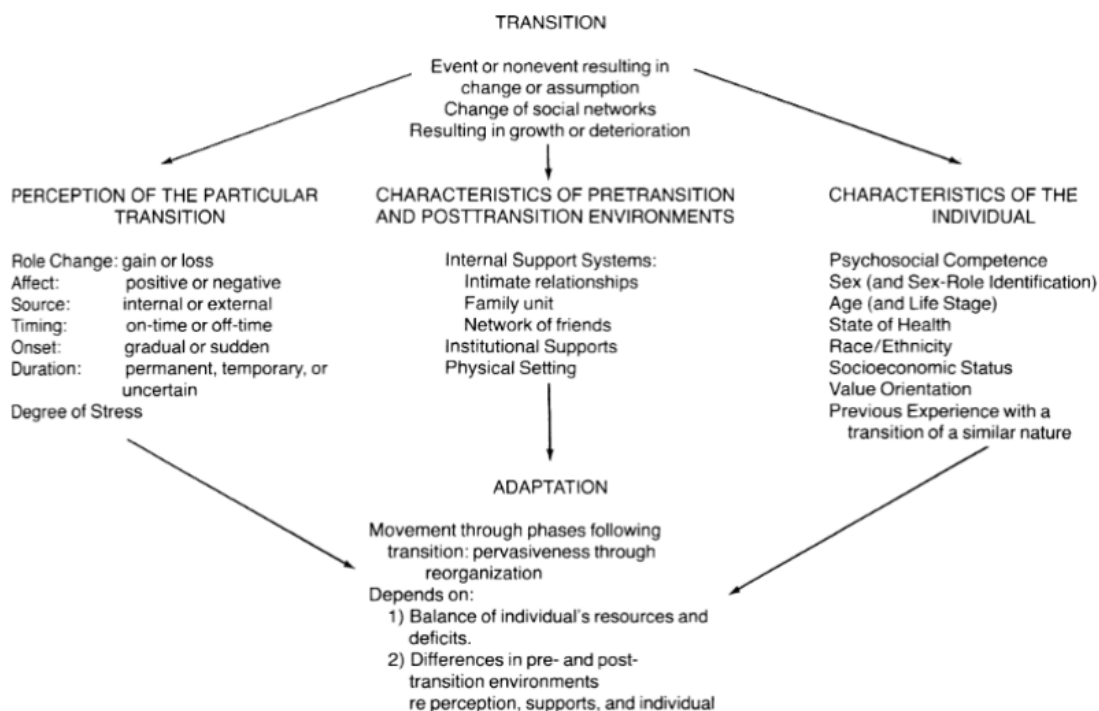
sanctioned by the NCAA does not mention athletic identity (Chapter Three). In addition, this investigation explores if current student-athletes are the most qualified subjects to offer recommendations on combatting high athletic identity given their potential bias due to their present time demands of intercollegiate athletics. Smith and Hardin (2020) acknowledge that underclassmen may lack the experience and ability to fully speak about transition experiences or athletic identity (p. 153). While many of the aforementioned studies have surveyed current student-athletes to understand athletic identity, they have yet to compare current student-athlete feedback to recently transitioned athletes. This comparison may have significant implications for the role that student-athlete development programming should play in addressing athletic identity and career readiness for current student-athletes.

Career Transition

Student-athletes will inevitably one day transition from athletics, and this milestone has become the focus of many studies in higher education and athletics. Scholars assert that collegiate student-athletes, particularly at the Division I level, are not adequately prepared for life after the termination of their athletic careers (Pouk & Fry, 2015, p. 360). There are many factors that impact the student-athlete's readiness to assimilate into a life without sports.

One popular framework used to explain this transition is Nancy Schlossberg's Transition Theory. Transition Theory is used to explain how individuals encounter and react to changes throughout periods of their lives differently. According to Schlossberg (1981), these reactions to such changes are based on the available resources (or lack thereof) during the various transitions. Although this theory was initially developed from a study on the general adult population, it has been applied within the intercollegiate athletics environment (Payne & Driska, 2020, p. 171). Schlossberg (1981) defines a transition as any event or nonevent that results in perceived

changes in relationships, routines, assumptions, and roles (p. 5). While Schlossberg's Transition Theory was not initially based on empirical research, several other studies (Smith & Hardin, 2020; Stokowski et al., 2019; Woods, 2017) have utilized this framework to explore the student-athlete career transition experience. As cited in Schlossberg (1981), the following figure represents a visual representation of Schlossberg's Transition Theory.



Note: Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist*, 9(2), 2-18.

Figure 2

Schlossberg's Transition Theory

Prior research has shown that many collegiate athletes feel that they need more institutional support, guidance, and resources upon and beyond graduation (Smith & Hardin, 2020). Chartrand and Lent (1987) state that this lack of support during a student-athlete's transition can cause disengagement when navigating this life event (p. 164). In some cases, this perceived lack of support and preparation can also lead to mental health concerns (Miller &

Buttell, 2018, p. 67). According to scholars (Hansen et al., 2019; Payne & Driska, 2020; Woods, 2017), multiple factors—including athletic identity, career development, and student-athlete development programming—can affect transition outcomes for student-athletes. Several studies investigating career transition in athletics have confirmed a relationship between identity and guided career planning behaviors (Bennett III et al., 2015; Bjornsen-Ramig et al., 2020; Kelly & Dixon, 2014; Lally & Kerr, 2013). However, these studies examine career transition from a specific construct—such as race, sport, or major program. Nonetheless, research suggests that institutional and departmental resources from career services, campus counseling, academic advising, and alumni affairs may help facilitate a student-athlete’s readiness to transition from school and sport (Bjornsen-Ramig et al., 2020, p. 22).

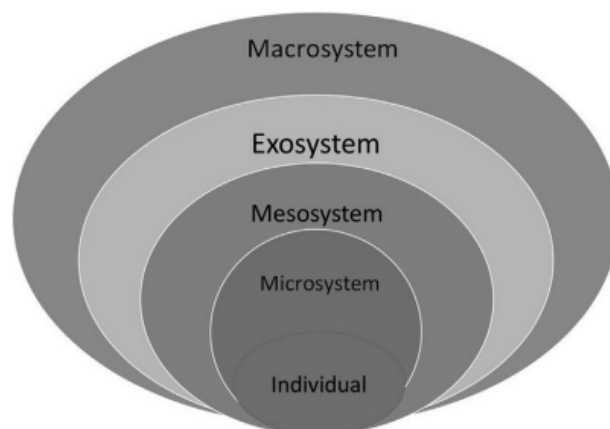
Although extensive studies have been conducted utilizing Schlossberg’s Transition Theory, there has been little investigation into the effect that student-athlete development has on the transition experiences of student-athletes. While previous findings imply that student-athlete development can facilitate the post-sport transition, these discussions do not specify how the student-athlete development experience can enhance a student-athlete’s perception of career readiness. This investigation fills a substantial gap in research by allowing current and former student-athletes to assess various tenets of the student-athlete development experience and its direct impact on their perceptions of being career-ready. For example, student-athletes are asked to critique the content, facilitators, implementation strategies, and overall quality of the student-athlete development experience. This specific insight is a vital component of programming evaluation and is needed to inform applied practice.

Ecological Systems Theory

For years, scholars have explored the effects of environmental factors on an individual's development. According to Kerr & Kerr (2020), this theoretical concept has been used to demonstrate that a child or adolescent's interactions with multiple environmental factors can influence growth and development (p. 96). A growing body of research (Cooper et al., 2017; Kerr & Kerr, 2020; Lopez et al., 2020) has applied this concept to the sports environment to better understand how coaches, team culture, and programming can impact an athlete's development. For instance, previous studies (Cooper et al., 2017; Navarro et al., 2019; Saxe et al., 2022) have shown that student-athlete development may directly influence various academic-related and student-athlete development outcomes. In addition, other studies (Cooper et al., 2017; Navarro et al., 2019) have determined that student-athlete development may be used to influence identity development in student-athletes. While environmental factors can improve developmental efforts, many scholars (Kerr & Kerr, 2020; Lopez et al., 2020) contend that sports environmental elements can also negatively influence the development of student-athletes. For example, Duerden and Witt (2010) imply that specific programming elements in a student-athlete's microsystem—such as a lack of knowledge about specific topics or the failure to be exposed to certain career-related opportunities—can discourage certain student-athlete behaviors (p. 112).

Bronfenbrenner's ecological theory is one prominent human development model often used to explain the impact of environmental factors on the development experience. This theory, initially developed in the 1970s by Dr. Urie Bronfenbrenner from early childhood and psychology research, suggests that environmental factors play a prominent role in a person's development (Bronfenbrenner, 2005). A fundamental assertion of this theory is that all

ecological environments consist of the following five systems: individual, microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 1977, as cited in Cooper et al., 2017, p. 63; Kerr & Kerr, 2020; Steinberg, 2017). The individual system consists of an individual's knowledge, attitude, and skills. The microsystem consists of relationships with parents, coaches, and teachers. The mesosystem consists of interactions between elements of the microsystem (i.e., parent-teacher interactions). The exosystem consists of relationships between organizations (i.e., between the NCAA and a member institution). Finally, the macrosystem consists of national, international, and local laws, policies, and societal beliefs that impact an individual. Of the five systems presented in Bronfenbrenner's ecological theory, Kerr & Kerr (2020) contend that the micro-level—family, school, coaches—is considered the most influential level in the athlete's environment (p. 97). According to Bronfenbrenner (2005), individual characteristics may position a child or an adolescent for learning. However, various interrelated ecosystems and contextual factors may also influence the speed and manner of their development. Figure 2 represents Bronfenbrenner's Ecological Theory (Kerr & Kerr, 2020).



Note: Kerr, R., & Kerr, G. (2020). Promoting athlete welfare: A proposal for an international surveillance system. *Sport Management Review*, 23, 95-103.

Figure 3

Bronfenbrenner's Ecological Systems Theory

Some scholars warn against misrepresenting Bronfenbrenner's ecological model in research. Tudge et al. (2016) argue that it is often difficult to isolate a singular environmental factor when examining a particular facet of human development due to the interdependent nature of all elements (p. 428). Additionally, Tudge et al. (2016) assert that there is no reason to isolate a variable in a student-athlete's ecosystem because there are no effects independent of the others (p. 431). To avoid the misrepresentation of the application of Bronfenbrenner's ecological theory in this study, the researcher applied it by identifying a controllable environmental element—student-athlete development—that deserves further investigation. Numerous studies (Duerden & Witt, 2010; Saxe et al., 2022; Tudge et al., 2016) have already been conducted using this ecological systems model as a theoretical framework. These scholars have examined specific issues in sports to learn that some interventions can create an improved experience (Saxe et al., 2022, p. 564). Furthermore, researchers note that studies with a student-athlete development focus are lacking (Navarro, 2014, p.233), and this study can inform future research in student-athlete development.

This study's inclusion of Bronfenbrenner's ecological theory can be used to advance knowledge in the field of student-athlete development. For one, this study explores an under-researched element in a student-athlete's environment—the impact of developmental programming on their perceptions of career readiness. This facet of the learning environment is beyond a student-athlete's control, yet it can significantly impact their perceptions of career readiness. Researchers (N4A, 2022) have called for additional scholars to conduct targeted student-athlete development investigations, and findings from this study can inform future research. Next, this study can contribute to existing research by identifying various demographic markers that may also correlate with career readiness outcomes. Factors—such as identity, sport,

or classification—may explain variances in responses. This data can be helpful to researchers seeking to understand the interactions between individuals and their microsystem environments.

Student-Athlete Development

College institutions provide academic resources to student-athletes as they fulfill their athletic obligations to their sports programs. While additional academic support is usually housed within athletics, student-athlete development is often utilized to support the other non-sport areas of student-athletes' lives and to combat high athletic identity (Navarro et al., 2019, p. 54). Since 1999, the NCAA has acknowledged that student-athletes require additional life skills and career development support by introducing the CHAMPS/Life Skills programming to its membership (NCAA, 1999). The present-day version of this programming is led by the N4A organization and focuses on the holistic personal and professional development of NCAA-member student-athletes. A growing body of literature supports the notion that student-athlete development programming is an influential catalyst in the career readiness enhancement of current student-athletes (Forester et al., 2020; Navarro, 2014; Navarro et al., 2019; Van Raalte et al., 2017). However, leading researchers assert that student-athlete development is in its early stages of substantial evidence-based research (N4A, 2022). It is important to note that many institutions operate academic advising and student-athlete development from the same department.

Prior student-athlete development studies (Cabrita et al., 2014; Navarro, 2014; Pierce et al., 2021) have shown an inverse relationship between athletic identity and career preparation. When student-athletes identify with their “athlete” role, they are less likely to engage in various academic or student development activities. Nevertheless, researchers have implied that student-athlete programming interventions may help lower athletic identity and increase career maturity

in student-athletes (Houle & Kluck, 2015, p. 38; Poux & Fry, 2015; Van Raalte et al., 2017). Robinson (2015) asserts that addressing athletic identity is the missing link in program development and practical application when working with athletes at most levels (Chapter Three). However, more research is needed to determine precisely how to approach athletic identity within student-athlete development programming.

As the field of student-athlete development grows, several gaps in research continue to be exposed. First, researchers (Navarro et al., 2019; N4A, 2022) find that the current framework of student-athlete development is disorganized and requires a more standardized implementation model for NCAA member institutions. In many cases, the vast autonomy that member schools across each division have in customizing their programming leads to a wide range of student-athlete outcomes. Jolly et al. (2020) support these findings by describing the adaptations that can be made to the current framework to provide more meaningful national guidance on student-athlete development. However, other researchers (Knelfelkamp, Widick, & Parker, 1978, as cited in Vermillion, 2014) note that it is impossible to develop a universal student-athlete development program for all institutions (p. 85). Although athletes generally share many of the same concerns, there may be vast differences between sub-groups of student-athletes across different institutions (Chartrand & Lent, 1987, p. 164). Nonetheless, student-athlete development programming research must produce an evidence-based national model that can be adapted to individual, institutional needs.

A second gap in student-athlete development research involves a need for more programming assessment and evaluation data. How do student-athlete development scholars measure the effectiveness of programming? According to Vermillion (2014), “research should be gathered in order to better understand what student-athletes are saying about their development”

(p. 83). Prior research has demonstrated the importance of gathering feedback in the career domain. For example, Hu et al. (2015) argue that feedback can operate as a process where information is gathered and adjustments are made—which may elicit an improved state (p. 151). While several studies have solicited feedback from student-athletes on student-athlete development effectiveness, many of the investigation prompts ask for general feedback. For example, one study’s survey questions focused on the holistic growth of the student-athlete as compared to a more targeted analysis of the student-athlete development experience (Vermillion, 2014, p. 80). In another study, Pierce et al. (2021) asked broad questions about the benefits of programming. However, the researchers did not solicit specific feedback about the programming content or facilitation that could aid in more meaningful adjustments. Although few studies offer specific recommendations from student-athlete programming evaluations, evidence is needed to support best assessment practices. For instance, these studies have found that student-athlete development programming should span multiple years (Bjornsen & Dinkel, 2017; Hansen et al., 2019; Van Raalte et al., 2017), involve student mentors (Forester et al., 2020; Kelly & Dixon, 2014), and utilize the resources of career services (Tyranice et al., 2013). A more extensive discussion of student-athlete development assessment is discussed in the literature review section on “Programming Evaluation.”

Finally, additional student-athlete development research gaps have been discovered as current student-athletes are forced to navigate monumental legislative changes that require the engagement of various professional and career-related skill sets. In 2019, the intercollegiate athletics landscape shifted when California passed state legislation entitled the “Fair Pay for Play Act” which prohibited schools from limiting student-athletes from earning money for their name, image, and likeness, abbreviated NIL (Roy & Hamer, 2022, p. 57). NCAA member institutions

have been required to adhere to the ruling in their states as it pertains to NIL guidelines. As of 2021, Roy and Hamer (2022) assert that 28 states had enacted laws to allow college athletes to earn money based on their status as collegiate student-athletes (p. 57). This opportunity for student-athletes to receive play-related pay conflicts with certain aspects of their amateur status. Historically, student-athletes have been bound by the amateurism code that states they must play for the love of the game and not for compensation (Smith, 2021). However, the passing of this law has revealed specific education and career-related deficiencies amongst student-athletes, such as financial literacy, communication skills, and networking. Nonetheless, this monumental NIL rule change carries significant implications for institutional support—specifically student-athlete development—as intercollegiate athletics regulators determine how to meet the enhanced educational needs of the student-athletes.

This investigation contributes to existing student-athlete development research in two distinct ways. One, it adds a focused study angle of the specific aspects of the student-athlete development experience that enhance career readiness. Scholars (Navarro et al., 2019) argue that this research area needs additional investigation. Two, this study offers an easy-to-implement evaluation model for student-athlete practitioners to gain specific and meaningful feedback from current and former student-athletes concerning their student-athlete development experience. This feedback can be used to inform applied practice in the evaluation of student-athlete development programming by involving former student-athletes. Researchers (N4A, 2022) contend that this type of investigation can aid scholars in developing an evidence-based evaluation model to enhance the effectiveness of student-athlete development.

Programming Evaluation

A critical gap in the literature on student-athlete development is evidence-based programming evaluation. Navarro et al. (2019) contend that the assessment of a program is essential to provide evidence that the program works (p. 112). Most literature on student-athlete development acknowledges that no meaningful measurement of effectiveness for student-athlete development currently exists (Jolly et al., 2020; Navarro & Malvaso, 2015; N4A, 2022). In most cases, student-athlete development practitioners create, administer, and evaluate their respective student-athlete development programming. Their efforts include the implementation of some of the proposed curricula suggested by the NCAA/N4A collective. Then, they subjectively evaluate the effectiveness of their programming by their institution's participation metrics or some flawed statistical benchmark. Nevertheless, scholars (Jolly et al., 2020) maintain that gathering programming evaluation feedback from student-athletes can help student-athlete development practitioners learn how to enhance programming to meet student-athlete needs (p. 75). More student-athlete development research is needed to determine how to effectively evaluate knowledge transfer, skill acquisition, and overall career readiness to transition beyond school and sport.

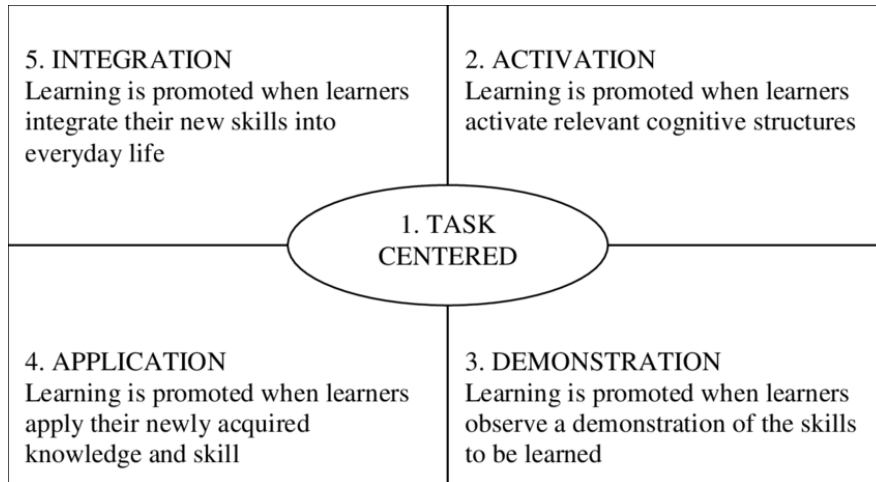
Certain statistics show that intercollegiate student-athletes in the United States have been graduating from college in record numbers. However, they lag behind their non-athlete peers in terms of career readiness (Van Raalte et al., 2017, p. 9). This conclusion has led researchers to examine two of the NCAA's student-athlete success metrics—the Academic Progress Rate (APR) and the Graduation Success Rate (GSR). As the athletic program achieves satisfactory APR and GSR indicators, both academic advisors and student-athlete development staff often take credit for that academic-related success. The APR metric is supposed to allow institutions to

track student-athlete progress toward graduation and measure retention (Gurney et al., 2015, p. 2). The calculation considers a student-athlete's grade point average (GPA) and progress toward graduation. The GSR metric is an NCAA adaptation of the federal law that requires colleges and universities to report graduation rates for their student bodies and athletes. The GSR adjusts the federal government's statistics to account for student-athlete transfers into and out of the athletic program (Eckard, 2020). However, research shows that despite graduating from college, not all student-athletes are prepared to enter the workforce (Van Raalte et al., 2017, p. 9).

One research group has published a powerful statement exposing the flaws in the APR and GSR calculations, deeming them unreliable predictors of success (Gurney et al., 2015). These researchers (Gurney et al., 2015) argue that the APR is a flawed measure of student-athlete success for two reasons. First, they argue that wealthier institutions can manipulate existing rules to show academic progress and inflate APR, such as using summer school aid or learning disability waivers. Second, they argue that the APR metric does not accurately compare the academic performances of athletes and non-athletes by manipulating the minimum GPA standard. These conclusions require a more reliable way to evaluate student-athlete success and readiness.

Additionally, other researchers question the validity of the GSR metric. According to Eckard (2020), the NCAA's adjustment of the federal graduation rate involves subtracting from the athlete cohort all who leave an institution while academically eligible for sports, not just those who transfer to another college (p. 782). This statistical error inflates graduation statistics. As athletic departments seek to align with institutional objectives, the metric for student-athlete development effectiveness should more closely align with learning goals related to career readiness and employment (Zakaria, 2015).

Merrill's First Principles of Instruction is one theory used to inform this study's investigation into student-athlete development evaluation. This framework is an instructional design model that fuses several learning and instructional theories to create general principles for effective learning facilitation and evaluation. According to Merrill (2018), there are five constructs to Merrill's First Principles of Instruction: identification of the problem, activation of prior knowledge, (observed) demonstration of new knowledge or skills, application of new knowledge or skills, and integration into the learner's world. Merrill (2018) asserts that "learning is promoted when learners are engaged in a problem-centered strategy involving a progression of whole real-world tasks." Learners should understand and be able to apply new knowledge or specific skills to a defined task after an educational experience. This model also suggests that the context in which information is presented is an important facet of the learning experience (Merrill, 2020, p. 112). Figure 4 (Rosenberg-Kima, 2012) highlights the key elements of Merrill's First Principles of Instruction.



Note: Rosenberg-Kima, R. (2012). *Effects of task-centered vs. topic-centered instructional design approaches on problem solving-learning to program flash*. [Master's thesis, University of Florida]. Research Gate. https://www.researchgate.net/figure/Merrills-First-Principles-of-Instruction-Merrill-2002a_fig3_270572791

Figure 4

Merrill's First Principles of Instruction

This study applies foundational concepts from Merrill's Principles of Instruction to the student-athlete development evaluation investigation to contribute to research. First, this study focuses on a singular, real-world programming objective: career readiness. Having a clear programming objective is a critical component of an effective evaluation, and this focus on clear objectives and outcomes also supports the evaluation framework needs identified in existing student-athlete development research (Navarro et al., 2019, p. 118; N4A, 2022). In addition, this study contributes to research by gathering evaluation feedback from current and potentially more qualified former student-athletes about their student-athlete development experience. One of Merrill's Principles of Instruction implies that "integration into the learner's world" is a measure of effecting learning and facilitation (Merrill, 2020). Former student-athletes' perceptions of readiness can provide a more meaningful reflection of student-athlete development's role in preparing them to apply the knowledge and skills they have learned. Jolly et al. (2020) suggest that universal programming evaluation guidance be provided to athletic departments. This study

can inform applied practice since many institutions already conduct some form of pre- or post-workshop survey and exit interviews for their student-athletes. As institutional missions highlight a tangible real-world need—being career-ready—the student-athlete development experience must be examined to provide evidence that it is meeting that pressing need.

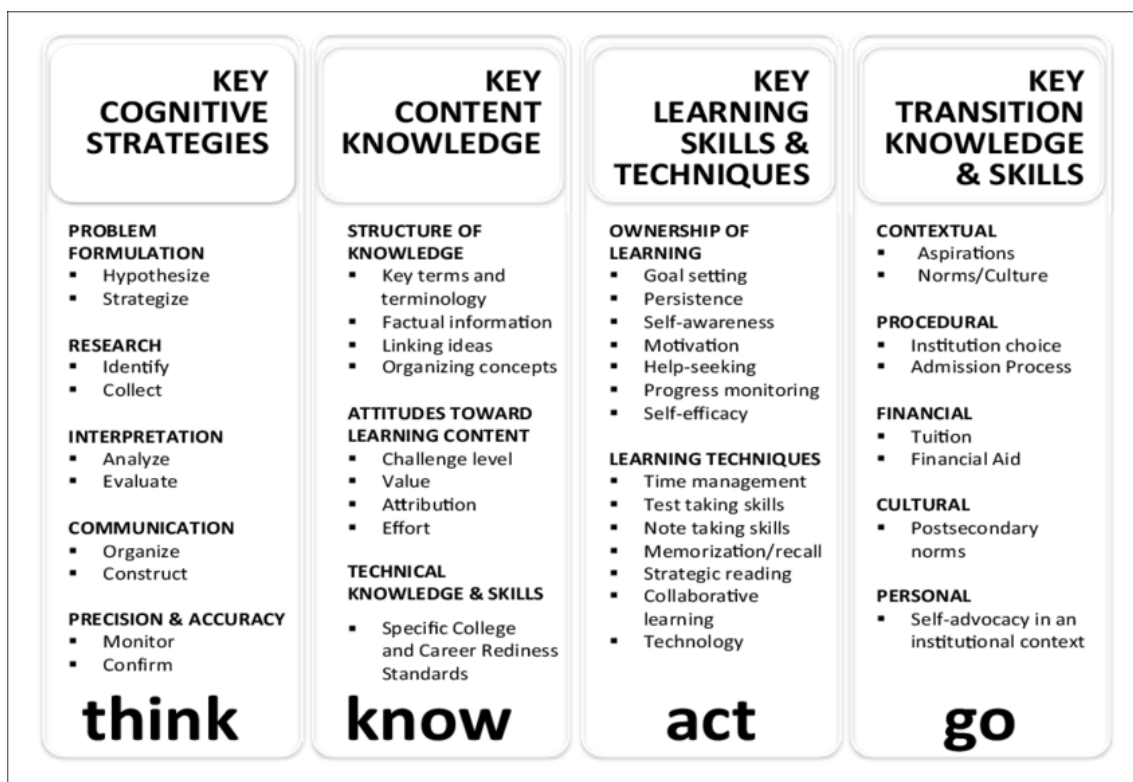
Career Readiness

Previous research has shown that student-athletes require additional support when preparing for (Forester et al., 2020; Navarro et al., 2019; NCAA, 1999; Van Raalte et al., 2017) and transitioning into (Bjornsen-Ramig et al., 2020; Poux & Fry, 2015) a career after sports. August (2020) suggests that the extent to which college student-athletes are prepared to enter the workforce upon graduation is an important concern to the university, the NCAA, and to student-athletes themselves (p. 177). Despite the NCAA's efforts to develop a curriculum that supports its student-athletes' career preparation needs (NCAA, 1999), student-athletes continue to call for additional support in enhancing their readiness for the workforce. In 2019, the NCAA surveyed over 20,000 student-athletes in the fourth iteration of its GOALS Study. GOALS stands for Growth, Opportunities, Aspirations, and Learning of Students in College. According to the NCAA website, the purpose of this survey is “to study the experiences and well-being of current student-athletes” to inform NCAA committees, policymakers, and member institutions (NCAA, n.d.a). In their Division I GOALS Study report, the NCAA (NCAA, n.d.a) states that 41% of male student-athletes and 58% of female student-athletes request additional support from their coaches in “preparing for a career after college.” This career preparation option garnered the second highest and highest percentages, respectively, of reactions to all the presented topic areas.

Prior studies (Clontz, 2019; Lokhande, 2019) on career readiness assert that there are significant relationships between career transition readiness, career-confidence-type college

experiences, and athletic identity. However, career readiness must be clearly defined to address career preparation for student-athletes through student-athlete development (Alfeld, 2018, p. 167). According to NACE (n.d.)—the National Association of Colleges and Employers—career readiness is the possession of competencies needed to launch and develop a successful career. This definition was developed from a task force of over 300 career services professionals and recruiters and is often used to provide a framework to assist higher education in addressing career-related outcomes (NACE, n.d.). However, one of the most prominent researchers in career readiness is Dr. David Conley. Conley’s College and Career Readiness Model was developed to identify the knowledge and skills students need to succeed in school and their careers (Conley, 2012). Although his initial study was developed with high school students in mind, the research has been applied to studies within the intercollegiate athletics setting (August, 2020).

In this study, the theoretical lens used to examine the impact of student-athlete development on student-athlete perceptions of career readiness is Conley’s College and Career Readiness Model. According to Conley (2012), career readiness encompasses certain cognitive strategies, content knowledge, transition skills, and learning techniques (p. 2). Figure 5 describes Conley’s model.



Note: Conley, D. T. (2012). A complete definition of college and career readiness. *ERIC*. Retrieved June 1, 2022, from <https://eric.ed.gov/?id=ED537876>

Figure 5

Conley's College and Career Readiness Model

Through the “four keys” of Conley’s (2018) College and Career Readiness Model, he asserts that career-ready individuals must possess certain knowledge and skills and demonstrate the ability to perform certain tasks independently. Scholars recognize that certain “knowledge” aspects of career readiness are more appropriately addressed through the choice of major, which is often influenced by academic advisors (Lokhande, 2019, p. 39). Although it may be difficult to assess specific skills or abilities unless student-athletes have opportunities to “learn by doing” or “practice,” their perceptions of their knowledge, skills, and abilities can inform practitioners about gaps in their career preparation experience.

The use of Conley’s College and Career Readiness Model as a theoretical lens offers a valuable contribution to existing research. First, this model was utilized to focus the investigation

of this study on the student-athlete development experience's impact on career readiness. Prior research (August, 2020; Lokhande, 2019; Van Raalte et al., 2017) has recommended that additional studies be conducted with this research focus. Next, it offers an evidence-based guide to forming objectives and evaluation metrics for the student-athlete development experience. By identifying a clear developmental objective (career readiness), this model guides researchers in querying student-athletes about specific programming tenets that can produce this defined outcome. For instance, survey questions ask student-athletes if they were provided opportunities to “learn by doing” or network with peers. These student-athlete development activities would allow student-athletes to demonstrate certain cognitive strategies and transition skills—two keys to Conley’s College and Career Readiness Model. Former student-athletes are included in this study to reflect on their perceptions of career readiness as they are likely more qualified to assess which student-athlete development elements affected their career readiness and career transition preparation. Finally, applying this model to student-athlete development can inform future evaluation research since a prior study (Gurney et al., 2015) has shown that grade-point-average (GPA), academic progress rates (APR), and graduation rates (GSR) are not accurate predictors of career readiness. Conley (2018) asserts that there is a stark difference between eligibility and readiness (pp. 12-13). While colleges use isolated, often-manipulated statistics to assess student-athlete academic performance, the readiness profile can yield a more comprehensive and actionable view of the student-athlete that can better inform stakeholders on how to support their needs. Findings from this study can inform existing researchers and practitioners in developing objectives and outcomes within a national student-athlete development framework.

Chapter III: Research Methodology

This section explains the study design, the theoretical perspective of the current investigation, a description of the sample, and the participant recruitment process. In addition, the research methodology chapter describes the survey instrument, the data collection process, and the statistical analysis techniques utilized in this study. The primary purpose of this study is to examine the reflections of both current and former collegiate student-athletes on their student-athlete development experience and to assess whether specific student-athlete development tenets enhance their perceptions of career readiness. A lesser-explored angle of existing research sought in this investigation is the comparative analysis of current and former student-athlete responses in the same study. Former student-athletes may be more qualified to offer constructive feedback about student-athlete development's impact on perceptions of career readiness due to their completed career transition.

Study Design

This study followed a positivist philosophy. Creswell and Creswell (2018) assert that a positivist philosophy is based on scientific methods that develop knowledge through numeric measures of observations and by studying the causes of outcomes (p. 6). This non-experimental, quantitative study explored if independent variables related to the student-athlete development experience were statistically significant in enhancing perceptions of career readiness. This correlational study design was appropriate to measure the associations between two or more observed variables with complex relationships (Creswell & Creswell, 2018, p. 11). The researchers chose a quantitative analysis method over a qualitative analysis technique to focus student-athlete reflections and responses on specific tenets of the student-athlete development experience. According to Creswell and Creswell (2018), quantitative approaches are best utilized

when the investigation calls for the identification of factors that influence or predict an outcome (p. 19). Kothari (2004) notes that other research methods—such as qualitative approaches—are often utilized when researchers investigate human behaviors or the underlying motives of their behaviors (p. 3). Although previous studies (Forester et al., 2020; Haslerig & Navarro, 2016; Lally & Kerr, 2013; Navarro, 2014; Payne & Driska, 2020) on student-athlete development have employed either qualitative or mixed-method research designs, the current study had a narrower research focus (Godwill, 2015) on the student-athlete development experience.

Surveys were administered to two populations of student-athletes from a mid-major university in the Mid-Southern region of the United States, the University of Memphis. Online surveys were chosen due to their popularity with college students (Van Mol, 2017) and the ability to collect primary data from participants. Since the entire population of current and former student-athletes (who had exhausted eligibility in the past five years) at the University of Memphis had an equal opportunity to participate, the respondents represented a randomized sample. Because this is exploratory research without many prior studies to inform this investigation, the researcher used a widely accepted scientific practice of determining the minimum number of observations needed in this study. According to Peduzzi et al. (1995, as cited in Babyak, 2004), regression models will produce reasonably stable estimates if the sample size allows a ratio of approximately 10-15 observations per independent variable (p. 415).

The survey responses were collected and examined using both descriptive and inferential statistics. A multiple regression technique was chosen to analyze the multiple independent variables and account for any potential correlations or interdependence amongst the variables (Kothari, 2004, p. 315). More specifically, multiple logistic regression was applied to ascertain if a relationship existed between the independent variables related to student-athlete development

and the dependent variable—student-athlete perceptions of career readiness. Godwill (2015) contends that logistic regression is commonly used to predict a dichotomous outcome based on multiple independent variables (p. 102). The dependent variable, represented as a Likert scale question, was converted to a binary outcome (yes/no) to simplify the model. In addition, the mean responses of the two groups of student-athletes were intended to be compared to one another to determine if there were any statistically significant differences between their perceptions of career readiness. The findings from this study can be used to predict certain career readiness outcomes with similar populations of student-athletes (Kothari, 2004, p. 5).

Although a survey instrument was determined to be the more valuable data collection tool for this study, the researcher acknowledges the disadvantages of using these questionnaires when gathering data. First, surveys commonly have low response rates. Fan and Yan (2010, as cited in Lin et al., 2017) contend that online surveys average an 11% less response rate than other data collection methods (p. 51). Other researchers (Van Mol, 2017) estimate that response rates of less than 10% are typical in web-based survey research. However, Mayer (2021) argues that surveys are still the cornerstone of social science research and are frequently used to inform decisions even though response rates have steadily declined (p. 1).

In addition, surveys force respondents to choose from a limited, pre-determined list of answer options. In some cases, qualitative research tools may yield more meaningful results. Although three questions from the survey instrument allowed open-ended responses, student-athletes were primarily required to choose from the available answer choices. Nonetheless, Godwill (2015) asserts that closed-end questions with pre-determined answer choices can generate more specific responses and increase the comparability of results across studies (p. 84). Finally, non-response bias—when certain respondents refuse to participate in the survey—may

limit the representativeness of the sample. The respondents may share characteristics, such as demographic or cultural factors, that influence their perceptions of career readiness that do not apply to other student-athletes. Researchers acknowledge that the potential for non-response bias can skew results (Kothari, 2004, p. 101; Van Mol, 2017).

Theoretical Perspective

According to Miles and Huberman (1994, as cited in Patil, 2020), the theoretical perspective is the context that explains the main factors to be studied and the presumed relationships among them (p. 10). Conley's College and Career Readiness Model was the primary theoretical framework used to inform the current study. As a career readiness expert, Dr. David Conley has developed a detailed description of the various indicators of a student's college or career readiness based on what they should know or should be able to demonstrate upon transition. In this framework, Conley (2012) establishes an actionable definition of college and career readiness that includes four "keys:" cognitive strategies, content knowledge, learning skills, and transition knowledge.

The researcher utilized Conley's model to develop survey questions that focus on the student-athlete development programming's facilitation of experiences that align with the stated outcomes. Having a clear definition of career readiness is also critical to preventing operational bias. Operational bias error occurs when the underlying concepts used to define the study are not clearly expressed (Godwill, 2015, p. 158). For this study, career readiness is described according to Conley's (2012) four keys:

1. having key content knowledge that includes terms, concepts, and facts related to the career process;

2. possessing key cognitive strategies, including how to research careers and communicate effectively;
3. having key learning skills such as self-awareness and learning through social interactions; and
4. possessing key transition knowledge such as identity and appropriate career pathways.

These four keys informed the survey questions around how the student-athlete development experience enhanced student-athlete thinking skills, career knowledge, learning strategies, and overall exposure to the transition process. The use of Conley's College and Career Readiness Model allowed participating student-athletes to encounter a more focused reflection of their athletic department's effectiveness in facilitating development experiences that meet their career readiness needs (August, 2020).

Sample Description

The population for this study included two groups of student-athletes from the University of Memphis. The first group of student-athletes were current student-athletes from all university sports. These student-athletes spanned all classifications and were solicited via email through the athletic department's email system during the Spring semester of the 2022-2023 academic year. The second group of student-athletes comprised former University of Memphis student-athletes from all sports who had exhausted eligibility within the past five years. The eligibility pool went back five years to include former student-athletes who were exposed to a more traditional, in-person student-athlete development experience before the COVID-19 pandemic. Many student-athlete development staff were forced to administer programming virtually during the pandemic. These former student-athletes were solicited from the athletics alumni directory during the

Spring semester of the 2022-2023 academic year. The researcher had access to the complete directory of current and former student-athletes and distributed surveys to the entire population.

The University of Memphis—in the American Athletic Conference—was chosen as the target institution for this study due to the potential to provide generalizable solutions to a range of institutions across the NCAA. There are two reasons that the primary investigator implies that the results of this study can be applied to schools with similar resources and student populations as well as larger institutions. First, leading researchers (N4A, 2022) contend that it is “critical to recognize that resources should not dictate the effectiveness of a student-athlete development program” (p. 7). This notion is supported by the NCAA’s national framework for student-athlete development that is required of all institutions regardless of size or budget (Forester et al., 2020, p. 352). Scholars insist that one key difference between mid-major athletic programs (i.e. University of Memphis) and high-major programs (i.e. Power Five institutions) is budget (Woltring et al., 2021, p. 129). However, a focus on general student-athlete development and career readiness deficiencies may prompt the need to be innovative when applying the findings from this study across a range of athletic programs.

Yet, when an institution’s budget is the deciding factor, implementing the findings may be more practical when generalizing from a mid-major school to a high-major school—but not vice versa due to potential staffing and budget limitations at lower levels or smaller schools. Although the researcher acknowledges that there may be stark differences between institutions (i.e. variables related to student profiles, geographic setting, staff size, philosophies, and/or athletic budgets), the results of this investigation can still guide applied practice in student-athlete development. For example, findings related to identifying effective student-athlete development tenets, establishing clear programming objectives and outcomes, or devising

student-athlete development evaluation strategies can be valuable to student-athlete development staff at any institution. Leading researchers (Navarro & Malvaso, 2015; Navarro et al., 2019; N4A, 2022) also argue that findings from research with this study's design and focus are necessary to enhance the NCAA/N4A's current national programming requirement across all levels of intercollegiate athletics.

Next, the researcher suggests that findings can be applied to a variety of institutions based on results from a recent NCAA GOALS Study. In 2019, the NCAA surveyed over 20,000 student-athletes from various institutions across its membership—including small, mid-major, and high-major Division I programs. As previously iterated, the purpose of this national survey is “to study the experiences and well-being of current student-athletes” to inform NCAA committees, policymakers, and member institutions (NCAA, n.d.a). In the Division I GOALS Study report, the NCAA (NCAA, n.d.a) stated that 41% of male student-athletes and 58% of female student-athletes requested additional support from their coaches in “preparing for a career after college.” Findings from this investigation can provide a more detailed framework to address previously identified student-athlete career readiness needs and supply a practical evaluation method to assess its effectiveness in meeting those needs. In addition, the sample demographics range from the NCAA GOALS Study suggests that this study's findings may also be generalizable to athletic programs with different budgets within the NCAA. Respondents to the NCAA study represented all demographics, classifications, sports, and institution sizes. Although some scholars (Chartrand & Lent, 1987; Vermillion, 2014) state that it is impossible to establish a universal student-athlete development model across various institutions, the mere existence of the NCAA's present-day CHAMPS/Life Skills model refutes those claims. The national framework is in place to offer guidance for campus-level implementation. Thus, the researcher

suggests that findings may enhance national guidance and be applied at both the mid-major level of athletics and larger-budget Power Five institutions (i.e., Atlantic Coast Conference, Big Ten Conference, Big 12 Conference, Pac-12 Conference, and Southeastern Conference) with comparable results.

Sample Recruitment

After receiving approval from the Institutional Review Board (IRB) in December of 2022, the primary researcher for this study contacted the Associate Athletic Director for Student-Athlete Welfare to explain the study's purpose and to request assistance in soliciting current student-athletes to participate. The IRB approval letter for this investigation is shown in Appendix A. In addition, the primary researcher contacted the Associate Athletic Director for Academic Services for further support in recruiting current student-athletes. Other recruitment methods for current student-athletes included social media postings and direct communications with sports coaches and other influential student-athlete development staff. Hansen et al. (2019) suggest that student-athlete development staff can be persuasive when recruiting student-athletes to participate. Furthermore, the Director of Annual Fund and Letterwinner Relations was emailed for assistance in recruiting former student-athletes from the institution to participate in the study. The primary researcher crafted emails, recruitment flyers, and social media posts to broadcast the research opportunity to current and former student-athletes.

According to Hansen et al. (2019), multiple recruitment strategies, such as emails, university athletic department postings, and communications with coaches and athletic staff can be effective. Trespalacios & Perkins (2016) also maintain that combinations of well-crafted messages, trustworthy senders, multiple contacts, and incentives can increase response rates of email-based surveys. In each recruitment and follow-up email, an informed consent statement

was included to explain the purpose of the study, the respondent's rights, and the researcher's contact information. While there were no direct benefits offered to current or former student-athletes for their participation in this study, participants were given an opportunity to enter a raffle for a \$25 gift card after their survey. Mid-way through the survey period, the researcher increased the gift card raffle incentive from \$25 to \$100. The researcher also received permission to visit the athletics academic study hall to allow student-athletes to complete surveys via an anonymous QR code. The survey window was open for seven weeks during the Spring 2023 semester, and the researcher sent two reminder emails to student-athletes to complete the survey instrument. Previous studies (Blumenberg et al., 2019; Van Mol, 2017) have shown that sending reminder emails can improve response rates.

Survey Instrument

The primary data examined in this study was collected using a survey instrument comprised of 23 questions. These multiple-choice questions included several independent variables related to the student-athlete development experience and a dependent variable about the student-athlete's perception of career readiness. The dependent variable was presented as a Likert scale question. Respondents were asked to indicate if they felt very or somewhat prepared to pursue a career outside of sports. This variable was coded as "yes" if the student-athlete indicated that they felt very or somewhat prepared, and it was coded "no" if the student-athlete indicated that they felt very or somewhat unprepared. Again, career readiness is defined in this study as having the content knowledge, cognitive strategies, learning skills, and transition knowledge to feel prepared to pursue a career beyond sports. There were two versions of the survey: one for current student-athletes and another for former student-athletes. The survey instruments for current and former student-athletes can be found in Appendix B and Appendix C,

respectively. Each version contained the same questions, but the wording differed slightly to account for the difference in tense for current student-athletes and their ongoing experience as compared to the past experiences of former student-athletes.

There were three categories of questions. The first cluster of questions focused on demographic information, such as which sport the responding student-athlete plays (or played), their ethnicity, their classification (or highest classification attained), and their socioeconomic status (as inferred by their acceptance of financial aid). Then, current and former student-athletes were asked if they feel (or felt) “prepared to explore a career beyond college sports?”

Additionally, the study included a question about athletic identity. Current and former student-athletes were asked if they felt most like a student, an athlete, or a professional. These responses were collected to determine if there were correlations between student-athlete perceptions of career readiness and athletic identity. Previous studies (Cabrita et al., 2014; Stokowski et al., 2019) have indicated that athletic identity might negatively affect the career perceptions and planning behaviors of student-athletes despite interventions. In addition, the responses to this question were analyzed to determine if there were significant relationships between specific tenets of the student-athlete development experience and the level of athletic identity experienced by the student-athletes.

The next cluster of questions focused on the categories of content that the student-athletes were exposed to throughout their student-athlete development experience. These questions aligned with Conley’s “content knowledge” and “transition knowledge” keys to College and Career Readiness. For example, some choices included mental health, financial literacy, resume writing, and career exploration. Current and former student-athletes were asked to share any topics not included in the list that may enhance (or may have enhanced) their career readiness.

Finally, the last cluster of questions focused on various implementation strategies employed by the student-athlete development staff. These questions aligned with Conley's "cognitive strategies" and "learning skills" keys to College and Career Readiness. For instance, current and former student-athletes were asked if they had opportunities to practice any skills taught in the sessions and if they were assisted in figuring out their career matches or majors. As student-athlete developers determine best practices in evaluating programming, they should facilitate learning opportunities that align with appropriately defined student-athlete outcomes (N4A, 2022).

The survey instrument was developed by the researcher specifically for this study. Before the study, the researcher conducted secondary research to review survey instruments used in other studies that explored career-related outcomes in student-athletes. The researcher formulated questions based on Conley's College and Career Readiness Model, then put extensive effort into establishing the survey instrument's reliability and validity. To replicate this study's findings across the general student-athlete population, the reliability of the instrument had to be established. Cronbach's Alpha was used to determine the internal consistency and reliability of the survey instrument. This technique is a well-established estimate of scale reliability amongst psychology, social science, and education researchers (Zakariya, 2022). However, many researchers have found that Cronbach's alpha can be unreliable due to its dependence on unrealistic assumptions—that all variables contribute equally on a continuous scale—and the potential to downwardly bias reliability estimates (McNeish, 2018).

Validity was examined to ensure that the survey instrument measured what it was intended to measure. Kothari (2004) states that content validity can be determined by using a panel of persons to judge how the survey instrument measures its research focus even when there

is no numerical way to express it (p. 74). Upon receiving IRB approval of the study and its accompanying survey instrument in December of 2022, a pilot of the survey instrument was distributed via Qualtrics to 26 current and former student-athletes from other institutions. These respondents served as “peer reviewers” to ensure reliability and content validity, to provide an initial evaluation of internal consistency, and to offer feedback on how the survey may be interpreted by respondents (Creswell & Creswell, 2018, p. 154). Reviewers were asked to proofread the questions for accuracy in evaluating student-athlete development, to suggest question improvements, and to provide any relevant omissions. Following the pilot, the peer respondents did not return any suggestions to enhance the reliability or validity of the survey instrument.

Data Collection

Once the researcher finalized the survey, it was administered to capture cross-sectional responses (Creswell & Creswell, 2018, p. 149). The Associate Athletic Director of Student-Athlete Welfare was the primary contact for the distribution of the survey instrument to current student-athletes. The researcher sent an email to the Associate Athletic Director of Student-Athlete Welfare that included a recruitment flyer, an anonymous survey link, and an informed consent statement. The recruitment flyer and informed consent statement notified the student-athletes of their anonymity, freedom to decline to take the survey, and their option to stop taking it at any time. The recruitment flyer for the study is included in Appendix D. They were assured that their decision to forego participation in the survey would not impact their standing at the university in any way. Student-athletes were also informed of their option to submit their email addresses after completing the survey to be entered into the gift card raffle. The survey link was distributed to 427 current student-athletes via email through the University of Memphis athletic

department's "Teamworks" application on February 1, 2023, and February 8, 2023. Researchers were not able to ascertain how many emails were delivered since the email distribution for current student-athletes was handled by athletic department staff.

For the former student-athlete population, the researcher asked the Director of Annual Fund and Letterwinner Relations to compile an email list of all athletic alumni who had exhausted eligibility at the University of Memphis in the past five years. The Director shared a Microsoft Excel spreadsheet of 908 contacts of former student-athletes across all sports from the last five years. After scrubbing the list of invalid or missing email addresses, 841 emails remained. The researcher imported this spreadsheet into the Qualtrics survey tool to utilize the software's functionality in preserving anonymity and preventing the duplication of entries. On February 1, 2023, February 9, 2023, and March 15, 2023, the researcher sent the recruitment flyer, consent statement, and anonymous survey link directly to the 841 former student-athletes from the shared spreadsheet through Qualtrics. Of those emails, 147 returned undeliverable leaving a former student-athlete population of 694 student-athletes.

Once student-athletes clicked the survey link, they were taken to the questionnaire administered through Qualtrics—the online survey tool used to collect and organize the survey data. The advantages of this software program include organized data collection, reduced data entry errors, and accelerated analysis (Creswell & Creswell, 2018, p. 153). As previously gauged during the survey pilot, the instrument required less than 10 minutes to complete. All responses were recorded and stored within the Qualtrics tool until exported as a numerically coded Microsoft Excel file for import into the data analysis software. No identifying information was collected, and the Qualtrics system omitted email addresses from each response unless student-athletes entered it to opt-in to the voluntary gift card raffle. Although the researcher possessed

email addresses for the entire population of former student-athletes, the Qualtrics system omitted email addresses from each response unless former student-athletes entered it to opt-in to the voluntary gift card raffle.

Data Analysis

The Statistical Analysis Software (SAS) application was utilized to organize and analyze quantitative survey data. The SAS application was used to organize data and identify relationships between independent variables and the binary outcome dependent variable. There were several analyses performed on the data. First, descriptive statistical analysis was applied to summarize the data and measure the variability and frequency of independent variables within the data set. The mode, median, and standard deviation descriptors are used most often with numerical data that have even intervals. Since the demographic and independent variables in the study were all represented categorically, the descriptive statistics in the “Results” section describes the frequencies and percentages of the survey responses. However, the mode and median for the dependent variable was recorded before the question responses were re-coded from a Likert scale to dichotomous response. In addition, the coefficient of determination—or R^2 —and the practice of relative importance were used to determine associations between variables.

The hypotheses being tested in this study were:

H₀: The tenets of student-athlete development introduced in this study have no significant relationship with a student-athlete’s perception of career readiness.

H₁: There is a significant relationship between a student-athlete’s perception of career readiness and certain tenets of student-athlete development.

Inferential statistical analysis was employed to explore predictors of perceptions of career readiness. Creswell and Creswell (2018) maintain that quantitative analysis is inferential in nature and often used to compare differences, suggest explanations for differences, test hypotheses, and predict correlations and outcomes. Multiple logistic regression was performed to test the null hypothesis and to determine which independent variables (sport, socioeconomic status, classification, and other student-athlete development tenets) predict the dependent variable (a student-athlete's perception of their career readiness). Multiple logistic regression was chosen as the data analysis technique in this study because there were multiple independent variables and one binary outcome variable (yes or no). Significance was set at $p \leq .05$.

While quantitative analysis often emphasizes statistical significance, the researcher acknowledges the value of practical significance in this study. In statistical analysis, p-values are used to determine if associations exist within the data. However, in recent years, scholars (Kuhberger et al., 2015; Spurlock, 2017) have alleged that p-values are often interpreted improperly and treated as indicators of importance rather than probability estimates that require further examination. On the other hand, practical significance refers to the usefulness of findings in the real world and how they can be integrated into applied practice (Fraas & Newman, 2000). One major issue that lends to this discussion is that statistical associations drawn from a sample may not actually exist in the population since there are ways to manipulate statistical significance by adjusting the sample size (Mohajeri et al., 2020, p. 527). However, according to Fraas and Newman (2000), both statistical and practical significance are important as they incorporate both science and practice. Nonetheless, it is possible for a study to reject scientific statistical correlations in theory; yet, the findings may be reliable or useful for practical application in the real-world. In this study, the researcher posits that independent variables that do not achieve

statistical significance in predicting student-athlete perceptions of career readiness may still inform applied practice in student-athlete development.

Chapter IV: Results

In this chapter, the results of the data analysis are reported. This section presents the study's objective, an overview of the research design, and findings from the descriptive and inferential statistical analyses. The objective of this study was to examine the reflections of both current and former collegiate student-athletes on their student-athlete development experience and to assess whether specific student-athlete development tenets enhanced their perceptions of career readiness. A lesser-explored angle of existing research that was also intended to be explored in this investigation was the comparative analysis of current and former student-athlete responses in the same study. As student-athletes continue to face career transition struggles (Hansen et al., 2019; Payne & Driska, 2020; Woods, 2017), this study makes a valuable contribution to existing literature by exploring practical methods of evaluating and enhancing the effectiveness of student-athlete development. Due to the scarce availability of studies with a targeted focus on student-athlete development and career readiness, this investigation can be used to inform applied practice across a range of institutions.

Research Design

This study used a quantitative survey instrument to query student-athletes on specific elements of their student-athlete development experience as it relates to their perceptions of being career-ready. A multiple logistical regression analysis was chosen to measure relationships between multiple independent variables and one dependent variable. In this investigation, the dependent variable was identified as a student-athlete's perception of career readiness, and the independent variables included a range of demographic factors and characteristics of the student-athlete development programming experience. Additionally, the quantitative data collection method allowed researchers to focus respondent feedback on specific tenets of the student-athlete

development experience as it relates to their perceptions of career readiness. Career readiness was defined according to Conley’s College and Career Readiness Model as a student-athlete possessing four “keys” that indicate what he or she knows or can demonstrate to signal readiness to transition into a career: cognitive strategies, content knowledge, learning skills, and transition knowledge. With this “career-ready” outcome in mind, the survey instrument was developed by the researcher from surveys used in previous studies on the student-athlete development experience. Questions were formulated to narrow student-athlete reflections on the content and context of their student-athlete development experience and its effectiveness in facilitating the outcome of them feeling “career-ready.”

The entire population of current student-athletes from the University of Memphis was surveyed. The researcher also surveyed the entire population of former student-athletes from the University of Memphis’ alumni directory dating back to the past five academic years. Five years was chosen by the researcher to capture the more traditional student-athlete development experience prior to the COVID-19 pandemic. After receiving IRB approval, the researcher emailed a link to a 23-question survey instrument and consent statement to current and former student-athletes. Student-athletes could skip questions or quit the survey at any time. The survey instrument was distributed via Qualtrics—an online survey tool—during the Spring semester of 2023. It was available for seven weeks beginning February 1, 2023. The surveys used in this study for both current and former student-athletes can be found in Appendices B and C.

The survey responses were collected using Qualtrics and exported into the SAS application. The survey data were coded both numerically and categorically and examined using both descriptive and inferential statistical analyses. First, descriptive statistics were run to discover meaningful demographic characteristics within the data and to identify the frequency of

certain student-athlete responses. Then, a multiple logistic regression analysis was administered to detect statistically significant correlations within the data set and to account for any potential relationships amongst the dependent and independent variables.

Descriptive statistics

Statistical analysis is often conducted to better understand a set of data. While both former and current student-athlete responses were included in the sample, a comparative analysis of the two groups was not performed due to the low number of responding former student-athletes. All 427 current student-athletes at the University of Memphis were surveyed. Ninety-eight current student-athletes responded, producing a response rate of 23% for current student-athletes only. Twenty of the 694 former student-athletes responded, bringing the total sample size to 118. Demographic information was collected from the respondents to better understand the sample characteristics and its representation of the population of student-athletes. These questions included sport, classification, ethnicity, athletic identity, and socioeconomic status as indicated by the acceptance of financial aid. Additionally, student-athletes were asked to select their career plans and to indicate if their sport participation influenced their choice of major or course availability. As Wienclaw (2014) notes, there are a number of variables extraneous to the research question that can impact the outcome of the study (p. 3).

The first analysis performed was a descriptive statistical analysis. This type of statistical analysis is used to categorize, organize, and summarize certain characteristics of a sample so that they are easier to comprehend. Descriptive statistics are also used to provide information about the representativeness of the sample (Godwill, 2015, p. 94). Typically, this also includes calculating measures of central tendency—such as the mode, median, and standard deviation—to measure the variability within a sample (Wienclaw, 2014). Since the demographic and

independent variables in the study were all represented categorically, the descriptive statistics in this section described the frequency and percentages of the survey responses. The mode, median, and standard deviation descriptors are used most often with numerical data that are characterized by even intervals. Because the dependent variable was represented using a Likert scale, the mode and median of this question was calculated.

Respondents were not forced to answer all questions. Because of this, the number of observations differed for some of the questions. Survey respondents represented nearly all 18 sports offered by the University of Memphis. The only sport that was not represented in the survey responses was men's baseball. The sport that had the highest number of respondents was men's football (23.28%, $n = 27$). Table 1 shows the distribution of responses by sport. Multi-sport student-athlete responses are also included in the breakdown. The survey received a balanced response from all classifications with 23.42% freshmen ($n = 26$), 20.72% sophomores ($n = 23$), 23.42% juniors ($n = 26$), 17.12% seniors ($n = 19$), and 15.32% former players ($n = 17$) answering this survey question. Figure 6 illustrates the classification distribution of the respondents. Of the sample, 55.36% of the student-athletes ($n = 62$) identified as non-white, while 44.64% ($n = 50$) identified as white. The non-white category was comprised of student-athletes who identified as African American (43.75%, $n = 49$), Hispanic/Latino (6.25%, $n = 7$), Asian (2.68%, $n = 3$), and other (2.68%, $n = 3$). Figure 7 shows the distribution of the sample by ethnicity.

Table 1*Respondent Breakdown by Sport (n =116)*

Sport	Frequency	Percentage
Men's Baseball	0	0%
Men's Basketball	5	4.31%
Men's Cross Country	2	1.72%
Men's Football	27	23.28%
Men's Golf	1	0.86%
Men's Rifle	4	3.45%
Men's Soccer	5	4.31%
Men's Tennis	1	0.86%
Men's Track & Field	9	7.76%
Women's Basketball	13	11.21%
Women's Cross Country	3	2.59%
Women's Golf	2	1.72%
Women's Rifle	4	3.45%
Women's Soccer	13	11.21%
Women's Softball	4	3.45%
Women's Tennis	3	2.59%
Women's Track & Field	11	9.48%
Women's Volleyball	9	7.76%
<i>Total</i>	<i>116</i>	<i>100%</i>

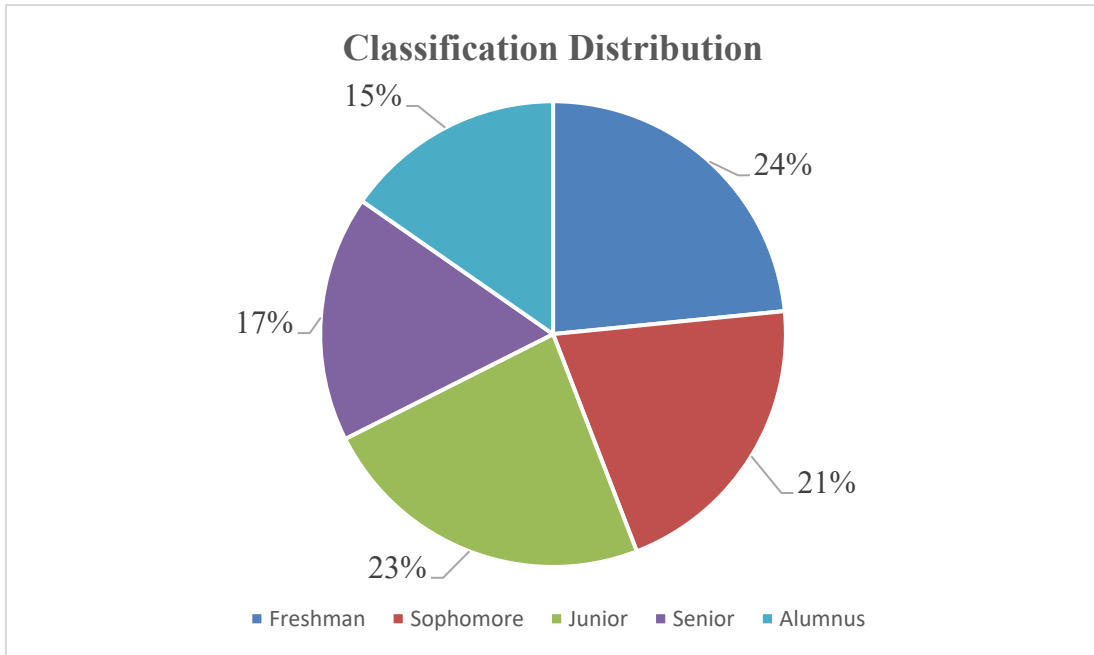


Figure 6

Respondent Breakdown by Classification (n = 111)

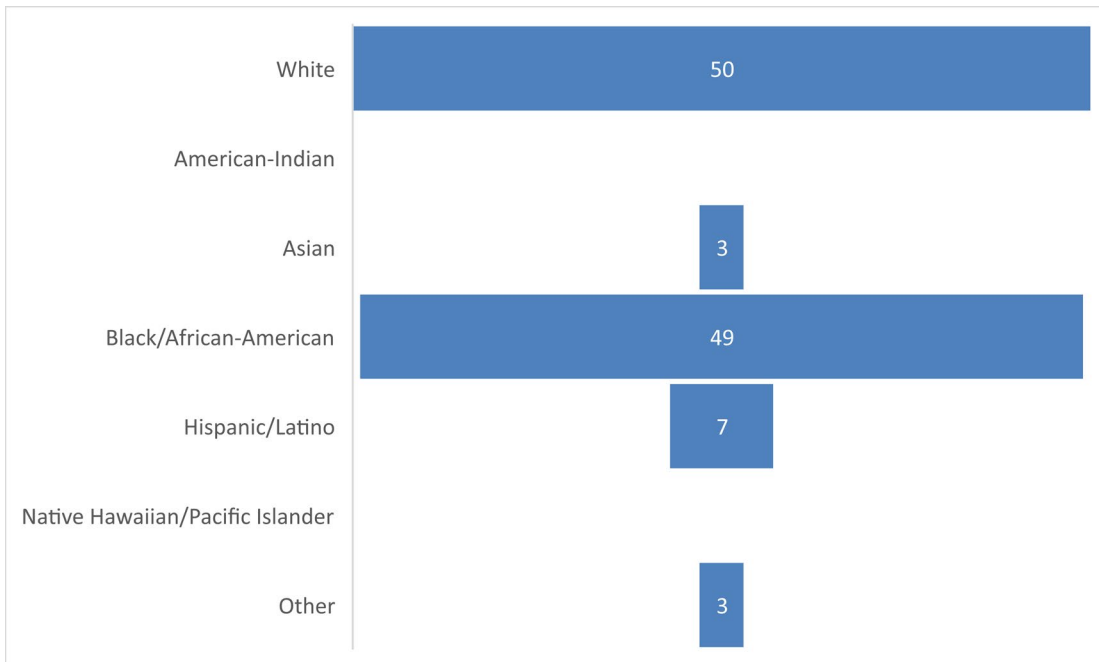


Figure 7

Respondent Breakdown by Ethnicity (n = 112)

As current student-athletes evaluated their career readiness, it was important to inquire about their career plans. Many student-athletes selected multiple responses. However, the most frequent response from student-athletes about their career plans or current career pathway was to “work in a career/entrepreneurship related to my major” (34.23%, $n = 51$). The next most frequent response was to “play professional/Olympic sports” (24.83%, $n = 37$). “Attending graduate school” received 18.12% ($n = 27$) of responses, and “work in a career/entrepreneurship unrelated to my major” comprised 11.41% ($n = 17$) of the responses. Figure 8 describes the sample distribution of career plans.

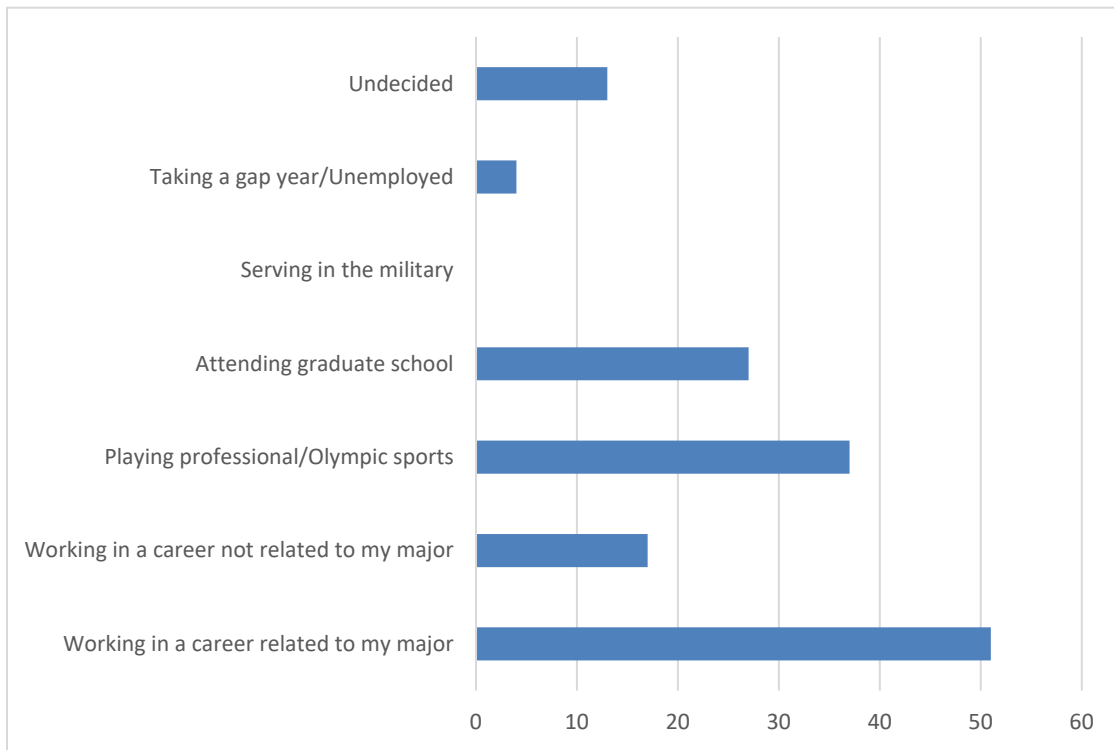


Figure 8

Distribution of Respondent Career Plans (n = 149)

One of the study’s questions asked student-athletes if their participation in sports had prevented them from taking any courses related to their majors. Just over 33% of student-athletes

($n = 36$) answered yes, and just under 67% of student-athletes ($n = 72$) replied that their participation in sports had not prevented them from taking courses related to their majors. Student-athletes were also asked to state if they identified more as an athlete, as a student, or as a career professional. The majority of respondents (69.44%, $n = 75$) replied that they felt more like an athlete. These responses included former student-athletes. When asked about their socioeconomic status (as indicated by the acceptance of financial aid), 53.77% of student-athletes ($n = 57$) answered that they had received some form of financial aid.

The dependent variable in this study was the student-athlete’s perception of feeling career-ready. Of 107 student-athletes and alumni who answered this question, approximately 54.31% of the sample ($n = 58$) indicated that they felt somewhat or very prepared to explore a career beyond college. Another 28.97% ($n = 31$) of respondents indicated that they were unsure if they were prepared or unprepared for a career after college, and 16.82% of the sample ($n = 18$) indicated they did not feel career-ready. This question was formatted as a Likert scale question, so the mode and median of the dependent variable is also presented in Table 2.

Table 2

Do you feel ready for a career beyond college sports? ($n = 107$)

<u>Response</u>	<u>Percentage</u>	<u>Frequency</u>
1. Very prepared	14.02%	15
2. Somewhat prepared	40.19%	43
3. Not sure if I am prepared or unprepared	28.97%	31
4. Somewhat unprepared	7.48%	8
5. Very unprepared	9.35%	10
<i>Total</i>	<i>100%</i>	<i>107</i>
Mode = 2 Somewhat Prepared	Median = 2.5	

To explore the relationship between stressors related to career preparation and a student-athlete's mental health, survey participants were asked if thinking about preparing for a career after college caused them stress. Just over 80% of respondents answered that they felt somewhat, a little, or very stressed when thinking of preparing for a career after college. Nearly 20% of respondents indicated that they were unsure if they were stressed or not stressed at all. The range of responses for this survey question is presented in Figure 9. Additionally, the cross-tabulation of career-related stress by classification for current student-athletes is shown in Figure 10.

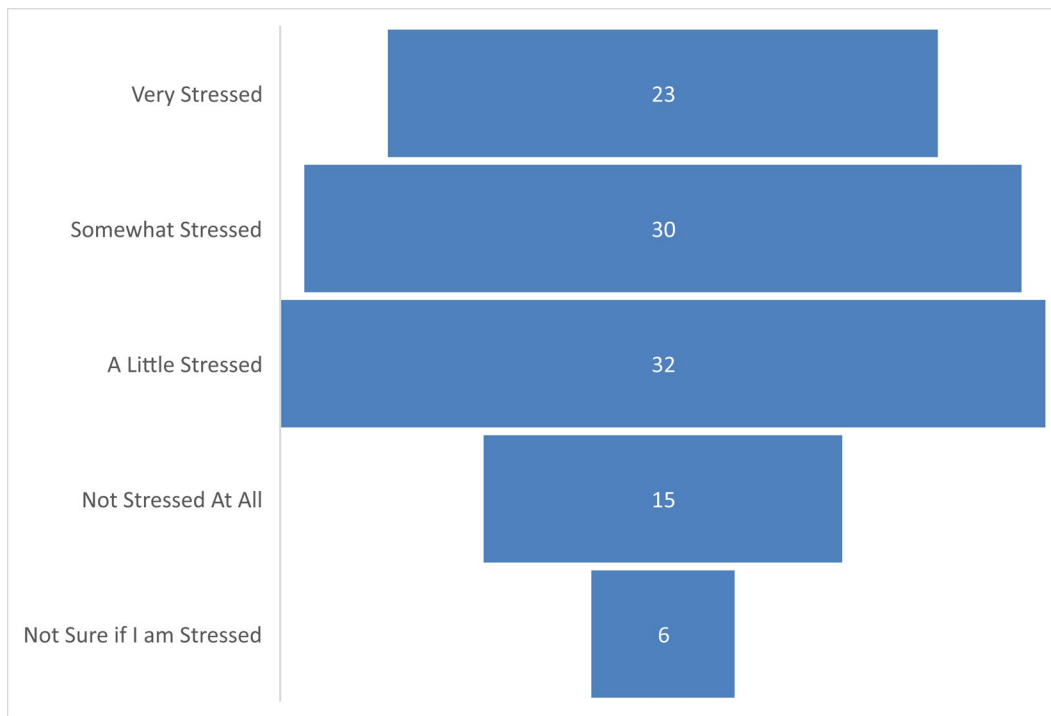


Figure 9

Does thinking about preparing for a career after college sports cause you stress? (n = 106)

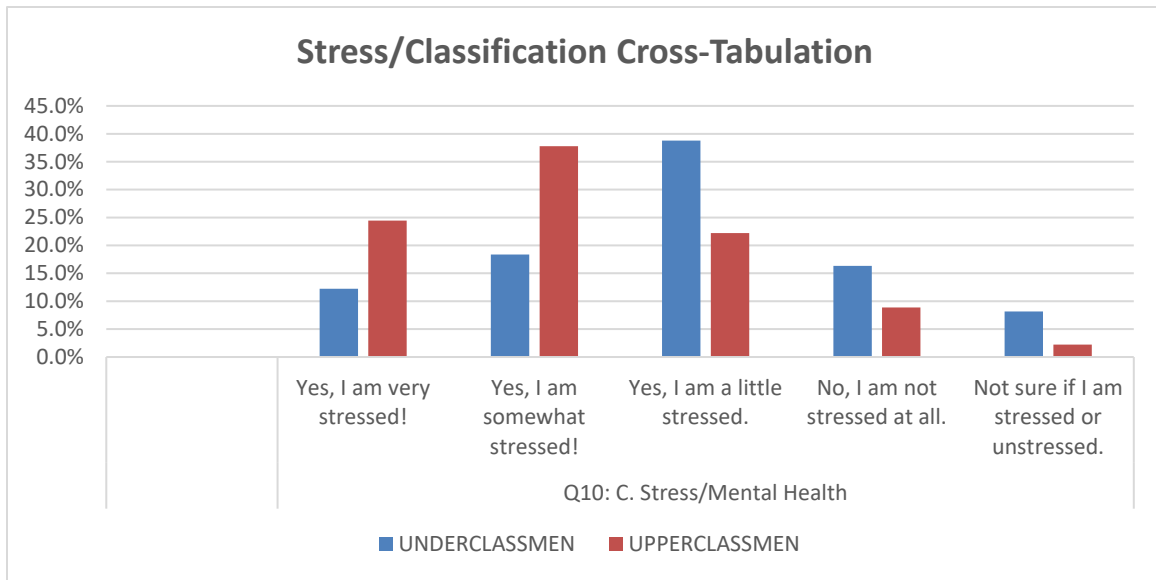


Figure 10

Cross-Tabulation of Stress-to-Classification

To explore the programming content offered through student-athlete development, the survey included a multi-response question that allowed respondents to choose all topics to which they have been exposed. The three topics selected most often by respondents, in order of frequency, were: Leadership/communication skills ($n = 58$), branding/NIL ($n = 51$), and mental health ($n = 47$). The three topics that student-athletes indicated that they were least exposed to were mock interviews ($n = 16$), higher education/graduate school options ($n = 21$), and work experience ($n = 23$). The frequency of responses from student-athletes about the topics they have been exposed to through their student-athlete development programming experience is described in Table 3. Leadership/communication skills, branding/NIL, and mental health were also the most frequently selected topics that respondents found most helpful.

Table 3*Student-Athlete Development Programming Topic Exposure*

Topic	Frequency	Percentage
Financial literacy	29	6.49%
Career exploration	25	5.59%
Job search	27	6.04%
Career skills development	39	8.72%
Leadership/communication skills	58	12.98%
Mental health	47	10.51%
Networking	35	7.83%
Campus resources	41	9.17%
Resume writing	31	6.94%
Mock interviews	16	3.58%
Work experience (internship, teaching assistantship, etc.)	23	5.15%
Higher education/graduate school options	21	4.70%
Branding/NIL	51	11.41%
None	4	0.89%

Additionally, student-athletes were asked which student-athlete development programming topics they found least useful. Respondents chose branding/NIL ($n = 11$) and exposure to campus resources ($n = 10$) as their two most frequent selections. When asked if they attended non-athletic events from other departments on campus, 35.66% of student-athletes

responded that they had not. Figure 11 describes a cross-tabulation of responses from student-athletes who did not attend events outside of the athletic department and their athletic identity.

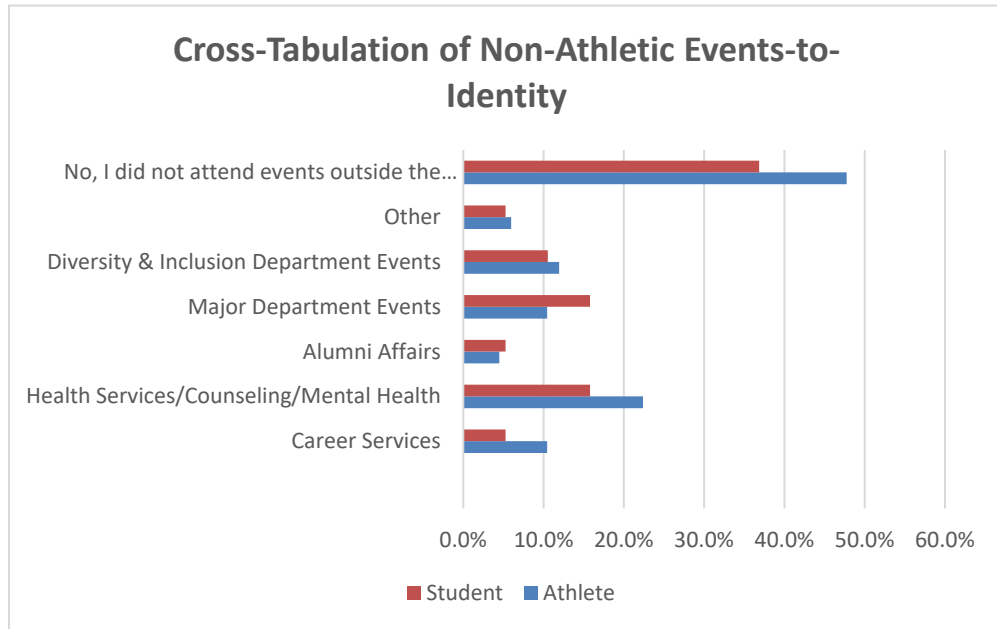


Figure 11

Cross-Tabulation of Non-Athletic Events-to-Identity

Finally, student-athletes were asked to share suggestions for how they would improve their student-athlete development experience to enhance their career readiness. The suggestions covered a range of content and implementation strategies. Respondents chose “create more opportunities to network with other student-athletes, students, mentors, alumni, and companies offering internships/jobs” ($n = 67$) more than any other option. The next most frequent suggestion was “increase opportunities to practice skills or ‘learn by doing’” ($n = 53$), followed by “add more opportunities to identify and improve transferable skills, such as communication skills, critical thinking, problem solving, leadership, etc” ($n = 47$). The fourth most selected option was “create year-round learning experiences for resume writing, job interviews, and career preparation” ($n = 44$). Table 4 presents the frequency of respondent selections for ways to improve student-athlete development to enhance their perceptions of career readiness.

Table 4

Which areas of your student-athlete development experience would you improve to enhance your career readiness?

Areas	Frequency
Create year-round learning experiences for resume writing, job interviews, and career preparation	44
Create more opportunities to network with other student-athletes, students, mentors, alumni, and companies offering internships/jobs	67
Improve the quality and diversity of guest speakers	17
Add more opportunities to identify and improve transferable skills, such as communication skills, critical thinking, problem solving, leadership, etc.	47
Increase opportunities to practice skills or “learn by doing”	53
Add more relevant financial literacy experiences	39
Collaborate with other campus departments or community organizations	27
Normalize how to identify, address, and cope with stress and mental health issues	31
Provide a way for student-athletes to offer anonymous feedback on sessions and programming	26
Make the sessions more engaging	27
Other	1

Inferential Statistics

Inferential statistics are used to draw conclusions and make predictions for the main population based on the data drawn from the sample (Godwill, 2015, p. 95). A multiple logistic regression analysis was performed to detect any statistically significant relationships between

certain tenets of the student-athlete development experience and a student-athlete's perception of career readiness. Kothari (2004) asserts that a multiple regression analysis is adopted when there is one dependent variable which is presumed to be a function of two or more independent variables (p. 130). To reduce the effects of model distortions caused by correlations between variables, a problem described as multicollinearity (Kothari, 2004, p. 132), the researcher used the practice of relative importance to adequately balance the significance of the input variables to the model. In this study, it was determined that 180-270 observations (10-15 observations per 18 independent variables) were needed to fit the model. However, only 118 student-athletes completed the survey.

Due to the low response rate, the researcher collapsed answer choices to create dichotomous outcomes to run the logistic regression analysis. Additionally, independent variables that did not contribute to the model were removed. Harrell (2015) maintains that independent variables may be stabilized by grouping them according to subject matter or empirical correlations and running various tests, although the scholar warns against removing all seemingly insignificant variables from the model (pp. 71-72). Several of the questions gave respondents the option to make multiple selections, and these independent variables were removed from the regression model. The primary investigator ran several analyses using the backwards stepwise technique to determine which grouping of independent variables contributed to the model. Table 5 lists the independent variables analyzed in the final model. With this new model of 10 variables, the minimum sample size required was 100-150 observations (10-15 observations per variable). The R-Squared value of the final model was 0.1334. This means that the independent variables accounted for 13.34% of the variance of the dependent variable. The dependent variable was represented as a Likert scale with respondents being able to indicate if

they felt very prepared, somewhat prepared, unprepared, very unprepared, or unsure about their readiness to pursue a career beyond college and sports. It was later coded as a binary outcome.

Table 5

Independent Variables Included in the Model

Question	Independent Variables
3	Classification
4	Ethnicity
5	Career Plans
7	Identity
15	In-person vs. Virtual Meeting Preference
16	Knowledgeable Speakers
18	Experiential Learning Opportunities
19	Personal Assessment
20	Networking Opportunities
21	Understanding Content

There were two hypotheses tested in this study. According to Wienclaw (2014), a hypothesis is a testable statement that the independent and dependent variables are related in a specific way as proposed by a certain theory. The dependent variable in this study was the student-athlete’s perception of career readiness. Both hypotheses are shown in Table 6.

Table 6*Study Hypotheses*

H ₀ : The tenets of student-athlete development introduced in this study have no significant relationship with a student-athlete’s perception of career readiness.
H ₁ : There is a significant relationship between a student-athlete’s perception of career readiness and certain tenets of student-athlete development.

The multiple logistic regression analysis showed that current student-athlete plans to participate in professional or Olympic sports after college were statistically correlated with their perceptions of career readiness. With a p-value of .0281, this variable (Q5) appears to be statistically correlated with perceptions of career readiness at a 95% confidence level. Further, with a negative standardized coefficient of -.02630, the analysis suggests that student-athlete plans to play professional or Olympic sports may be inversely correlated to them feeling “career-ready.” Table 7 describes the statistical values from the logistic regression analysis.

Table 7*Q5. What are your career plans after you leave college?*

Analysis of Maximum Likelihood Estimates					
Parameter	Estimate	Standard Error	Wald Chi-Square	PR>Chi-Sq	Standardized Estimate
<i>Intercept</i>	.7357	.2536	8.4163	.0037	
<i>Q5</i>	-1.1034	.5023	4.8250	.0281	-0.2630

While the researcher expected other independent variables to be significantly correlated with the dependent variable, low response rates and missing data likely contributed to the lack of statistical significance. Conversely, it is possible that there is no relationship at all in the data. Nonetheless, the researcher was able to reject the null hypothesis based on the results from the

multiple logistic regression analysis and accept the alternative hypothesis. However, other items of possible practical significance were discovered and will be explored in the Discussion chapter.

Chapter V: Discussion

As the NCAA and N4A organizations support continued research in student-athlete development, institutional-level programming efforts continue to evolve. In a developing academic environment, intercollegiate athletic administrators have been charged with satisfying the interests and desires of a diverse student-athlete population, while simultaneously meeting institutional and departmental objectives (Braunstein-Mincove et al., 2022, p. 73). One of the core functions of student-athlete development identified in this research study is the facilitation of programming experiences that contribute to the career readiness of student-athletes—including those who desire to play professional and Olympic sports. Since there is a lack of studies with this focus, this analysis combines theory and practice to contribute to an existing gap in student-athlete development research (Jolly et al., 2020; Navarro et al., 2019; N4A, 2022).

The objective of this quantitative investigation was to examine the reflections of both current and former collegiate student-athletes of their student-athlete development experience and to assess whether specific student-athlete development tenets enhance their perceptions of career readiness. The theoretical foundation for this study was Conley's College and Career Readiness Model (Conley, 2012). Conley's model was used to define career readiness and to establish the "career-ready" outcomes that the student-athlete development experience should facilitate. However, this study was also informed by Athletic Identity Theory (Brewer et al., 1993), Career Transition Theory (Schlossberg, 1981), Ecological Systems Theory (Bronfenbrenner, 2005), Merrill's First Principles of Instruction Theory (Merrill, 2018), and existing research in student-athlete development (Navarro et al., 2019; N4A, 2022). This chapter will interpret the investigation's findings, highlight practical implications of this study, and offer

recommendations for practitioners, researchers, and organizational leaders in student-athlete development.

Interpretation and Implications of Findings

Kothari (2004) notes that the interpretation of the findings is the device through which a researcher explains what has been observed and provides a theoretical concept for future research (p. 344). Of the sample of student-athletes surveyed in this study, the demographic profile of the respondents ($n = 118$) was generally representative of the entire population of students at the host institution. All classifications, all ethnicities, and all sports (except baseball) were represented in the sample. Due to lower-than-expected response rates from former student-athletes, the intended comparative analysis between current and former student-athletes was omitted from the study. The null hypothesis was: The tenets of student-athlete development introduced in this study have no significant relationship with a student-athlete's perception of career readiness. The multiple logistic regression analysis showed that a student-athlete's career plans after college—specifically plans to play professional or Olympic sports—may be statistically correlated with their perceptions of career readiness. Specifically, there appeared to be a negative correlation between this independent variable and the dependent variable. The researcher also found that certain independent variables may offer practical significance for practitioners and researchers. Practical significance refers to the usefulness of findings in the real world and how they can be integrated into applied practice (Fraas & Newman, 2000).

The researcher ran additional logistic regression analyses to identify other statistically significant correlations between certain variables that appeared insignificant in the main model—such as ethnicity/socioeconomic status/career readiness, classification/stress/career readiness, and stress/identity/career readiness. However, no other statistically significant relationships were

discovered in the data. It is possible that no other correlations exist or that the low statistical power of the sample may have impacted results. The next section will both highlight and interpret the statistical and practical findings of the study.

Professional and Olympic Sports Aspirations

Career plans to play professional or Olympic sports was the only independent variable that appeared to be statistically correlated with a student-athlete's perception of career readiness. Many researchers (Lokhande, 2019; Miller, 2012; Pflum et al., 2017) have highlighted the prevalence of young athletes aspiring to participate in professional or Olympic sports, oftentimes at the expense of their overall development. The findings from this study support this existing research to suggest that student-athletes who plan to play professional sports after college may not feel ready for a post-college career. This phenomenon may be exacerbated for current student-athletes as they sometimes battle high athletic identities (Houle & Kluck, 2015). In this study, 69% of student-athletes indicated that they felt more like an athlete than a student or professional. Although athletic identity did not appear to be statistically correlated with a student-athlete's perception of career readiness in this study, this observation suggests that this potential relationship may warrant further analysis. Other researchers (Houle & Kluck, 2015) have found athletic identity to be statistically significant in predicting certain career behaviors. While other factors—such as familial environments and major course availability—may influence student-athlete career decisions, institutional athletics staff must consider ways to prepare student-athletes for their diverse and desired career paths.

Prior research indicates that student-athletes lag behind their non-sport peers in being ready for a career beyond college (Van Raalte et al., 2017). In this investigation, student-athletes suggested additional support from student-athlete development staff in the areas of networking,

experiential learning opportunities, and specific career-related skill development. Interestingly, over 80% of student-athletes indicated that they experienced some degree of stress when they thought of preparing for a career beyond sports. Yet, this variable was also not found to be statistically correlated with student-athlete perceptions of career readiness in this study. However, for student-athletes who desire to participate in professional or Olympic sports, this career-related stress can be compounded. For instance, these student-athletes may experience stress related to their preparation for the business of professional or Olympic sports in addition to the stress they may feel as they consider a post-sports career occupation.

Oftentimes, student-athlete development professionals and career advisors may appear dismissive of recognizing professional and Olympic sports as a viable or stable occupation. However, many people switch jobs or careers several times throughout their lifetimes, so the idea of career longevity should not prevent athletics personnel or career professionals from acknowledging the practicality of the professional and Olympic sports occupations for many student-athletes. Scholars have also suggested that academic advisors often “cluster” student-athletes in pre-determined majors based on their scheduling flexibility around sports (Schneider et al., 2010). It is possible that student-athletes experience stress related to the career preparation process as they are forced to pursue majors that do not align with their true career interests. Researchers and student-athlete development practitioners must determine how to facilitate the student-athlete’s exploration of career paths that fulfill their diverse interests and help them explore the accompanying educational and certification requirements. Over one-third of responding student-athletes in this study (35.66%) indicated that they did not attend campus activities outside the athletics department. According to Table 11 (p. 61), those student-athletes may experience a higher athletic identity than those who do participate in non-sport events. The

combination of being siloed in athletics, experiencing high athletic identity, and being treated like a professional athlete in college due to NIL opportunities may also contribute to the student-athlete's pursuit of professional sports-related pathways.

Student-Athlete Participation

Oftentimes, sports administrators utilize academic and graduation statistics to support programming and budget decisions. However, the researcher found literature to challenge the accuracy and reliability of some of those statistics (Gurney et al., 2015). Practitioners must also include insight from both current and former student-athletes in a participative decision-making arrangement to gather more meaningful data and to inform support decisions. Vermillion (2014) asserts that practitioners should learn what student-athletes have to say about their development. Former student-athletes may offer a slightly different perspective of general student-athlete career readiness needs as they reflect on their previous transition experiences and current career demands. However, for many former student-athletes, the relationship with athletics and student-athlete development staff may be severed or strained as these former players graduate and move into their careers after college or as college coaches and student-athlete development staff change. The inclusion of former student-athletes may require cross-departmental collaborations between athletics, career services, and alumni affairs.

The current student-athlete response rate for this survey was 23% (98/427), and former student-athlete participation was so low that they could not be included in a comparative analysis. However, this study does combine the responses of both subsets of the student-athlete population. Initially, the researcher determined that 180-270 observations were needed to be able to generalize results. After collapsing variables, the observations range was set to 100-150. It is likely that the low response rates and incomplete surveys contributed to many of the independent

variables appearing to be insignificant. However, it is possible that no relationship exists between the data. Although student-athletes are accustomed to electronic methods of gathering information, there are three potential explanations for the lower-than-anticipated response rate. First, it is possible that the student-athletes had been inundated with survey requests and deprioritized this study's questionnaire. Van Mol (2017) admits that college students are the most surveyed population group and indicates that their non-response may be explained by survey fatigue, technical issues, or their failure to use their university email addresses as their primary contact (p. 318). Some observations were omitted from the study due to missing data and may have limited the usability of the results.

Next, the researcher acknowledges that survey reminder emails could have been sent more frequently to improve response rates. It is easy for student-athletes to be consumed by the schedules set for them by their academic advisors and coaches. Reminders were sent approximately every two weeks in this study. According to Blumenberg et al. (2019), sending reminder emails more frequently can potentially improve web-based survey response rates.

Finally, in-person survey solicitation may have improved response rates as opposed to a mass email. There are ways to preserve the anonymity of the respondents using the Qualtrics survey tool. For instance, selecting the "anonymous" option for the survey and creating a scannable QR code can allow student-athletes to take the survey without sharing personally identifiable information. During the last two weeks of the survey period, the researcher attended athletics study hall to present the volunteer research opportunity to current student-athletes in-person. Response rates doubled. It is possible that this planned time block allowed student-athletes to focus on completing the survey instrument without distractions. Implications for future research include exploring evidence-based strategies to engage student-athletes.

The Relationship Between Career Preparation and Mental Health

Existing literature has highlighted the career transition struggles of student-athletes (Chartrand & Lent, 1987; Pouk & Fry, 2015; Smith & Hardin, 2020). Prior research (August, 2020; Bjornsen & Dinkel, 2017; Jolly et al., 2020; Miller & Buttell, 2018; Navarro & Malvaso, 2015; NCAA, 2019) has proven that student-athletes have diverse and holistic developmental needs that may extend beyond the academic responsibilities of the institution. Because student-athletes face unique time demands, they may face unique stressors and require additional guidance when preparing for a career. Although few studies have examined the relationship between career preparation and mental health outcomes for student-athletes (Miller & Buttell, 2018), the results of this investigation suggest that the career preparation process may be a source of stress for student-athletes.

Although a statistically significant correlation did not exist between stress and a student-athlete's perception of career readiness, most survey respondents (80%) answered that they felt somewhat, a little, or very stressed when thinking of preparing for a career after college. This observation builds on existing literature about rising student-athlete stress and anxiety levels (Bjornsen-Ramig et al., 2020; Davoren & Hwang, n.d.). This finding also aligns with the results of the 2019 NCAA GOALS Study where over 20,000 student-athletes were surveyed about their overall well-being (NCAA, n.d.a). In the GOALS report, "preparing for a career after college" received the most responses from female student-athletes (58%) and the second most responses for male student-athletes (41%) when asked what topics they wished their coaches and administrators discussed more often. Previous research contends that stress related to the career preparation process may lead to various mental illnesses (Miller & Buttell, 2018, p. 67). Prior studies have also concluded that student-athlete development interventions may enhance career maturity (Van Raalte et al., 2017). The findings from this study may offer theoretical

implications for researchers to explore the relationship between career readiness, stress, and mental health.

One practical implication of this finding is for practitioners and researchers to consider career preparation programming that tracks a student-athlete's matriculation through college and proactively addresses their stressors and mental health needs over time. This study's sample was evenly distributed amongst all four classifications and alumni, indicating that student-athletes from all classifications may experience some degree of career-related stress. Figure 10 (p. 59) shows that upperclassmen report experiencing a greater degree of career-related stress than underclassmen. Prior investigations have determined that student-athlete development programming should span multiple years (Bjornsen & Dinkel, 2017; Hansen et al., 2019; Van Raalte et al., 2017). Even though the researcher acknowledges that extraneous variables can also affect stress levels and mental health (Davis et al., 2017; Davoren & Hwang, n.d.), future investigations should explore career-related stressors for all student-athletes.

Athletic Identity

Findings from the study's descriptive statistics suggest that student-athletes may identify as "athletes" more than they identify as "students" or "professionals." These findings lend support for prior assertions that student-athletes may experience high athletic identities (Brewer et al., 1993; Cabrita et al., 2014; Clontz, 2019; Forester et al., 2020; Poux & Fry, 2015; Stokowski et al., 2019). However, this variable did not prove to be statistically correlated with a student-athlete's perception of career readiness in this study. Career plans to play professional or Olympic sports were found to be statistically significant in this investigation while over 69% of respondents indicated that they felt more like an "athlete" than a student or professional.

Previous studies (Smith & Hardin, 2020; Van Raalte et al., 2017) have discovered a relationship between athletic identity and career outcomes.

Yet, research shows that student-athlete development programming interventions can be used to shape the perceptions of student-athletes about their readiness to explore pathways outside of sports (Bjornsen-Ramig et al., 2020; Van Raalte et al., 2017). In this study, student-athletes who did not participate in non-athletic events tended to experience higher athletic identities (Figure 11, p. 61). Practitioners should explore evidence-based methods to address the formation and development of an identity beyond sports and facilitate experiences that allow student-athletes to engage in non-sport environments. However, this may prove difficult due to the time demands of sports and student-athletes often being siloed within sport-specific environments (Haslerig & Navarro, 2016; Kelly & Dixon, 2014, p. 500). In addition, national guidance on approaches to combat athletic identity may be helpful, as scholars assert that little to none of the NCAA sanctioned programming mentions athletic identity (Robinson, 2015). Future research may focus on examining the precise relationship between career readiness and athletic identity.

Programming Evaluation

As student-athlete development staff, researchers, and organizations consider how to evaluate the effectiveness of programming, they must shift their focus to outcomes. One primary purpose of the modern student collegiate experience is to prepare students for the workforce (Alfeld & Smerdon, 2018, p. 1; Johannsen & Felton, 2014, p. 2; Zakaria, 2015). This study's focus on the student-athlete's perception of career readiness identified a clear outcome influenced by the student-athlete development experience. As scholars acknowledge the transition struggles of student-athletes (Smith & Hardin, 2020; Stokowski et al., 2019; Woods,

2017), implications for future research include the establishment of clear programming objectives and key indicators that those career-related objectives have been met. Unfortunately, scholars have concluded that graduation statistics (Gurney et al., 2015) and even job placements do not signal career readiness (Conley, 2018). The design of this study can be used to inform future programming evaluation research in student-athlete development and to offer techniques to gather focused data about the student-athlete development process.

Further, this study's construct around a real-world task may offer engagement insight and guidance for establishing programming objectives for practitioners. Oftentimes, student-athletes may not realize how smaller career preparation tasks fit into their individual growth and development plans. Research shows that situating the programming objective in the proper context may also facilitate engagement and learning (Merrill, 2018). Other implications for future studies include the exploration of how establishing a clear, real-world programming objective of the student-athlete development experience may influence athletic identity and reduce stress.

Recommendations for Practice

The researcher has developed several practical recommendations for student-athlete development practitioners, researchers, and organizations. First, it is recommended that student-athlete development practitioners establish targeted engagement with student-athletes who desire to play professional sports. This study found that student-athlete aspirations to participate in professional and Olympic sports may be statistically correlated with their perceptions of career readiness and related planning behaviors. Many athletics staff may discourage players from pursuing professional sports as a career path due to the limited spots available and the low odds of achieving this goal (NCAA, 2020, as cited in Davis et al., 2022). According to the NCAA

(2016, as cited in Lokhande, 2019, pp. 1-2), approximately 1.6% of draft-eligible football players were selected in the 2015 NFL Draft (256 of 16,175 eligible participants). Yet, this practice of dissuading student-athletes from pursuing their desired career options may have a negative psychological effect on the student-athlete. Ogilvie and Howe (1982, as cited in Chartrand and Lent, 1987) state that student-athletes can become disengaged in the career transition process if they feel they are not receiving the proper support (p. 164). Student-athletes may even find certain career guidance from coaches, advisors, and other athletics staff contradictory to the daily prioritization of athletics over their course selections, socialization time, and mental wellness.

The recommended targeted engagement could take three forms:

- Recognize professional and Olympic sports as a viable career pathway and establish an “athletics” major or minor
- Collaborate with Career Services to facilitate career development events
- Create a professional development course specifically for student-athletes

Recognize Professional Sports as a Career Pathway

Surprisingly, professional and Olympic sports are not recognized as a career pathway with an educational or certification requirement. Yet, it does represent a career profession option for thousands of student-athletes each year—both in the U.S. and abroad. The sports industry is a multi-billion-dollar industry and employs many athletes. In this study, the multiple regression analysis indicated that a student-athlete’s career plan to play professional sports may be negatively correlated with their perception of career readiness. It is recommended that a degree program be created within Liberal Arts to allow student-athletes to major (or at least minor) in “athletics” to prepare them for both professional or Olympic sports and the general workforce. Oftentimes, student-athletes who pursue professional sports route may also struggle when they

leave professional sports and enter a career. In this “athletics” major, student-athletes could go through a series of courses and experiences that develop their identities and teach them how to utilize the transferable skills that they have honed through sports. The student-athletes could take courses that align with their development needs as they matriculate through the collegiate experience. The course curriculum could also offer specific guidance and training for those student-athletes who aspire to play professional sports or who require NIL education. This educational curriculum could be a collaboration between student-athlete development, career services, and the institution. Currently, no other majors are designed to offer specific preparation to navigate the business of professional or Olympic sports as it does not translate into a recognized occupation. However, this course of study could also prepare student-athletes with the soft skills needed to transition into many other professional fields. In this program, those student-athletes who do not plan to play professional or Olympic sports can also gain valuable transferable knowledge and skills that they can apply to various occupations and to entrepreneurship. There should be options to take specialized courses as electives within the “athletics” degree program curriculum.

Dr. Drew Hyland is one researcher who has posited a precedent for this type of degree program. In his research, he traces the origins of sports to ancient Greek competitions and liberal arts philosophy. He makes the connection between sports and intellectual capacity by positing that physical excellence is necessary to produce the highest level of intellectual excellence (Hyland, 2017, p. 2). In his work, Hyland (2017) maintains that intellectual growth produced by sports is an essential component of a holistic learning experience for student-athletes and proposes that sports should become its own discipline of study within the liberal arts framework. The liberal arts are already popular major choices amongst student-athletes. Research (Ferguson,

2016; Pflum et al., 2017; Schneider et al., 2010) has shown that a large number of student-athletes major in Liberal Arts and Liberal Studies-related fields due to the expansive course offerings, the scheduling flexibility around athletics, and the “community college effect.” As two-year institutions, community colleges have become feeder schools for four-year colleges and universities (Gurney et al., 2015) due to their massive liberal arts course offerings (Guth, 2020) and cost effectiveness (Fitzpatrick & Say, 2017). Many transfer student-athletes enter college with general course credits. Hyland (2017) asserts that sports can support a liberal education by imparting wisdom in ethics, philosophy, social issues, and self-knowledge. While Hyland proposes that this program should not focus on the path to professional sports, he does contend that it would fit within the liberal arts curriculum by focusing on the student-athlete’s experience in sports.

Recognizing professional and Olympic sports as an occupation and creating the appropriate educational pathways can potentially reduce career-related stress for student-athletes with aspirations to pursue this profession. In this investigation, slightly more than 80% of respondents answered that they felt some degree of stress when thinking of preparing for a career beyond sports. One possibility for this finding may be that student-athletes have experienced some type of conflict related to the career they desire and the career options they are presented. It is reasonable to expect a student-athlete’s professional and Olympic sports plans and accompanying career-related stress to be exacerbated in Power Five institutions that have more of a sports focus (Bartlett, 2022, p. 197). The career readiness stressor related to professional and Olympic sports may also influence current student-athlete mental health trends (Davoren & Hwang, n.d.). Additional research is recommended to develop a liberal arts-centered major

around athletics that both prepares pro-bound student-athletes for the business of sports and teaches transferable skills to student-athletes who have non-sport career plans.

Collaborate with Career Services

Most student-athlete development staff develop and administer their own student-athlete development programming. They create career-related experiences and invite guest facilitators to share certain insight and expertise with student-athletes. However, these athletics staff members often fail to fully utilize the pre-paid career resources of the campus Career Services department (Davis et al., 2022, p. 231). Student-athletes can often be siloed within athletics due to its excessive time demands and miss valuable opportunities to explore campus life as a student (Kelly & Dixon, 2014, p. 500). This exclusionary sports environment may cause them to identify as “athletes” and negatively influence their career development and career planning behaviors. In this investigation, 69% of respondents indicated that they felt more like an athlete than a student or career professional. It is recommended that athletics staff collaborate with career services to create non-sport experiences to introduce student-athletes to available career resources, expose them to the general student population, and allow them to hone professional skills from trained career development professionals. These collaborative events may take the form of networking events, resume workshops, or career exploration exercises—where the student-athlete development staff coordinates student-athlete participation, and the career services team leads the workshop sessions. It is also important for athletic coaches to emphasize student-athlete attendance at these events since they carry so much influence over student-athlete schedules and priorities. As previous studies have shown (Bronfenbrenner, 2005), environmental context can influence a student-athlete’s growth, development, and identity formation. The ecological systems theory can be utilized to frame development activities within career services rather than

in athletics. In some cases, it may be necessary to assign career development responsibilities exclusively for student-athletes to a career services staff member. Specific experiences can be curated for the professional and Olympic sport transition.

Create a Professional Development or Career Course for Student-Athletes

Oftentimes, student-athlete development staff are not able to mandate student-athlete attendance at workshops or sessions. Due to strict rules around the hours that student-athletes can spend on certain athletics activities (Haslerig & Navarro, 2016), staff members are encouraged to make programming events voluntary for student-athletes to attend. As a result, student-athlete participation may be low for certain programming activities. One recommendation to combat these low participation rates is to create a professional development or career-related course specifically for student-athletes. Some institutions, such as the University of Memphis, currently offer this type of course as an elective. This experience can take the form of a semester-long course that covers career assessments, resume writing, elevator pitches, networking, career search tools, and other career-related topics. Many of these topics were suggestions from the student-athletes surveyed in this study. In some ways, connecting these lessons in a progressive way can be more beneficial for the student-athlete's career preparation than an isolated workshop event. This strategy will also allow for a more meaningful assessment of outcomes.

In a collaboration between the institution, career services, and athletics, this professional development course can also be customized to offer sports-specific lessons on NIL and the transition into professional sports for those student-athletes who aspire to play professional or Olympic sports as a career. In many ways, the student-athlete-specific NIL legislature—which allows student-athletes to play-for-pay—has created demand for student-athlete education around thriving as a “professional” athlete. As these players receive compensation and are

treated like professional athletes at the collegiate level, this structured educational recommendation can fill an existing gap in their development needs. Student-athlete development staff may soon be forced to develop a student-athlete's professional and career skills as a function of their sport experiences—especially in Power Five schools where student-athletes may experience enhanced NIL activity (Bartlett, 2022, p. 197). Additionally, this strategy of creating a semester-long professional development course may improve engagement by treating the student-athletes as they already see themselves. As athletics staff search for ways to transform knowledge into tangible skills for student-athletes, this targeted “credit” course may create an opportunity to examine the demonstration of certain skills and assess student-athlete readiness outcomes. Some institutions may also offer experiential learning credit to student-athletes who are able to translate their athletics experience into approved learning outcomes.

Establish Programming Objectives, Outcomes, and Evaluation Methods

Leading scholars in student-athlete development have established that a national implementation model is needed to provide guidance to NCAA member institutions. This strategy allows the governing organization to share best practices and benchmarks across programs (Davis et al., 2022, p. 233). While this national model may continue to allow localized customization, there is still a need for an evidence-based way to measure programming effectiveness. Oftentimes, student-athlete development staff will utilize activity-driven metrics—such as the number of workshops offered or the number of student-athlete participants—as proof of the effectiveness of their programming. Others may loosely highlight a connection between developmental programming and graduation statistics. Based on the design of this study, the researcher recommends that student-athlete development staff collect meaningful feedback about the student-athlete development experience through surveys and interviews. Many practitioners

may already administer certain data collection instruments, but they may need to gather more targeted data or improve the quality of their question prompts. For instance, the survey should cover specific tenets of the experiences—such as the quality of facilitators, the timing of sessions, and the opportunity to practice certain skills—and possess the ability to be completed anonymously. Student-athletes may need to be reminded that their responses are confidential and that they will not be penalized for their feedback. Findings in this study on professional sports aspirations have implications for programming adjustments.

Additionally, student-athlete development staff should conduct exit-type interviews with all student-athletes at the end of each academic year. This will allow the practitioner to gather feedback from student-athletes across all classifications and learn how they can better meet their developing career readiness needs as they matriculate through college. In addition, this practice can be particularly useful when working with graduating seniors. As institutions consider how to improve engagement with student-athlete alumni, these exit interviews with graduating seniors may provide an opportunity to gain deeper insight and to establish expectations of post-graduation communication. The proposed exit interview could take the form of an in-person or virtual discussion or a quantitative instrument. Sometimes, the cloak of anonymity offered by a quantitative instrument can give student-athletes the courage to be more transparent in their responses. Further, student-athlete development staff may invite former student-athletes to participate in focus groups to contribute meaningful recommendations to improve certain athletics practices. These strategies may be used to guide national guidance while offering institutions the ability to customize the strategies they utilize to collect this information while using an evidence-based method of supporting programming decisions.

Limitations of Study Findings

There are two additional limitations of the study findings that were not mentioned in the Introduction chapter. First, the small sample size of the study may affect the statistical power of the study and the generalizability of the findings. In the Introduction chapter, the researcher acknowledged the potential for non-response bias to impact this study's findings. Ninety-eight current student-athletes responded to the survey, producing a response rate of 23% ($n = 427$). Only 118 responses were recorded—well shy of the 180 observations needed. However, after collapsing some of the variables, the targeted sample size became 100-150. The host institution is a mid-major Division I university in the mid-southern region of the country. It is also possible that the results of this study are only generalizable to the host institution or to those with similar populations of student-athletes. Yet, findings may be applicable at other institutions.

A second limitation of the findings may be the lack of prior research with the study's specific construct. During the literature review process for this investigation, the researcher was unable to find sufficient studies that focused on the student-athlete development experience and its relationship with student-athlete perceptions of career readiness. In general, there was a lack of studies that focused on student-athlete development. This study relied on exploratory research by the primary investigator to develop a usable model for analysis. However, this investigation answers the calls from leading researchers for more investigation into student-athlete development programming and its impact on career outcomes.

Conclusion

The objective of this study was to examine the reflections of both current and former collegiate student-athletes on their student-athlete development experience and to assess whether specific student-athlete development tenets enhanced their perceptions of career readiness.

Findings from the multiple logistic regression analysis found post-college career plans to be significantly correlated with a student-athlete's perception of career readiness. Specifically, a student-athlete's aspirations to play professional or Olympic sports were negatively correlated with their perceptions of being career-ready. This finding was interesting in light of the current NIL environment in intercollegiate athletics. Other variables of practical importance included career-related stressors, athletic identity barriers, and a student-athlete's integration into non-sport campus environments. Although several variables in this study did not prove to be statistically significant in enhancing student-athlete perceptions of career readiness, the study design and data solicitation approach offer practical implications for both student-athlete development practitioners and researchers.

This research contributes to applied practice and ongoing research by positing recommendations to better accommodate professional and Olympic sport-seeking student-athletes and establishing a strategy to evaluate the effectiveness of student-athlete development programming in enhancing a student-athlete's perception of career readiness. A synthesis of research concludes that graduation statistics may be misleading (Gurney et al., 2015) and that a true readiness to transition into post-college life may require a different level of self-efficacy (Conley, 2018, pp. 12-13). Findings from this study also identify potential relationships that may require more investigation, such as the relationship between mental health and career readiness and the relationship between identity and career readiness. As scholars (Navarro & Malvaso, 2015; Tyrance et al., 2013) call for more research into student-athlete development, this study contributes to existing literature by examining the influence of student-athlete development on career readiness outcomes from the student-athlete's perspective.

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Appendix A

IRB Approval Letter



Institutional Review Board
Division of Research and Innovation
Office of Research Compliance
University of Memphis
315 Admin Bldg
Memphis, TN 38152-3370

December 7, 2022

PI Name: Tywana Smith
Co-Investigators: Richard Irwin
Advisor and/or Co-PI: Richard Irwin, Nicco Bray, Gary Donhardt
Submission Type: Initial
Title: From the Perspectives of Current and Former Student-Athletes: Identifying the Tenets of Student-Athlete Development that Enhance Career Readiness
IRB ID: #PRO-FY2023-54
Exempt Approval: December 7, 2022

The University of Memphis Institutional Review Board, FWA00006815, has reviewed your submission in accordance with all applicable statuses and regulations as well as ethical principles.

Approval of this project is given with the following obligations:

1. When the project is finished a completion submission is required
2. Any changes to the approved protocol requires board approval prior to implementation
3. When necessary submit an incident/adverse events for board review
4. Human subjects training is required every 2 years and is to be kept current at citiprogram.org.

For any additional questions or concerns please contact us at irb@memphis.edu or 901.678.2705

Thank you,
James P. Whelan, Ph.D.
Institutional Review Board Chair
The University of Memphis.

Appendix B

Current Student-Athlete Survey Instrument

Student-Athletes Wanted for a Research Study

*From the Perspectives of Current and Former Student-Athletes:
Identifying the Tenets of Student-Athlete Development that Enhance
Career Readiness*

The intent of this research is to examine and compare the reflections of both current and former collegiate student-athletes from the University of Memphis on your career preparation experiences and to assess whether student-athlete development enhanced your career readiness. It will take **approximately 15 minutes to complete** this survey instrument. Your responses will be collected anonymously for research.

Participation is **100% voluntary**, and you may skip questions or end the survey at any time without consequence. This research opportunity is open to all current student-athletes (all classifications, all sports, all genders).

There will be no direct compensation for completing this survey, however, completion of the survey questions will qualify you to be entered into a random drawing to win a \$25 gift card. Four \$25 gift cards will be given to four randomly selected current student-athletes who complete the survey. The odds of winning the raffle are 1 in 20 out of 150 expected participants. Other indirect benefits include the opportunity to improve the way that student-athletes are supported in their preparation for a career beyond sports. You can take the survey here:

Please direct questions or concerns to:

Tywanna Smith, Primary Researcher
tdsmth20@memphis.edu

Dr. Richard Irwin, Faculty Advisor
rirwin@memphis.edu

Institutional Review Board
irb@memphis.edu

If you agree to the above, please continue to the survey.

SURVEY INSTRUMENT

DEMOGRAPHIC QUESTIONS:

1. **Which sport(s) do you play?** *(Choose all that apply.)*
 - a. Men's Baseball
 - b. Men's Basketball
 - c. Men's Cross Country
 - d. Men's Football
 - e. Men's Golf
 - f. Men's Rifle
 - g. Men's Soccer
 - h. Men's Tennis
 - i. Men's Track &Field
 - j. Women's Basketball
 - k. Women's Cross Country
 - l. Women's Golf
 - m. Women's Rifle
 - n. Women's Soccer
 - o. Women's Softball
 - p. Women's Tennis
 - q. Women's Track & Field
 - r. Women's Volleyball

2. **What is your classification as of the Spring 2023 semester?**
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Senior (Not Graduated)

3. **How would describe yourself?** *(Choose one.)*
 - a. White
 - b. Non-White

4. **What are your career plans after you leave college?**
 - a. Working in a career related to your major
 - b. Working in a career but not necessarily related to my major
 - c. Playing professional/Olympic sports
 - d. Attending graduate school
 - e. Serving in the military
 - f. Taking a gap year/Unemployed
 - g. Undecided

- 5. Has your participation in sports prevented you from taking a course or majoring in a particular degree program that could enhance your career readiness?**
- a. Yes
 - b. No
- 6. Which statement best describes you:**
- a. I feel like an athlete more than I feel like a student or a potential career professional.
 - b. I feel like a student more than I feel like an athlete or a potential career professional.
 - c. I feel like a career professional more than I feel like an athlete or a student.
- 7. Do you currently receive a Pell Grant or other form of financial aid?**
- a. Yes
 - b. No

CONTENT QUESTIONS:

- 8. How prepared are you to explore a career beyond college sports right now?**
- a. Very prepared
 - b. Somewhat prepared
 - c. Not sure if I am prepared or unprepared
 - d. Somewhat unprepared
 - e. Very unprepared
- 9. Does thinking about preparing for a career after college sports cause you stress?**
- a. Yes, I am/was very stressed!
 - b. Yes, I am/was somewhat stressed.
 - c. Not sure if I am stressed or unstressed
 - d. Yes, I am/was a little stressed.
 - e. No, I am/was not stressed at all.
- 10. Which of the following career readiness topics have you been exposed to during your collegiate student-athlete development experience? (Choose all that apply.)**
- a. Financial literacy
 - b. Career exploration
 - c. Job search
 - d. Career skills development
 - e. Leadership/communication skills
 - f. Mental health
 - g. Networking
 - h. Campus resource introduction
 - i. Resume writing

- j. Mock interviews
- k. Field Experience (Internship, work, teaching assistantship, etc)
- l. Higher education opportunities
- m. Branding/NIL
- n. None

11. Which of the career readiness topics that you have been exposed to did you find helpful? (Choose all that apply.)

- a. Financial literacy
- b. Career exploration
- c. Job search
- d. Career skills development
- e. Leadership/communication skills
- f. Mental health
- g. Networking
- h. Campus resource introduction
- i. Resume writing
- j. Mock interviews
- k. Field Experience (Internship, work, teaching assistantship, etc)
- l. Higher education opportunities
- m. Branding/NIL
- n. None

12. Which of the career readiness topics that you have been exposed to did you find least useful? (Choose all that apply.)

- a. Financial literacy
- b. Career exploration
- c. Job search
- d. Career skills development
- e. Leadership/communication skills
- f. Mental health
- g. Networking
- h. Campus resource introduction
- i. Resume writing
- j. Mock interviews
- k. Field Experience (Internship, work, teaching assistantship, etc)
- l. Higher education opportunities
- m. Branding/NIL
- n. None

13. Which topics that you were not exposed to do you think would have enhanced your career readiness? Or, put another way, what topics would have been helpful?

- a. _____

CONTEXT QUESTIONS:

14. Did you find the in-person or virtual learning opportunities to be most helpful in enhancing your career readiness?

- a. In-person
- b. Virtual learning
- c. Both in-person and virtual learning

15. Did guest speakers or session leaders seem to be knowledgeable about their topics?

- a. Very knowledgeable
- b. Somewhat knowledgeable
- c. A little knowledgeable
- d. Not knowledgeable

16. Have you attended events hosted by the following non-athletic departments?

(Choose all that apply.)

- a. Career Services
- b. Health Services/Counseling
- c. Alumni Affairs
- d. Major Department Events
- e. Diversity & Inclusion Department Events
- f. Other: _____

17. Do you have opportunities to “learn by doing” or practice demonstrations of what you learned in each session?

- a. Yes
- b. No

18. Did you have opportunities to complete a self-assessment or scientific survey to help you determine career matches, career skills, or what to major in?

- a. Yes
- b. No

19. Did you have opportunities to network and learn from/with your peers (teammates, other student-athletes, former student-athletes, or alumni)?

- a. Yes
- b. No

20. Did you understand the career-related information that was shared with you during the student-athlete development sessions?

- a. Yes
- b. No

21. Are you able to relate to speakers or topics during student-athlete development sessions? (Is it an inclusive environment? Do you feel like you belong?)

- a. Yes
- b. No

22. Have you been asked to provide meaningful feedback on your student-athlete development programming experience?

- a. Yes
- b. No

AREAS OF IMPROVEMENT QUESTIONS:

23. Which areas of your student-athlete development experience would you improve to enhance your career readiness? (Choose all that apply.)

- a. Create year-round learning experiences for resume writing, job interviews, and career preparation
- b. Create more opportunities to network with other students, mentors, alumni, and companies offering internships/jobs
- c. Improve the quality and diversity of guest speakers
- d. Add more opportunities to identify and improve non-sport skills
- e. Increase opportunities to practice skills or “learn by doing”
- f. Add more relevant financial literacy experiences
- g. Collaborate with other campus departments or community organizations
- h. Normalize how to identify, address, and cope with stress and mental health issues
- i. Provide a way for student-athletes to offer anonymous feedback on sessions and programming
- j. Make the sessions more engaging
- k. Other: _____

Thank you for completing this survey! This section is voluntary, and you may exit this survey at any time. To be entered into the raffle to win a \$25 gift card, please enter your email address here: _____.

Appendix C

Former Student-Athlete Survey Instrument

Student-Athletes Wanted for a Research Study

*From the Perspectives of Current and Former Student-Athletes:
Identifying the Tenets of Student-Athlete Development that Enhance
Career Readiness*

The intent of this research is to examine and compare the reflections of both current and former collegiate student-athletes from the University of Memphis on your career preparation experiences and to assess whether student-athlete development enhanced your career readiness. It will take **approximately 15 minutes to complete** this survey instrument. Your responses will be collected anonymously for research.

Participation is **100% voluntary**, and you may skip questions or end the survey at any time without consequence. This research opportunity is open to all former student-athletes (all classifications, all sports, all genders) who have graduated or exhausted eligibility **in the past five years**.

There will be no direct compensation for completing this survey, however, completion of the survey questions will qualify you to be entered into a random drawing to win a \$25 gift card. Four \$25 gift cards will be given to four randomly selected former student-athletes who complete the survey. The odds of winning the raffle are 1 in 20 out of 150 expected participants. Other indirect benefits include the opportunity to improve the way that student-athletes are supported in their preparation for a career beyond sports. You can take the survey here:

Please direct questions or concerns to:

Tywanna Smith, Primary Researcher
tdsmth20@memphis.edu

Dr. Richard Irwin, Faculty Advisor
rirwin@memphis.edu

Institutional Review Board
irb@memphis.edu

If you agree to the above, please continue to the survey.

SURVEY INSTRUMENT

DEMOGRAPHIC QUESTIONS:

1. **Which sport(s) do you play?** *(Choose all that apply.)*
 - a. Men's Baseball
 - b. Men's Basketball
 - c. Men's Cross Country
 - d. Men's Football
 - e. Men's Golf
 - f. Men's Rifle
 - g. Men's Soccer
 - h. Men's Tennis
 - i. Men's Track &Field
 - j. Women's Basketball
 - k. Women's Cross Country
 - l. Women's Golf
 - m. Women's Rifle
 - n. Women's Soccer
 - o. Women's Softball
 - p. Women's Tennis
 - q. Women's Track & Field
 - r. Women's Volleyball

2. **What was your highest attained classification in college?**
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Senior (Did not graduate.)

3. **How would describe yourself?** *(Choose one.)*
 - a. White
 - b. Non-White

4. **Which selection best describes your current career path?**
 - a. Working in a career related to my major
 - b. Working in a career but not necessarily related to my major
 - c. Playing professional/Olympic sports
 - d. Attending graduate school
 - e. Serving in the military
 - f. Taking a gap year/Unemployed
 - g. Undecided

5. **Did your participation in sports prevent you from taking a course or majoring in a particular degree program that could have enhanced your career readiness?**
 - a. Yes
 - b. No

6. **Which statement best describes you:**
 - a. I feel like an athlete more than I feel like a career professional.
 - b. I feel like a career professional more than I feel like an athlete.

7. **Did you receive a Pell Grant or other form of financial aid during your time as a collegiate student-athlete?**
 - a. Yes
 - b. No

CONTENT QUESTIONS:

8. **How prepared for your career did you feel when you left college?**
 - a. Very prepared
 - b. Somewhat prepared
 - c. Not sure if I am prepared or unprepared
 - d. Somewhat unprepared
 - e. Very unprepared

9. **Did the thought of preparing for a career after sports cause you stress before you left college?**
 - a. Yes, I was very stressed!
 - b. Yes, I was somewhat stressed.
 - c. Not sure if I was stressed or unstressed
 - d. Yes, I was a little stressed.
 - e. No, I was not stressed at all.

10. **Which of the following career readiness topics were you exposed to during your student-athlete development experience (through in-person workshops or presentations, virtual learning opportunities, or any other information-sharing methods)? (Choose all that apply.)**
 - a. Financial literacy
 - b. Career exploration
 - c. Job search
 - d. Career skills development
 - e. Leadership/communication skills
 - f. Mental health
 - g. Networking
 - h. Campus resource introduction

- i. Resume writing
- j. Mock interviews
- k. Field Experience (Internship, work, teaching assistantship, etc)
- l. Higher education opportunities
- m. Branding/NIL
- n. None

11. Which of the following career readiness topics that you exposed to did you find helpful? (Choose all that apply.)

- a. Financial literacy
- b. Career exploration
- c. Job search
- d. Career skills development
- e. Leadership/communication skills
- f. Mental health
- g. Networking
- h. Campus resource introduction
- i. Resume writing
- j. Mock interviews
- k. Field Experience (Internship, work, teaching assistantship, etc)
- l. Higher education opportunities
- m. Branding/NIL
- n. None

12. Which of the following career readiness topics that you were exposed to did you find least useful? (Choose all that apply.)

- a. Financial literacy
- b. Career exploration
- c. Job search
- d. Career skills development
- e. Leadership/communication skills
- f. Mental health
- g. Networking
- h. Campus resource introduction
- i. Resume writing
- j. Mock interviews
- k. Field Experience (Internship, work, teaching assistantship, etc)
- l. Higher education opportunities
- m. Branding/NIL
- n. None

13. Which career readiness topics that you were not exposed to do you think would have enhanced your career readiness? Or which areas would have been helpful?

a. _____

CONTEXT QUESTIONS:

14. Did you find either the in-person or virtual learning opportunities to be most helpful in enhancing your career readiness?

- a. In-person
- b. Virtual learning
- c. Both in-person and virtual learning

15. Did guest speakers or session leaders seem to be knowledgeable about their topics?

- a. Very knowledgeable
- b. Somewhat knowledgeable
- c. A little knowledgeable
- d. Not knowledgeable

16. Did you attend events hosted by the following non-athletic departments? (Choose all that apply.)

- a. Career Services
- b. Health Services/Counseling
- c. Alumni Affairs
- d. Major Department Events
- e. Diversity & Inclusion Department Events
- f. Other: _____

17. Did you have opportunities to “learn by doing” or practice demonstrations of what you learned in each session (ie. Experiential learning)?

- a. Yes
- b. No

18. Did you have opportunities to complete a self-assessment or scientific survey to help you determine career matches, career skills, or what to major in?

- a. Yes
- b. No

19. Did you have opportunities to network and learn from/with your peers (teammates, other student-athletes, former student-athletes, or alumni)?

- a. Yes
- b. No

20. Did you understand the career-related information that was shared with you during the student-athlete development sessions?

- a. Yes
- b. No

21. Did you feel included during student-athlete development sessions?

- a. Yes
- b. No

22. Were you asked to provide meaningful feedback on your student-athlete development programming experience?

- a. Yes
- b. No

AREAS OF IMPROVEMENT QUESTIONS:

23. Which areas of your student-athlete development experience would you improve to enhance your career readiness for your current career path? (Choose all that apply.)

- a. Create year-round learning experiences for resume writing, job interviews, and career preparation
- b. Create more opportunities to network with other students, mentors, alumni, and companies offering internships/jobs
- c. Improve the quality and diversity of guest speakers
- d. Add more opportunities to identify and improve non-sport skills
- e. Increase opportunities to practice skills or “learn by doing”
- f. Add more relevant financial literacy experiences
- g. Collaborate with other campus departments or community organizations
- h. Normalize how to identify, address, and cope with stress and mental health issues
- i. Provide a way for student-athletes to offer anonymous feedback on sessions and programming
- j. Create more engaging sessions
- k. Other: _____

Thank you for completing this survey! This section is voluntary, and you may exit this survey at any time. To be entered into the raffle to win a \$25 gift card, please enter your email address here: _____.

Appendix D

Survey Recruitment Flyer



Current & Former
STUDENT-ATHLETES:
Are You Career-Ready?



RESEARCH PARTICIPANTS NEEDED!

100% Voluntary & Anonymous

*From the Perspectives of Current and Former Student-Athletes: Identifying the
Tenets of Student-Athlete Development that Enhance Career Readiness*

[https://memphis.co1.qualtrics.com/jfe/form/SV_55fGQDc6
M9YBaLQ](https://memphis.co1.qualtrics.com/jfe/form/SV_55fGQDc6M9YBaLQ)

Purpose: The intent of this research is to examine and compare the reflections of both current and former collegiate student-athletes from the University of Memphis and to assess whether your student-athlete development experience has enhanced your career readiness.

Who: All current and former University of Memphis student-athletes (the past five years.)

Time Required: This survey should take **approximately 10-15 minutes to complete**. There are no consequences for declining to take this survey.

Benefit: You will be contributing to student-athlete development research. Eight randomly selected participants who complete the survey will be entered to win a \$25 gift card. Your chances of winning a gift card are approximately 1 in 20 out of an estimated 150 participants.

Contact: Please direct questions or concerns to:

Tywanna Smith, Doctoral Candidate & Primary Researcher
tdsmth20@memphis.edu

Marlon DeChausay, Senior Associate Athletic Director, Student-
Athlete Welfare marlon.d@memphis.edu

