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#### UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

# ATHLETIC IDENTITY ASSOCIATION AND PROSPECTIVE BASIC PSYCHOLOGICAL NEEDS SATISFACTION PREDICT ATTITUDES OF COLLEGIATE ATHLETES TOWARD SEEKING HELP FROM THE ATHLETIC DEPARTMENT

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science

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College of Natural and Health Sciences Department of Kinesiology, Nutrition, and Dietetics Social Psychology of Sport and Physical Activity This Thesis by: Allie Payton Zerr

Entitled: Athletic Identity Association and Prospective Basic Psychological Needs Satisfaction Predict Attitudes of Collegiate Athletes Toward Seeking Help From the Athletic Department

has been approves as meeting the requirement for the Degree of Master of Science in College of Natural and Health Sciences in Department of Kinesiology, Nutrition, and Dietetics, Program of Social Psychology of Sport and Physical Activity

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#### **ABSTRACT**

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There is an epidemic of mental health issues that has begun to be more openly talked about in college athletics. In 2022, the National Collegiate Athletic Association has found that college student-athletes are now 1.5-2 times more likely to report struggling with mental health than ever before. Previous research has shown a significant association with basic psychological needs satisfaction and overall psychological well-being. Furthermore, the purpose of this study was to investigate the possible ways that reported of autonomy, competence, and relatedness need satisfaction predicted whether athletes would seek mental health services and identify how athletic identity plays into this relationship. Participants in this study included 52 current National Collegiate Athletic Association collegiate student-athletes (34 female and 18 male) from Division I, Division II, and Division III schools. Results indicated a significant relationship between the three factors of basic psychological needs satisfaction (competence, autonomy, and relatedness) and attitudes toward seeking professional psychological help, as well as a significant result between autonomy and relatedness association with athletic identity. No significance was found between athletic identity and predictions of attitudes toward seeking professional psychological help.

#### **ACKNOWLEDGEMENTS**

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To have the support of my friends and family has truly been my biggest blessing. Thank you all.

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#### CHAPTER I

#### INTRODUCTION

Mental health support is becoming more mainstream to openly discuss and address in society. College students, as a specific population, have anecdotally been found to have some of the highest rates of mental health issues as compared to other populations. A study done by Kessler et al. (2005) reported that half of all lifetime long mental disorders start by the age of 14 years and three-fourths of all mental health disorders will start by the age of 24. This means that those who are diagnosed at age 14 now are experiencing the challenges of college for the first time with their mental health diagnosis, and the others who haven't been diagnosed are now in college during the time in their life a mental health disorder could emerge. They also found that 4.7% of college dropouts could be attributed to mental health struggles. A more recent study by Lipson et al. (2022) revealed that more than 60% of the 350,000 college students they surveyed met the criteria for one or more mental health issues, which was a 50% increase from 2013. Lipson et al. also reported that 42% of college students consider dropping out due to their mental health. Universities have dedicated staff/personnel to aid college students in helping with their mental health issues such as counseling centers, therapists, and mental health specialists. Mental health support resources on a college campus should be a main focus of support from the Universities because the percentage of students who experience mental health issues are over 50%. Better mental health services could create an overall better environment on college campus for students. Each sub-population of college students have specific needs when it comes to their

mental health issues. For example, college student athletes need different support than other groups of college students.

The mental health of college student-athletes needs to be further discussed in the sport psychology literature, especially considering student-athletes face unique life stressors that are different than their non-athlete peers. College student-athletes face particular stress in their lives because they have all the normal challenges of being college students, but they also must cope with various issues that being a high-level athlete adds. There are adversities that stem from athletic participation that the population of non-athlete college students never have to consider. College athletes, now more than ever with Name, Image, and Likeness profits available, are seen as performers and entertainers instead of being viewed as college students. Neglecting to view college athletes as individual people—not entertainers— has the potential to invalidate the emotions and struggles that they experience just like non-athlete students do every day.

According to a study done by the National Collegiate Athletic Association (NCAA; Johnson, 2022) about well-being, the number of student athletes who reported mental health concerns was 1.5-2 times higher than reports prior to 2020. There is a prominent stigma around mental health for athletes that inhibits them from seeking help when they need it because they do not want to be seen as weak (Brown et al., 2014). High level athletes are taught from a young age that they need to be strong and have a "suck-it- up" mentality. This way of thinking has created the stigma for athletes that they are not allowed to show any signs of weakness. This mindset can set student-athletes up for failure when they are faced with mental health adversity. The stigma around mental health for student-athletes needs to dissipate so that seeking mental health support can be normalized and thus make it more mainstream and allowable for student-athletes to get the support and resources needed. Stigma can also affect student-athlete motivation to seek

mental health support; therefore, using a motivational theory as framework for exploring mental health can help strengthen the literature where it may previously have gaps.

The topic of motivation has been extensively researched in sport psychology literature and that focus has led to the formation of numerous motivational theories. Self-determination theory is a salient motivation theory that has been found to be a reliant theory for sports psychology research (Horn & Smith, 2019). Basic psychological needs theory (BPNT) is a mini theory of the self-determination theory that considers the satisfaction of basic psychological needs, and the impact the satisfaction of those needs has on motivation (Deci & Ryan, 2012).

Much of the research done with BPNT and sports is centered around sport continuation, burnout, and general sport participation motivation. Specifically, in research on collegiate athletics, BPNT has been used to examine mindfulness, anxiety, burnout, injury, and coachathlete relationships. There are identifiable gaps in the literature around the application of BPNT and the way it may be used to help athletic departments. University athletic departments could use research framed in BPNT to better support their athletes in a holistic wellness approach if the literature explored the ability for the theory to help predict the nature of athletes' motivation to seek mental health support. Seeking mental health support as student-athletes has not been extensively researched in sports psychology, but athletic identity as a construct is rooted in sports psychology research which lends to the knowledge about identity driven behaviors.

Athletic identity has been widely researched in the academic sport literature. Athletic identity is rooted in social identity that also stems from literature around the self (Erikson, 1968; James, 1890; Stryker, 1980). A large portion of the research done around athletic identity in college athletes is related to athlete retirement as well as injury. There has been little research done around the way athletic identity can be used to help current college athletes. An athlete's

identity has the potential to tell a lot about the way they may respond to certain situations including circumstances related to their mental health status and adherence to rehabilitation programs (Stokowski et al., 2022). Using athletic identity as a factor when in consideration of college student-athlete mental health may be able to help predict help seeking behaviors. If an athletic department can better predict help seeking behaviors, then they will be able to create the necessary, effective support student-athletes deserve. Athletic identity is a factor that needs to be researched more with active collegiate athletes, not just with retired college athletes or those who are injured. There are numerous immeasurable factors that play into help seeking behavior, but athletic identity is a measurable factor that researchers need to utilize for high level athletes like collegiate athletes.

The rationale behind the current study stemmed from the possible ways that autonomy, competence, and relatedness need satisfaction predict whether athletes will seek mental health services and exploration of how athletic identity plays into this relationship. Student athlete participation in the study lent important perspective to the evaluation and explorative nature in which the information reported about the satisfaction of psychological needs can ensure student athletes get mental health support from their athletic departments. Little to no research about the utilization and effectiveness of mental health services offered to collegiate athletes exists, so while it is important to have these services in place, it is more important to ensure these services are fulfilling expectations and upholding an effective standard that supports student-athletes.

The purpose of this study was to investigate the possible ways that reported of autonomy, competence, and relatedness need satisfaction predicted whether athletes would seek mental health services and identify how athletic identity plays into this relationship.

- Q1 How do projections of collegiate student-athlete basic psychological needs satisfaction predict athletes' attitudes toward seeking mental health services by an athletic department?
- Q2 What is the association between collegiate student-athletes' projections of basic psychological need satisfaction and their degree of athletic identity?
- Q3 What is the association between the degree of athletic identity association in relation to collegiate student-athletes' attitude toward seeking mental health services?

#### CHAPTER II

#### **REVIEW OF LITERATURE**

The purpose of this study was to investigate the possible ways that reported of autonomy, competence, and relatedness need satisfaction predicted whether athletes would seek mental health services and identify how athletic identity plays into this relationship. The next section explores previous research done in the following areas: general overview of collegiate athlete mental health, basic psychological needs, athletic identity, and attitudes toward seeking help.

#### **Collegiate Athlete Mental Health**

College students are faced with adversity everyday as they try to navigate life away from home. Collegiate athletes face everyday demands that are unique from non-athlete students. These student-athletes have the added stressors of increased academic pressures, longer athletic seasons, pressure from coaches to win, and the commercialization of college athletics which can all impact the mental health of student-athletes (Brown et al., 2014). The day-to-day lives of college athletes entails a more structured, demanding schedule as compared to their non-athlete peers. According to the National Collegiate Athletic Association (2023) sport sponsorship and participation rates database, there are 188,375 Division I (DI) student-athletes, 133,059 Division II (DII) student-athletes, and 202,230 Division III (DIII) student-athletes competing as of 2022. An increased risk of emotional and behavioral difficulties can be seen in collegiate student-athletes because of the added stress due to potential injury, competing with teammates for playing time, playing in an important game, poor officiating, confrontational opponents, and media attention (Proctor & Boan-Lenzo, 2010). In a study done with college student-athletes,

they were found to be a high-risk population for developing mental health concerns due to the stressors and pressures that are unique to them (Etzel, 2006). The ways college athletes are susceptible to mental health issues comes in forms such as substance abuse, depression, and eating disorders among many others (Smith et al., 1990). In an NCAA study (Brown et al., 2014), it was reported that student-athletes are expected to hide when they are struggling, and sometimes coaches fortify this behavior because they are trying to make their athletes mentally tough and build their character; furthermore, coaches were found to overlook athletes' struggles and expect them to be mentally tough and "suck it up" (Brown et al., 2014). In the same article it was noted that the importance of mental health in collegiate student-athletes should be focused on as much as physical health and performance (Brown et al., 2014).

Student-athlete mental health is often thought of as secondary to physical health (Thompson & Sherman, 2007). The NCAA acknowledges that student-athletes may be at risk for mental health problems because their age increases the risk for certain disorders, college is a critical transition period, and mental health problems can be exacerbated by pressure in sport related and non-sport related areas (Thompson & Sherman, 2007). The NCAA found that 23.7% of DI athletes in the study reported clinically relevant levels of depression symptoms, 6.3% reported a moderate to severe level of symptoms, and female athletes were 1.844 times more likely to exhibit symptoms (Wolanin et al., 2016). "Even in the absence of a clinically diagnosable mental health disorder, student-athletes may have impaired overall well-being as a result of sub-clinical symptoms of mental health disorders such as anxiety, depression and insomnia or the misuse of substances such as alcohol or prescription drugs." (Anderson et al., 2016, p. 3).

The NCAA has a mental health task force that focuses on figuring out the scope of the problems, clinical conditions, and concerns related to, but not limited to, transition from high school to college, emotional distress, psychological problems from injury, and on field and classroom performances. This task force came up with four best practices in support of college athlete mental health and wellness: (a) clinical licensure of practitioners providing mental health care, (b) procedures for identification and referral of student-athletes to qualified practitioners, (c) pre-participation mental health screening, and (d) health-promoting environments that support mental well-being and resilience (Anderson et al., 2016). The NCAA (2017) has also created mental health best practices implementation tools that are targeted toward athletic department staff, conference offices (i.e., athletic conference administration) and campus stakeholders to understand and support student-athlete mental health and well-being. In 2017, the NCAA made a one-time \$200 million supplemental allocation to almost 350 schools with the funds intended toward the direct benefit of student- athletes and their academic success, career success, health and safety, and diversity and inclusion initiatives (Easterling, 2017).

The NCAA Division I schools are primarily focused on performance-centric approaches to the athletic programs (Whitehead & Senecal, 2020), which potentially creates a counterproductive athletic program that does not cultivate an environment tailored toward balanced growth and well-being. Beginning in August 2024, there will be new rules for all Division I schools that require increased support for college student-athletes which now follow a "holistic student-athlete benefit model" (Durham, 2023). "Student-athlete mental well-being is best served through a collaborative process of engaging the full complement of available campus and community resources, which may include athletics, campus health, counseling services, disability services and community agencies. Identifying the resources that are available and

integrating strong professional working relationships across these areas are critical to ensure that professionals are informed and respond quickly and effectively. Such integration links professionals in a collaborative model of care that can enhance the ability of individual service providers and maximize support of student-athlete wellness" (Anderson et al., 2016, p. 3).

Understanding general collegiate student-athlete mental health allows for people to identify the need for further research to support these athletes. Recognition that student-athletes struggle just as much or more than their non-athlete counterparts further contextualizes the need to research their mental health and the ways in which collegiate athletic programs can create resources. Creating resources is a step in the right direction, but colleges being able to offer resources tailored to individual athletes has the potential to make a more direct and positive impact on college student-athlete mental health. Individually tailored resources begins with college support staff understanding their athletes' basic psychological needs and psychological needs satisfaction.

#### **Basic Psychological Needs**

Basic needs theory is one of the six mini-theories within self-determination theory (SDT; Ryan & Deci, 2000). Self-determination theory is a meta theory that encompasses six smaller theories. A meta theory is an overarching theory that is untestable, so the mini theories allow for the meta-theory to be tested and validated. There are underlying assumptions that need to be considered with all mini theories of the SDT: SDT assumes humans have evolved to be inherently active, intrinsically motivated, and oriented toward developing naturally through integrative processes (Deci & Ryan, 2012, p. 417). Deci and Ryan (2012) found that important roles are played by psychological support and their dynamics within social environments along with inherent individual differences when considering SDT. The research done over decades has

revealed that there are at least three universal psychological needs that are essential to optimal development and functioning—autonomy, competence, and relatedness (Deci & Ryan, 2012).

Basic needs theory is centered around three psychological needs that, whether satisfied or not, can help predict an individual's motivation and well-being for a given situation. BNT was conceptualized to account for the well-being effects associated with the three psychological needs, and the research has shown the necessity of basic need satisfaction and the mediation these needs they play in social context for general wellness (Deci & Ryan, 2012).

Well-being is a theoretical construct that is characterized by psychological, emotional, and social dimensions that inform conceptions of positive mental health (Keyes, 2005). It was found that general need satisfaction was associated with more positive psychological health, and people experienced a greater positive affect on the days they got more satisfaction of their basic needs (Reis et al., 2000). The direct link between basic psychological needs and well-being creates a foundation for research to allow mental health to be part of the broader well-being approach in different populations.

The three basic psychological needs are the need for competence, the need for autonomy, and the need for relatedness. The need for competence defined by Deci (1975), Harter (1978), and White (1959) is the need to perceive our behavior and interaction with the social environment as effective. The second basic psychological need is the need for autonomy. The need for autonomy as defined by Charms (1983), Deci and Ryan (1987), and Ryan and Connell (1989), as the need to perceive our behavior and thoughts as freely chosen and we are the origins of our own actions. The third basic psychological need is the need for relatedness. The need for relatedness defined by Baumeister and Leary (2017) and Ryan (1995) is to perceive that we are connected to those around us and that we experience a sense of belongingness. Ryan and Deci

(2000) claim that the natural inclination and progression of humans is towards psychological growth, internalization, and well-being. A study by Podlog and Eklund (2007) reported empirical research results that supported Ryan and Deci (2000) findings that individuals' motivational states are reflections of the degree to which their three innate psychological needs to competence, autonomy, and relatedness are satisfied. The satisfaction of basic psychological needs reinforces these inclinations and can help predict the motivation of individuals in specific environments.

Basic psychological needs satisfaction has been found to directly impact well-being and mental health. Deci and Ryan (2008) claimed that the satisfaction of basic psychological needs may result in better mental health, including less depression and anxiety. Ng et al. (2012) found results that demonstrated the association of basic psychological needs satisfaction with more positive affect, less negative affect, and fewer symptoms of depression and anxiety. Their findings also supported the SDT contentions in that the satisfaction of basic psychological needs was related to mental health. Overall satisfaction of the three basic psychological needs were significantly associated with greater positive affect, lower negative affect, and better mental health (Schutte & Malouff, 2018). The relationship between basic psychological needs satisfaction and mental health makes Self-Determination Theory an applicable meta-theory to use as the basis for research related to mental health issues and motivation. Basic psychological needs satisfaction has an impact on athletes' well-being and mental health; in addition, athletic identity association of athletes can be predictive of a sense of self and sport-motivation.

#### **Athletic Identity**

Athletic identity is defined as "the degree to which an individual identifies with the athlete role" (Brewer et al., 1993, pg. 237). Athletic identity plays a critical role in sport

psychology for understanding athletes as individuals with, or without, more than one identity. The first research published that considered the concept of identity came from *The Principles of* Psychology by William James (1890). William James is considered the father of identity, and he considered the self to be the primary determinant of human thoughts. He laid the groundwork for the concept of identity to be relevant in psychology research through the study of "the self". Erikson (1968) wrote the book *Identity: Youth and Crisis*, which gave way to the idea that identity is an unconscious and constantly evolving sense of who one is as an individual and member of society. Erikson began to bring in the environment and contextual factors to identity through this work. This is critical for the development of identity as a concept because it ties in the social aspects which create multidimensionality to the construct. Ashmore and Jussim (1997) wrote a book called Self and Identity: Fundamental Issues, where they further break down the contexts in which various identities can take different shape. They compared the self in different contexts: a unified self, multiplicity of selves, and the social self. The work done by Ashmore and Jussim (1997) is considered an extension to the original work done by Erikson (1968). Ashmore and Jussim (1997) also mentioned culture and identity being different across various societies and expression of identity being significantly related to an individual's specific upbringing and beliefs. The book *Identity, Formation, Agency, and Culture: A Social* Psychological Synthesis by Côté and Levine (2002), is a thorough compilation of psychological and sociological research that demonstrates aspects of identity that other researchers before them didn't emphasize. Côté and Levine write about identity formation processes through developmental psychology and the study of the self through social psychology. Specific study of athletic identity began to emerge in the 1990s (Lochbaum et al., 2022).

Brewer et al. (1993) developed the presence of athletic identity in sports psychology. In their initial paper, they provided the first measurement tool for assessment of athletic identity—athletic identity measurement scale (AIMS)—and operationally defined athletic identity. Their research suggested that athletic identity was to be understood as a multidimensional self-concept as well as containing a social role derived from a cognitive structure (Ronkainen et al., 2015). It is important to understand the theoretical roots of athletic identity to demonstrate the validity in which athletic identity holds in sport psychology research.

Stryker (1980) made the claim that the self as the social role is the core of social identity, and the self has multiple identities. Social identity theory is defined as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value of emotional significance attached to that membership," (Tajfel, 1978, pg. 63). Social identity theory is central to the idea that individuals have different identities in various social environments. It is important to consider different environmental variables for individual's identities because social identities and social groups influence affect and behavior (Yukhymenko-Lescroart, 2014). Yukhymenko-Lescroart (2014) also states that identity is formed within the contexts of social interactions, institutions, processes, and relationships. The context of identity formation is important when considering Social Identity Theory (Tajfel, 1978) because it's important to consider all social environments in shaping an individual's identity over time, not just the impact of one specific environment in creating a permanent identity. If there were to be a complete theory of the self, there would need to be consideration of both the role and the group, along with identities of the individual person that are constant throughout different social environments (Stets & Burke, 2000). Stets and Burke also claim that a merger of identity theory with social identity theory yields a stronger social

psychology that would be able to attend to social processes on every level. If a merger of the theories were to happen in the literature, it simply strengthens the foundation in which athletic identity is rooted. The theories from which athletic identity emerged are important to note because it allows for a better understanding of the underpinnings that athletic identity holds in the sport psychology research.

The literature focused on athletic identity in the context of collegiate athletes holds a specific perspective due to the population's uniqueness. Brewer et al. (1993) used collegiate athletes as their original population of interest to examine athletic identity. They found that self-worth and the concept of individuals who strongly identify as athletes, are influenced by their successes or failures in sport (Brewer et al., 1993). When athletes placed their self-worth solely on their athletic role, the value they perceived of themselves was dependent on their athletic success. Studies done with college athletes performed by Brewer et al. (2000) as well as Good et al. (1993) found that some benefits of a strong connection to athletic identity are the development of a salient sense of the self, the establishments or social networks, improved life management skills, and increased sport-related motivation. Athletic identity can be seen as a factor that potentially influences motivation and self-worth; similarly, as a factor of self-worth, athletic identity can influence an athletes' well-being. High levels of athletic identity have been associated with negative psychological and mental health outcomes (Harrison et al., 2023).

Athletic identity has been found to be connected to well-being. Most of the research done on well-being and athletic identity is rooted in retirement and future career success. There is a gap in the literature with regard to the consideration of athletic identity association and current athlete well-being. It has been found that life satisfaction is considered a predictor of subjective well-being (Diener, 1984). Using life satisfaction as a measure of well-being, Mathews et al.

(2021) reported that DI college athletes who tend to score higher on the athletic identity scale scored lower on the life satisfaction scale as compared to their DIII counterparts. This report indicates that those who associate more with their athletic identity are more likely to potentially report lower levels of well-being. A study done by Houltberg et al. (2018) reported athletes with performance-based identity (i.e., associate with high perfectionism, fear of failure, and contingent self-worth) demonstrated high levels of depression, anxiety, and shame, as well as the lowest levels of life satisfaction. These findings support previous literature regarding high levels of identity association with lower levels of life satisfaction; therefore, high athletic identity association may be associated with overall athlete well-being.

Well-being can similarly be influenced through seeking and receipt of professional psychological support. Athletes seeking professional mental health help can be a factor in their overall well-being; moreover, athletes' attitudes toward seeking help can play an impactful role on their well-being and sport motivation.

#### **Attitudes Toward Seeking Mental Health Help**

The literature is incomplete when it comes to understanding the belief's student-athletes hold toward using mental health services, therefore, more research regarding college student-athletes seeking mental health services is extremely necessary (Moreland et al., 2018). Some collegiate athletes were found to be willing to seek mental health help, but they face many personal, interpersonal, and environmental barriers (Moreland et al., 2018). Personal barriers may be identified as self-stigma and appearing weak. Interpersonal barriers may be represented through leadership stigma, cultural norms, trust within the athletic department, and counselor background. Lastly, environmental barriers may be associated with University funding issues (Moreland et al., 2018).

According to a study done with college students, there are five significant psychological factors that play into help seeking intent: social support, self-disclosure, anticipated utility, anticipated outcome, social stigma, and social norms (Vogel et al., 2005). College undergraduate students demonstrated that the possibility of an individual to seek services decreases significantly due to stigma, even if consequences of not seeking help are known (Sibicky & Dovidio, 1986). The fear of being stigmatized can be a barrier for undergraduate students that inhibits them from seeking psychological help even if they are aware of the benefits they may experience. Public stigma associated with mental health can predict self-stigma association with seeking counseling (Vogel et al., 2007). This means that self-stigma can predict attitudes toward seeking psychological help and willingness to seek counseling services. The impact that public stigma can carry when considering mental health can directly change self-stigma, which can then alter an individual's entire attitude toward seeking help.

Student-athletes were found to be more uncomfortable trying to find help outside of their athletic departments due to lack of understanding specifics concerns, needs, and pressures (Watson, 2005). Student-athletes have greater expectations of their counselors to understand their challenges and demands of being a student-athlete (Watson, 2005). Attitudes can be predicted by a person's outcome expectation (Ajzen & Fishbein, 1980), so when the outcome expectation of the athlete is not met, they no longer feel safe and supported and are less likely to seek help again. Results from Martin et al. (1997) showed that from their 225-person sample size of NCAA DI athletes, stigma toward mental illness was negatively associated with willingness to consult with a sport's psychologist. Etzel and Watson (2007) demonstrated through work with intercollegiate athletes that if a sports psychologist's work is reframed as a "resource for the work of will and character", then the perception from athletes shifts more positively. If an athlete

can justify seeing a sports psychologist for will and character, they are less likely to be seen as weak and more likely to seek that service. A study done by Barnard (2016) found that college student-athletes scored in the high range of help-seeking attitudes which showed a shift in attitudes toward seeking help from college student-athletes. Continuing to improve student-athletes' positive attitudes toward seeking help would allow student-athletes to grow and reach new potentials while being supported efficiently from their universities and athletic departments.

There are very few literature resources that address the association of attitudes toward help-seeking behaviors and athletes in general, let alone collegiate student-athletes (Watson, 2005). Attitudes such as "no pain, no gain" have been socialized into student-athletes, so college student-athletes may view help-seeking behaviors as a weakness (Watson, 2005). Admitting to personal issues can damage student-athletes' chances to perform successfully due to it weakening their self-efficacy in terms of performance, trust from their teammates, reduced playing time, or weaking of their coach's confidence they can perform (Etzel et al., 1994). A study done by Linder et al. (1989) found that undergraduate students rated college student-athletes lower in prestige if they admitted to seeking counseling services. This stigma deters student-athletes from being comfortable to seek services when needed. Findings by Watson (2005) further support that collegiate student-athletes has less positive attitudes toward help-seeking behaviors than non-athletes. Research has shown that college student athletes often do not recognize or admit to mental health illness symptoms or are unaware of the mental health services at their disposal (Eisenberg et al., 2007).

One help-seeking construct that can be found in the literature is self-concealment. Self-concealment is the tendency to actively avoid disclosing potentially embarrassing information (Cepeda-Benito & Short, 1998). Higher levels of self-concealment have the potential to predict

negative attitudes toward psychotherapy. Higher levels of self-concealment in undergraduate college students were associated with less favorability toward counseling than those who were low self-concealers (Kelly & Achter, 1995). Alternate research found lower levels of social support can promote the consumption of psychological services by high-concealing individuals (Cepeda-Bentio & Short, 1998). Athletes who are more afraid to share "embarrassing" information are less likely to demonstrate help-seeking behaviors because counseling potentially involves the disclosure of personal information. There has been little to no research done on the prevalence of self-concealment personas in the context of college student-athletes.

In addition to the construct of self-concealment, the construct of a "negative halo" is used in help-seeking literature. "Negative halo" is used when an athlete deviates from his or her identity as an athlete (Linder et al., 1989). A deviation for an athlete trying to strictly identify with their athletic identity could be need helping or seeking psychological services. Collegiate athletes that were found to be more willing to seek help for future mental health concern were less likely to report receipt of mental health care as compared to their non-athlete counterparts (Brown et al., 2014). The culture around college student-athletes values strength, stability, and stamina (Tabet et al., 2021), so when an athlete receives mental health help, they are less likely to report it because they think it has the potential to put their athletic identity at jeopardy. The culture around college student-athletes can be greatly impacted by stakeholders in the athletes' lives.

Research findings show that attitudes and opinions of leaders can create culture norms which alter the actions of those they influence (Moreland et al., 2018). Stakeholders, such as coaches, parents, peers, and administrators, hold an extremely important role in the culture of college athlete mental health which can directly impact student athletes negatively or positively.

According to Harker and Petrie (2023), college student-athletes have placed value on stakeholders in the following order from most to least influential: (most) teammates, assistant coaches, athletic trainers, and head coaches; strength and conditioning staff, parents/family, and academic staff; athletic directors; and (least) non-athlete friends and friends from other teams. As seen by the value placed on stakeholders, the culture created by the athletes' most valued people has the potential to influence their behaviors and motivation. If their most valued stakeholders do not support or invest resources into receiving help when needed for mental health reasons, then student-athletes will not pursue getting help. There needs to be more funding and support going directly to the psychological and counseling resources at universities for student-athletes (Moreland et al., 2018). When universities allocate more funding and resources to an athletic department, it shows the worth and support for the department from the university. It is important to show college student-athletes that the university cares about their mental health by financially supporting the resources offered and ensuring support gets initially offered.

#### CHAPTER III

#### **METHODOLOGY**

#### **Purpose**

Collegiate athletes suffer from mental health issues just as much as any population, but anecdotally, a smaller portion of collegiate athletes seek mental health support. There are basic psychological needs that have been found to help explain motivational habits and actions—the need for autonomy, competence, and relatedness. Understanding college athletes' satisfaction of their needs can help figure out the predictors of motivation for them to seek support. Being aware of the motivational factors to seek mental health support allows university athletics' mental health services to target the satisfaction of needs that support individual athletes. The athletic identity of collegiate athletes is also very important to consider regarding mental health support because understanding the extent of an athlete's identity based on their sport could be a factor in their choice to seek offered resources for support. Athletic identity is important to consider when helping athletes because it can also aid those in charge of the mental health services to tailor the service for the specific level of association the athlete has toward their athletic identity. Projections of basic psychological needs satisfaction as it relates to motivation to seek mental health services among collegiate athletes were identified. Athletic identity is also measured to find the relationship between the strength of athletic identity association and the athletes' projected need satisfaction as it is related to their motivation to seek mental health services. Motivation for seeking mental health services provided by athletic departments was derived from collegiate athletes' attitudes toward seeking mental health services. If student

athletes think their basic psychological needs won't be satisfied by attending mental health services, then they are hypothetically less likely to utilize the service. Having these projections and predictions can help administration (i.e., trainers, psychologists, coaches, athletic directors, etc.) make mental health services more accessible and utilized by the athletes. The purpose of this study was to investigate the possible ways that reported of autonomy, competence, and relatedness need satisfaction predicted whether athletes would seek mental health services and identify how athletic identity plays into this relationship.

#### **Participants**

Current college student-athletes from NCAA DI, DII, and DII schools were included in this study. There was no restriction on the specific competitive division or level in which athletes were from in order to get a broad sample of college student-athletes. A total of 52 respondents were included in the study. Participants who completed the survey consisted of 63.5% (n=33) female and 34.6% male (n=18), one participant did not report. Participants were asked to report their age in years—and participants M=21.46 and  $SD=\pm 2.043$ , n(18)=2, n(19)=7, n(20)=10, n(21)=8, n(22)=6, n(23)=16, n(24)=1, n(25)=1, and n(26)=1. Year in school was broken down into Freshman (5.8%, n=3), Sophomore (9.6%, n=5), Junior (25%, n=13), Senior (17.3%, n=9), and Graduate Students (42.3%, n=22). Race/ethnicity was reported with the following categories: Asian (0%), Black/African American (13.5%, n=7), White/Caucasian (71.2%, n=37), and Hispanic/LatinX (7.7%, n=4), and 4 participants did not report race/ethnicity. 34.6% (n=18) of the participants played a men's sport (football n=9, 17.3%; basketball n=1, 1.9%; track and field n=5, 9.6%; track and field and cross country n=2, 3.8%; and baseball n=1, 1.9%) and 65.4% (n=34) played a women's sport (soccer n=9, 17.3%; basketball n=4, 7.7%; track and field n=7, 13.5%; cross country n=1, 1.9%; volleyball n=3, 5.8%; lacrosse n=5, 9.6%; track and field and

cross country n=2, 3.8%; golf n=1, 1.9%; softball n=1, 1.9%). The participants were from NCAA Division I schools (71.2%, n=37), NCAA Division II schools (23.1%, n=12), and NCAA Division III schools (5.8%, n=3). The athletic conference that participants play for was also considered: Summit League (n=3, 5.77%), Mountain West (n=10, 19.23%), Big Sky (n=7, 13.46%), SEC (n=4, 7.69%), Conference Carolinas (n=1, 1.92%), Big 12 (n=8, 15.38%), Northwest Conference (n=1, 1.92%), ACC (n=1, 1.92%), WAC (n=2, 3.85%), RMAC (n=10, 19.23%), Southland Conference (n=1, 1.92%), Liberty League (n=1, 1.92%), ASUN (n=1, 1.92%), and Pac 12 (n=2, 3.85%). Participants were asked if they had suffered a 2023-2024 season ending injury which resulted in 17.3% (n=9) reporting yes and 82.7% (n=43) reporting no. They were also asked to disclose if they have been diagnosed with a mental health illness prior to completion of the survey: 15.4% (n=8) yes and 84.6% (n=44) no.

#### Measures

#### **Collegiate Athletic Status**

College student-athletes were defined as individuals who participated in a NCAA regulated sport and were currently active on a team roster. For this study, collegiate athletic status included all NCAA Division I, Division II, and Division III student-athletes.

#### **Demographics and Open-Ended Questions**

Open-ended questions included inquiry about the reasons participants sought or stopped pursuing mental health services from their athletic department. The participants were also asked about their knowledge of what mental health services their athletic departments provide. There were six open-ended questions in total that participants answered (see Appendix A for the specific questions).

Demographic information included age in years (fill in the blank answer), year in school (choice between freshman, sophomore, junior, senior, graduate student), gender (choice between male, female, non-binary/third gender, prefer not to say), ethnicity/race (choice between Asian, Black/African, White/Caucasian, Hispanic/LatinX, Native American, Pacific Islander, Prefer not to say), sport (pick men's/women's) and fill in the blank with specific sport, Division (pick one: I, II, III), injury status (Have you suffered a 2023-2024 season ending injury?: yes/no), and mental health status (Have you been diagnosed with a mental health disorder? Yes/no).

#### **Basic Psychological Needs Satisfaction in Sport**

The Basic Needs Satisfaction in Sport Scale (Ng et al., 2011) was used to measure projected basic psychological needs satisfaction as it related to motivation for seeking mental health services (Appendix B, Part A). The original Basic Needs Satisfaction Scale (Ng et al., 2011) (Appendix B, Part B) has been used to assess the feeling of satisfaction of the three basic psychological needs in general sport situations, so the modified Basic Needs Satisfaction in Sport Scale (BNSSS) was used to target the nature of the sport setting with established reliability and validity. The development of the Basic Needs Satisfaction in Sport Scale (Ng et al., 2011) proved to be valid and reliable based on alpha coefficients and confirmatory factor analysis:  $\alpha$ (competence)=0.77,  $\alpha$ (autonomy-choice) =0.82,  $\alpha$ (autonomy-IPLOC) =0.76,  $\alpha$ (autonomyvolition) = .61,  $\alpha$ (relatedness)=0.77. The response format used was a 7-point Likert scale. The seven response categories were Strongly Disagree (1), Disagree (2), Somewhat Disagree (3), Neither Agree nor Disagree (4), Somewhat Agree (5), Agree (6), and Strongly Agree (7). The BNSSS is specifically for basic psychological needs satisfaction in sport settings, so the scale included a sport specific focus which aided in the validity of the measure with college studentathletes as the population from which the participant sample for this study was drawn. The

version of the BNSSS used in the present study was slightly modified to align with the projective/prospective nature of this study. For example, the original BNSSS states, "I can overcome challenges in my sport." The modified BNSSS states, "After attending mental health services, I will be able to overcome challenges in my sport." The modification was necessary to allow for the participants to project their basic psychological needs satisfaction into the future relative to seeking mental health services.

#### **Athletic Identity Measurement Scale**

The Athletic Identity Measurement Scale (AIMS; Brewer et al., 1993) was used to measure the degree to which participants identified with the athletic role. The use of AIMS in this study was to measure the degree of athletic identity association as it related to athletes' motivation for seeking mental health services. The 10 question AIMS has previously demonstrated high reliability and internal consistency,  $\alpha$ = 0.80-0.93 (Brewer et al., 1993) (Appendix C). The response format used was a 7-point Likert scale that ranged from *Strongly Disagree* (1), *Disagree* (2), *Somewhat Disagree* (3), *Neither Agree nor Disagree* (4), *Somewhat Agree* (5), *Agree* (6), and *Strongly Agree* (7). No modifications were necessary as the AIMS was developed and validated with collegiate athletes.

# Attitudes Toward Seeking Professional Psychological Help

The Attitudes Toward Seeking Professional Psychological Help (Fischer & Turner, 1970) questionnaire in its original form is a 29-item scale used to measure individual attitudes about seeking professional psychological help. The measure used for the present study was the unidimensional 10-question short version of the original scale. Fischer and Farina (1995) established reliability for the 10-question short-form from the original Attitudes Toward Seeking Help (Fischer & Farina, 1995,  $\alpha$ =.84). The response format used was a 4-point Likert scale. The

4-response option for these questions were *Agree* (4), *Partly Agree* (3), *Partly Disagree* (2), and *Disagree* (1). Attitudes Toward Seeking Professional Psychological Help was used to inquire about college athletes' attitudes toward seeking help from services provided by their athletic department. The nature of the present study required modifications to be made to the original scale to establish correct sport context and prospective/projective language (Appendix D).

#### **Procedure**

An application was submitted to the University of Northern Colorado Institutional Review Board (IRB) and approval was granted prior to data collection commencement (see Appendix E). Emails for participants were found online by searching publicly available collegiate athletic team rosters. All initial emails were sent to coaching staff and relevant administrators of teams, and all of those email addresses were also found through publicly posted Universities' websites (see Appendix F). Direct messages from the researcher's Instagram social media platform were sent out directly to NCAA DI, DII, and DII athletes. Text messages were also sent to contacts that the researcher already had available. Social media postings on Instagram and Facebook were made by the researcher and research advisor on their stories and a feed posting (see Appendix G).

Current college student-athletes were recruited using emails, social media postings (Facebook and Instagram), and snowball sampling. Recruitment was done by sending an email to athletics coaches and other staff with the recruitment email and survey link attached for them to send out to athletes. Snowball sampling also took place by word of mouth and the link being given directly to athletes. A recruitment social media post was posted on Instagram and Facebook stories and feeds with the link to the survey. Snowball sampling was also implemented as another parallel method to recruit participants from the same sample of all college athletes.

Qualtrics was used for online survey completion where participants were first instructed to click the indicated link that took them directly to the online portal to complete the survey. The page they were initially taken was the informed consent form (see Appendix H). Once participants clicked the arrow at the bottom of the first page, which indicated their consent, they were taken to the survey questions that began with demographic information and open-ended questions, followed by the BPNSSS, AIMS, and Attitudes Toward Seeking Professional Psychological Help surveys. Upon completion of the survey, participants were able to enter a raffle to win one of 50 \$10 Amazon gift cards by clicking a link on the thank you page that took them to a separate survey not connected to their responses to the actual questionnaire and enter their email addresses.

The survey took approximately 15-20 minutes for participants to complete and was composed of 55 questions. Data collection was done over a total of 19 weeks (July-November). There was one additional reposting of the survey on social media three months after the original posting. Continuous snowball sampling and recruitment occurred for five months.

#### Design

This study employed a non-experimental correlational design to determine if there was a relationship between collegiate athletes' projected basic psychological needs satisfaction, athletic identity, and attitudes toward seeking professional psychological help. The predictor variable was basic psychological needs satisfaction, while the criterion variables were athletic identity association and attitudes toward seeking professional psychological help.

#### **Data Analysis**

Data were primarily analyzed quantitatively to address research questions proposed.

Descriptive statistics (e.g., frequencies, means, and standard deviations) were examined for all

demographic variables (age, gender, race/ethnicity, sport type, university division, athletic conference, season ending injury, and clinical mental health diagnosis), and scale reliability and normality was run for the BNSSS, AIMS, and Attitudes Toward Seeking Professional Psychological Help. Homogeneity was run to test the assumption of normality for the dataset. Normality assumption was met through normal residuals for the three factors of the BNSSS (autonomy, competence, and relatedness) as well as the AIMS scale. The assumption of normality was not met for Attitudes Toward Seeking Professional Psychological Help until four of the ten scale items were removed. The Attitudes Toward Seeking Professional Psychological Help response data made up of six of the ten items were used for all regression and correlation analyses.

A multiple regression analysis was used to predict Attitudes Toward Seeking Professional Psychological Help with the three factors of autonomy, competence, and relatedness being used as the explanatory variable for the regression and the attitudes being used as the response variable. Correlation analysis was also performed to find the significant factors of the BPNSSS when predicting attitudes toward seeking professional psychological help, and the Pearson Correlation Coefficient (r) was reported. A one-way analysis of variance was run using the same predictor and criterion variables after significance was found with at least one factor during primary analysis to address the first research question.

Bivariate correlation analysis was used to assess the relationship between basic psychological need satisfaction and athletes' degree of athletic identity; this correlation addressed the second research question, and the Pearson Correlation Coefficient (*r*) was reported. Bivariate correlation analysis was used to assess athletes' degree of athletic identity and predicting attitudes toward seeking psychological help; this correlation addressed the third

research question, and the Pearson Correlation Coefficient (r) was reported. Responses to the open-ended questions were qualitatively content analyzed using thematic analysis (Braun & Clarke, 2006) to discover themes prevalent in the data obtained. The open-ended questions were as follows: What are some reasons you would seek student athlete mental health services? Why?, What are some reasons you wouldn't seek student athlete mental health services? Why?, What are some reasons you would stop seeking student athlete mental health services if you were receiving them? Why?, What current student athlete mental health services are you aware of being offered on your campus?, What mental health services do you wish your athletic department would offer? Why?, Is there anything else you want to share regarding seeking student athlete mental health services? All open-ended questions were content analyzed with trustworthiness confirmed by thematic comparison done by multiple researchers. After trustworthiness was confirmed, back coding of the data was completed. The researcher used to confirm trustworthiness had a relevant background in education and coaching which is important to mention when considering the lens of the researcher.

#### CHAPTER IV

# **RESULTS**

# **Preliminary Analysis**

Descriptive analyses including means, standard deviations, frequencies, and scale reliabilities were examined for each appropriate variable to determine if there were any non-normal data as well as to ensure assumptions of independency and non-multi collinearity between independent variables were met. Eighty-six surveys were collected but only 52 were filled out to completion. A sample size of 52 was, therefore, used for all analyses to ensure consistency with data completion. Descriptive statistics were run for variables BNSSS (competence, autonomy, and relatedness), AIMS, and attitudes toward seeking professional psychological help. Competence, autonomy, and relatedness were combined and kept as total basic psychological needs satisfaction. There were no participants removed after descriptive statistics were run. Table 1 provides results of the numbers and percentages for the variables of gender, age, year in school, race/ethnicity, sport gender, sport, NCAA division, athletic conference, "suffered a 2023-2024 season ending injury", and "been diagnosed with a mental illness prior to survey" within the sample.

**Table 1**Frequencies and Percentages of Participants according to Demographic Variables

Demographic Variable	n	%	
Gender			
Female	33	63.46	
Male	18	34.62	
Age			
18	2 7	3.85	
19	7	13.46	
20	10	19.23	
21	8	15.38	
22	6	11.54	
23	16	30.77	
24	1	1.92	
25	1	1.92	
26	1	1.92	
Year in School			
Freshman	3	5.77	
Sophomore	5	9.62	
Junior	13	25.00	
Senior	9	17.31	
Graduate	22	42.31	
Race/Ethnicity			
Asian	0	0.00	
Black/African American	7	13.46	
White/Caucasian	37	71.15	
Hispanic/LatinX	4	7.69	
Sport Gender			
Men's Sport	18	34.62	
Women's Sport	34	65.38	

Table 1 Continued

Demographic Variable	n	%
Sport		
Men's Football	9	17.31
Men's Basketball	1	1.92
Men's Track and Field	5	9.62
Men's Track and Field and Cross Country	2	3.85
Men's Baseball	1	1.92
Women's Soccer	9	17.31
Women's Basketball	4	7.69
Women's Track and Field	7	13.46
Women's Cross Country	1	1.92
Women's Volleyball	3	5.77
Women's Lacrosse	5	9.62
Women's Track and Field and Cross Country	2	3.85
Women's Golf	1	1.92
Women's Softball	1	1.92
NCAA Division		
Division I	37	71.15
Division II	12	23.08
Division III	3	5.77
Athletic Conference		
Summit League	3	5.77
Mountain West	10	19.23
Big Sky	7	13.46
SEC	4	7.69
Conference Carolinas	1	1.92
Big 12	8	15.38
Northwest Conference	1	1.92
ACC	1	1.92
WAC	2	3.85
RMAC	10	19.23
Southland Conference	1	1.92
Liberty League	1	1.92
ASUN	1	1.92
Pac 12	2	3.85
Suffered a 2023-2024 Season Ending Injury	_	2.02
Yes	9	17.31
No	43	82.69
Been Diagnosed with a Mental Illness (prior to survey		<b>52.</b> 65
completion)		
Yes	8	15.38
No	44	84.62

#### **Descriptive Analyses of All Scales**

#### **Basic Needs Satisfaction in Sport Scale**

Mean scores for each of the three basic psychological needs factors—competence, autonomy, and relatedness with consideration of the —7-point Likert response format were as follows: competence 4.93 (SD=1.1), autonomy 4.95 (SD=.83) and relatedness 5.48 (SD=.96). Cronbach (1951) alpha reliability values for each of the factors were 0.875 for competence, 0.838 autonomy, and 0.876 for relatedness. Minimum acceptable alpha levels for determination of reliability were set at 0.70; further, based on the minimum alpha level set for reliability, all three factors met the reliability minimum. In the original BNSSS (Ng et al., 2011), autonomy was broken down into three components (autonomy-choice, autonomy-IPLOC, and autonomyvolition). When the data from the present study were analyzed using the approach with the three components of autonomy, the assumption of normality was violated, and no statistical transformation was possible to obtain normality. With this, the factor of autonomy was not broken down into the three components during analysis, and by keeping autonomy all together, the assumption of normality and reliability were met. The assumptions of normality and reliability were met without further analysis for competence and relatedness. The original BNSSS scale contained 20 questions, and all 20 questions were included in reliability analysis as well as data analysis.

# **Athletic Identity in Sport Scale**

Mean scores for the AIMS according to the 7 point-Likert response format was 5.35 (*SD*= .87; Table 2). Cronbach (1951) alpha reliability values for all 10 factors in the scale was 0.848. The assumptions of normality and reliability were met without the need for further

analysis. The original AIMS scale contained 10 questions, and all 10 questions were included in reliability analysis as well as data analysis.

# Attitudes Toward Seeking Professional Psychological Help

Mean scores for the attitudes toward seeking professional psychological help scale according to the 4 point-Likert response format was 2.20 (SD= .61; Table 2). The entire attitudes toward seeking professional psychological help scale unfortunately did not meet the minimum criterion for reliability. The scale originally produced a Cronbach alpha ( $\alpha$ ) of 0.225 when all 10 items were included. Further analysis was required to meet reliability assumptions. Reliability assumptions were met ( $\alpha$ = 0.704) when scale items 2, 8, 9, and 10 were removed (see Appendix B). The questions removed were as follows in order as indicated above: "The idea of talking about problems with a sport psychologist strikes me as a poor way to get rid of emotional and sport specific conflicts.", "Considering the time and expense involved in sport related psychotherapy, it would have doubtful value for a person like me," "A person should work out his or her own sport-related problems; getting sports specific psychological counseling would be a last resort,", and "Personal and emotional troubles related to my sport, like many things, tend to work out by themselves." Items 1, 3, 4, 5, 6, and 7 were kept and used for all data analyses.

Table 2 displays the means, standard deviations, and reliabilities for BNSSS (competence, autonomy, and relatedness), AIMS, and attitudes toward seeking professional psychological help.

 Table 2

 Descriptive Statistics and Reliabilities for Study Variables

Variable	n	M	SD	α
Competence	52	4.93	1.1	0.875
Autonomy	52	4.95	0.83	0.838
Relatedness	52	5.48	0.96	0.876
AIMS	52	5.35	0.87	0.848
Attitudes Toward Seeking	52	2.2	0.61	0.704
Professional Psychological Hel	p			

# **Main Analyses**

# **Research Question One**

Q1 How do projections of collegiate student-athlete basic psychological needs satisfaction predict athletes' attitudes toward seeking mental health services by an athletic department?

Multiple regression analysis was employed to examine the relationship between college student athletes' projected basic psychological needs satisfaction and predicting attitudes toward seeking professional psychological help, which revealed results that indicated  $R^2$ = 0.348. An analysis of variance was run, finding the group differences according to basic psychological needs factors in attitudes toward seeking professional psychological help, resulting in an F-value= 8.528 (p <0.001). These results showed a significant linear relationship between independent variables (competence, autonomy, and relatedness) and the dependent variable (attitudes toward seeking professional psychological help). Findings indicated statistically significant inverse linear relationships between attitudes toward seeking help and competence

need satisfaction (r= -0.563, p=0.000). Results indicated statistically significant inverse linear relationships between attitudes toward seeking help and autonomy need satisfaction (r= -0.469, p=0.000) and between attitudes toward seeking help and relatedness need satisfaction (r= -0.406, p=0.001).

# **Research Question Two**

Q2 What is the association between collegiate student-athletes' projections of basic psychological need satisfaction and their degree of athletic identity?

Results indicated no evidence of a statistically significant linear relationship between competence need satisfaction and athletic identity (r= 0.161, p= .255). Evidence of a statistically significant linear relationship between autonomy need satisfaction and athletic identity (r= 0.286, p= 0.04, 95% CI [0.14, 0.518]) and between relatedness need satisfaction and athletic identity (r= 0.284\*, p= 0.04, 95% CI [0.012, 0.516]) emerged from the analyses.

#### **Research Question Three**

Q3 What is the association between the degree of athletic identity association in relation to collegiate student-athletes' attitude toward seeking mental health services?

Results indicated no evidence of a statistically significant linear relationship between athletic identity and attitudes toward seeking professional psychological help (r= -0.244, p= 0.81). The r-value indicated a negative correlation, but there was no statistical significance.

# Athlete's Report on Mental Health Services and Utilization

Responses were collected and analyzed for the following six open-ended questions: (1) "What are some reasons you would seek student athlete mental health services? Why?", (2) "What are some reasons you wouldn't seek student athlete mental health services? Why?", (3) "What are some reasons you would stop seeking student athlete mental health services if you

were receiving them? Why?", (4) "What current student athlete mental health services are you aware of being offered on your campus?", (5) "What mental health services do you wish your athletic department would offer? Why?", (6) "Is there anything else you want to share regarding seeking student athlete mental health services?". The response to two of the six-open ended questions (Questions 4 and 5) were analyzed using frequency analysis (Table 3). The responses to four of the six open-ended questions (Questions 1, 2, 3, and 6) were collectively analyzed using the open-ended thematic analysis approach from Braun and Clarke (2006). Determination of consensus was brought about using the five-step approach laid out by Braun and Clarke: (1) Familiarizing yourself with the data, (2) Generating initial codes (see table 4), (3) Searching for themes (see Table 5), (4) Defining and naming themes (see Table 6), and (5) Producing the report. The first three steps of the process were completed by two researchers separately, and once themes had independently been reviewed; the researchers collectively compared results to obtain trustworthiness with the final reported themes. Both researches came from a sports background, as they both played collegiate sports. One researcher has a physiological education background, while the other has an education and sport management educational background. Based on the nature of the responses from questions 4 and 5, the researchers determined that open-ended questions four and five were reported in such a way that thematic analysis was not necessary, which resulted in questions four and five being analyzed for response frequency (see Table 3 for questions 4 and 5). See table 4 for initial codes and sample quotes. Table 5 provides emergent themes and major subthemes of questions one, two, three, and six.

**Table 3**Frequencies of Participant Responses According to Open-Ended Questions

Open-Ended Questions (4 and 5)	n
What current student athlete mental health services are you aware of	being offered
on your campus?	
Sports Psychologist	16
Counselors/therapist	13
Not sure/hard to access	7
None	4
Counseling center/non-athlete specific services	4
Behavioral Therapy	1
School sponsored programs	5
Injury support group	1
What mental health services do you wish your athletic department wo	ould offer?
NA/ or no preference	13
Nothing we don't have	8
Mandatory meetings	3
Everything	1
Sport Psychologist	10
Group talks with other athletes	1
Therapist	7
Student appreciation	1
Mental toughness/education	4
Built in time for services	1
Sport specific services	1
Anonymous services	1

 Table 4

 Thematic Results Regarding Services Provided by Athletic Departments

Initial Codes	Sample Quotes
Overwhelmed	Workload, having so much physical work as well as mental between football and school weighs on you.
Depression/struggling	If I was really struggling and depressed, I would possibly seek help.
Don't want to go through something alone	When I am going through things that I can't go through alone. When I need that extra motivation to talk about the hard times.
To improve sport performance	Your mentality is a key aspect in your performance in your sport. I would seek help if it was affecting my performance on the field.
Being seen as soft	Because getting help can be seen as "soft" and is just seen as something that athletes don't do.
Didn't feel comfortable with services	You have to talk to someone that you may not trust; you might feel uncomfortable; the subject matter may be hard to talk about.
Don't have time	I wouldn't seek these services if I felt like I was too busy and it wouldn't fit into my schedule.
Don't trust the services	I wouldn't seek help if I felt I could control the situation myself or if I didn't trust the university resources. I think the last thing I would want to do is go talk to some face I've never met about my most personal issues.
Stigma	Because there can be a negative stigma with having mental health issues and sometimes one wouldn't want to be known for that.
Accessibility issues	I might not seek mental health services if I do not know they are available, or if I do not have enough time in my schedule.

 Table 5

 Emergent Thematic Results Regarding Services Provided by Athletic Departments

mergent Themes	Major Subthemes	
Overwhelm of Collegiate Athletics	Overwhelmed	
<u>-</u>	Depression/struggling	
	Don't want to go through something alone	
	Workload	
	Injury	
Mental Health Stigma in Athletics	Being seen as soft/babied	
	People finding out/checking in too often	
	Mental health stereotypes	
	Handle things by myself	
	Missing sport participation	
	Not being supported by significant others	
Services Demonstrate Inadequacy	No time	
	Don't know how to get services	
	Not sure if we have services	
	Don't trust the people	
	Not comfortable	
	Don't know services are available	
	Services aren't helping	

 Table 6

 Thematic Results Regarding Services Provided by Athletic Departments Defined

Emergent Themes	Definition
Overwhelm of Collegiate Athletics	Overwhelm of collegiate athletics refers to the way college student-athletes experience buildup of responsibilities that can induce stress, anxiety, depression, and poor sport performance. This overwhelm also refers to the workload that encompasses sports, academics, and social responsibilities that are unable to be balanced creating a feeling of being overwhelmed.
Mental Health Stigma in Athletics	Mental health stigma in athletics refers to the fear- based practice around admitting to any mental health issues as an athlete. There is fear around weakness, loss of athletic participation, loss of confidence, and victim blaming the athletes.
Services Demonstrate Inadequacy	Services demonstrate inadequacy encompassed the way that services are not accessible, athlete's schedules are not conducive with seeking help, and there is a systemic lack of trust between those providing the mental health services and the athletes.

#### CHAPTER V

# **DISCUSSION AND CONCLUSIONS**

The purpose of this study was to investigate the possible ways that reported of autonomy, competence, and relatedness need satisfaction predicted whether athletes would seek mental health services and identify how athletic identity plays into this relationship. Findings from this study established evidence about seeking mental health support and how this was predicted by factors that are specific to athletes, which can help athletic departments offer more effective resources to support collegiate athletes.

#### **Mental Health Services Utilization Themes**

When the responses to the open-ended questions about utilization of provided mental health services were analyzed using a thematic analysis approach, three main themes emerged:

(a) overwhelm of collegiate athletics, (b) mental health stigma in athletics, and (c) services demonstrate inadequacy.

The overwhelm that college life may induce is a known factor that can cause changes in mental health status for all college students. The addition of athletics to the already extreme lifestyle change college can create, may reasonably help explain the emergence of overwhelm as a reported theme. This emergent theme is confirmed by Brown et al. (2014) when considering that student-athletes have added stressors that are unique to their sub-population of college students. Overwhelm in the sport literature is often found when comparing athletes to their non-athlete peers, and in line with other research, overwhelm can cause stress unique to athletes in areas such as relationship stress (Wilson & Pritchard, 2005), academic stress (Humphrey et al.,

2000), and stress related to not enough sleep (Humphrey et al., 2000; Wilson & Pritchard, 2005). These reported stressors are all consistent with the reported findings in the current study. It is important for university athletic departments to be aware of the overwhelm that these student-athletes are reporting to provide the effective resources they need because collegiate student-athletes represent a population that is considered to have unique added stressors (Brown et al., 2014),

Athlete stigma is one of the biggest known barriers that hinders athletes from seeking any type of help when they are struggling. The reported answers leading to stigma being a theme that emerged in the current study supports what was expected from the open-ended questions because athletes have been taught their entire lives to be strong and "suck it up" or "push through". It is important to consider that as athletes get older, these ideas are often reinforced by significant others in every athlete's life. Being strong as an athlete, mentally and physically, is what will make them successful and win. This mindset is taught at such a young age, that when student-athletes get to college, they have this stigma associated with needing help is a weakness, and this is engrained in them which continues to be one of the largest barriers to seeking help. Consistent with findings from Watson (2006) and Kaier et al. (2015), athlete stigma has been found to reduce help-seeking behaviors and mental health services on college campuses. The findings from the current study support previous research in that collegiate student-athletes viewed athlete stigma as one of the biggest barriers to willingness to seek mental health support even if they are aware they need it.

Services demonstrating inadequacy emerged as the third theme from the open-ended questions. This theme also included the accessibility barriers presented to student-athletes when seeking help. Accessibility is one of the biggest challenges faced by society in every aspect of

people's lives from financial accessibility to physical accessibility. This theme, being a major barrier to part of general society, predictably emerged from this study. As a theme, services demonstrating inadequacy was also an indication of fears that college student-athletes may have regarding seeking help. This fear is different than overwhelm or athlete stigma because having fear around the services competency is indicative of the way the system is failing these athletes. It is not surprising that the theme of services demonstrating inadequacy emerged from the study because the system put in place for college student-athletes does not have the positive track record as far as effectively supporting these athletes. In order for provided mental health services to adequately demonstrate support, there needs to be a systemic change and trust built between the services and the athletes. Student-athletes knowing and predicting that provided mental health services may demonstrate inadequacy is coming from their personal historical experience with the services provided by their colleges, and if they do not have faith in the services, then their fear associated with the inadequacies of the services is justified. The student-athletes' lack of faith in these provided services supports the earlier mentioned facts that the NCAA only recently invested in a mental health task force to generate knowledge and resources to help collegiate student-athletes (Anderson et al., 2016). The 2016-time stamp on the investment aids the argument that historically the NCAA does not have adequate systemic support in place for college student-athletes to trust that the services that are provided are suitable to seek out and utilize.

# Collegiate Student-Athlete's Competence, Autonomy, and Relatedness

The mean scores for this sample of collegiate student-athletes' needs satisfaction of competence, autonomy, and relatedness were all relatively similar, with relatedness being slightly higher than the other two factors. This finding makes sense due to the nature of the

sample being the majority made up of team-based sports, rather than individual sports. The level of reported relatedness need satisfaction has been found to significantly impact subjective vitality when it comes to team sports (Reinboth & Duda, 2004), meaning a change in relatedness satisfaction can positively impact vitality and motivation when considering team sports specifically. The average of the three factors, all being similar, provided support for basic psychological needs theory in that all three factors were good contributors to predictions of motivation in a specific situation. Moreover, this is further demonstrated by the high reliability that was found for all three factors. The reliability of the factors was stronger within the current study than the original study that indicated the high significance of each factor as a predictor variable. Ng et al. (2011) reported average means for competence (m=5.78), autonomy (m=5.44), and relatedness (m= 6.18) which is consistent with the pattern of findings in the current study. The current study demonstrated an average of slightly lower means as compared to Ng et al. (2011), but the pattern of competence and autonomy being close in reported means and relatedness slightly higher was held consistent.

# **Research Questions**

# **Research Question One**

Q1 How do projections of collegiate student-athlete basic psychological needs satisfaction predict athletes' attitudes toward seeking mental health services by an athletic department?

The findings for determining how the level of basic psychological needs predicted attitudes toward seeking professional psychological help resulted in a significant linear relationship between competence, autonomy, and relatedness and predictive attitudes toward seeking help. The linear relationship was negative for all three predictor variables which indicated that as the predicted satisfaction for competence, autonomy, and relatedness increased,

then the predicted attitudes toward seeking professional psychological help decreased. This relationship makes sense due to the likelihood that the higher satisfactions of each basic psychological need the less likely individuals would have positive attitudes to seeking help. The inverse relationship also means the predicted attitudes toward seeking help increased as the projected need for competence needs were less satisfied. This inverse relationship was statistically significant for competence needs satisfaction as well as for autonomy and relatedness needs satisfaction. These findings are interesting because while the correlation statistics were mildly correlated, the p-values were very low demonstrating a very high significance between the factors.

The multiple regression analysis revealed an  $R^2$ = 0.348, meaning that 34.8% of predicted attitudes towards seeking professional psychological help was explained by the predictor variables which were competence, autonomy, and relatedness. The F-value= 8.528 (sig. <0.001) which indicated a statistically significant relationship between competence, autonomy, and relatedness and attitudes toward seeking professional psychological help. This relationship could be explained because the higher college student-athletes predicted their attitudes to seek help, the more they predicted satisfaction of basic psychological needs would be less satisfied, and therefore projected needs were lower. This finding demonstrated the significant inverse relationship found for all three factors of competence, autonomy, and relatedness needs satisfaction.

In the research, there is evidence that satisfaction of basic psychological needs is associated with psychological well-being (Deci & Ryan, 2000). If psychological well-being increases due to the satisfaction of basic psychological needs, this is consistent with the significant findings that an increase in perceived basic needs satisfaction will lower attitudes to

seek help because people are less likely to seek help when their psychological well-being is positive. The current study's findings also support results found by Britton et al. (2014) through demonstration that total basic psychological need satisfaction was associated with lower odds of suicidal ideation and risk for suicidal behaviors. With higher perceptions of need satisfaction, overall psychological well-being was found to be higher, so the need for seeking help will decrease indicating a decrease in attitude toward seeking professional psychological help.

The present study findings expand previous knowledge through drawing conclusions that satisfaction of basic psychological needs has an inverse relationship with attitudes toward seeking professional psychological help. Previous literature that compared these two specific variables was lacking, but there was previous research that can help pull the thread to draw significant conclusions from the current study. Previous literature can help create the supportive evidence needed to support the findings that these variables are significantly related, but there are still major gaps in the literature that need to be addressed in order to support the current study's findings.

# **Research Question Two**

Q2 What is the association between collegiate student-athletes' projections of basic psychological need satisfaction and their degree of athletic identity?

The correlation findings between predicted basic psychological needs satisfaction and athletic identity association indicated a positive linear correlation with only two basic needs factors resulting in statistically significant relationships; autonomy and relatedness. Competence did not indicate a statistically significant relationship with athletic identity. These findings indicate that athletic identity association is significantly correlated with predicted satisfaction of autonomy and relatedness. As athletic identity increases, the predictive satisfaction of autonomy and relatedness also increases linearly.

These present findings are not fully consistent with some previous research. A study done by Parker et al. (2022) examined athletic identity and basic needs satisfaction in the context of being a collegiate athlete through COVID. They found that competence and relatedness need satisfaction in sport were significantly associated with social-related athletic identity. The difference in contexts and type of athletic identity make it hard to draw comparisons between the two studies, but the literature on athletic identity and basic needs satisfaction is sparse. It has been found that athletes that have a higher basic need satisfaction are more likely to experience burnout (Gustafsson et al., 2017), and burnout can cause identity confusion (Erikson, 1968). Through these known ideas, it can lead to the conclusion that if basic psychological needs are not met, then there is potential for a negative impact to be taken out on the individual's identity. This conclusion is consistent with the findings in the current study for the general positive linear relationship between basic psychological needs and athletic identity.

Finding a positive linear relationship between these two variables expands our previous knowledge because conflicting results indicate that there is not enough research to draw a definitive conclusion. The literature regarding basic psychological needs satisfaction and athletic identity is not saturated with conclusive results to determine the impact these variables have on each other. The current study's findings are expansive in a way that leads to more research needing to be done.

# **Research Question Three**

Q3 What is the association between the degree of athletic identity association in relation to collegiate student-athletes' attitude toward seeking mental health Services?

The results from the current study revealed no statistically significant relationship between athletic identity and attitudes toward seeking professional psychological help. The r-

value was indicative of a negative correlation between the two factors leading to the idea that as one factor increases the other decreases. This would give way to athletes that have higher athletic identities, their attitude toward seeking help would decrease.

Previous research confirms this lack of statistical significance. A study done by Steinfeldt et al. (2009) used the same surveys as were used in the current study (AIMS and Attitudes Toward Seeking Professional Psychological Help) and found a negative correlation with no statistical significance, it is worth noting this previous study was done with high school student-athletes as compared to collegiate student-athletes.

This finding expands the previous knowledge not through a new finding, but through the entirety of the study. There was only one paper that was found for comparison, meaning there is a limited amount of research around athletic identity and attitudes toward seeking help. More research needs to be done using these variables, but for now, all research around these factors is expansive because of the lack of literature available.

#### **Limitations and Future Directions**

There are numerous limitations to consider with regard to the current study. The small sample size reflects challenges faced during data collection. There were 86 student-athletes who began the survey, but only 52 filled the survey out to completion. The online access to the survey lasted for 19 weeks and only resulted in 52 participants. There are challenges regarding mental health stigma in sport that perhaps was evident in the somewhat low sample size. There were also some social media correspondences that questioned the legitimacy of the survey, so participants who were directly messaged on social media may have thought the survey link was a scam or fake. Athletes also face the concern of any information getting back to their team or coach which may have deterred them from participating. The survey was originally made available in July

which is during the summer for most college-athletes, so they may not have checked their school email over the summer. Another limitation is the predictive nature of the survey. The athletes were asked to fill the survey out as if they were predicting or projecting their actions and feelings in a future circumstance. This could have proven to be difficult for some athletes and biased their answers based off how they would want to feel and act rather than how they actually would. A final limitation was the correlational design between variables, which limits the findings due to casual conclusions not being drawn.

A future direction for the study would be to utilize a longitudinal study design to follow collegiate athletes through their years of collegiate athletics and determine if the use or implementation of specific services changes their responses. The nature of mental health fluctuates overtime, so a longitudinal study would take those changes into consideration. A longitudinal study tracking the usage and effectiveness of specific services would help universities see which services may need more funding and support based off effectiveness.

# Conclusion

The current study was conducted for the purpose of exploring college student-athletes' projected basic psychological needs satisfaction and the association with attitudes toward seeking professional psychosocial help as well as athletic identity. The findings of this study warrant further research to be done due to the gap in academic literature. The gap in the literature inhibits comparisons to be made which would support or contrast the findings from the current study. It was found that college student-athletes' projected basic psychological needs satisfaction had an inverse and significant relationship with attitudes toward seeking professional psychological help. It was also found that reported autonomy and relatedness need satisfaction had a positive and significant association with strength of athletic identity. The current study holds great value

in helping set a foundation for future research. This research is critical to the success and well-being of the collegiate student-athletes because while it may be fun to view them as entertainment, they are young adults, human beings who need the support of their universities and athletic departments. The findings from this study have the potential to be used by athletic departments to help provide effective and adequate resources for each individual athlete based on their needs satisfaction. A bigger take away from this study for universities and athletic departments is to hear the call to action to help ease the overwhelm of collegiate athletics, help break athlete mental health stigma, and to provide services that are effective and adequate. The present study calls for future research to be done, moreover, it calls for universities and athletic departments to listen to their athletes and help on a systemic level.

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# APPENDIX A

# DEMOGRAPHICS AND OPEN-ENDED QUESTIONS

# **Demographics**

- Age: \_\_open ended, participants will fill in the number
- Year in school: freshman, sophomore, junior, senior, graduate student (choose one option)
- Gender: Male, Female, Non-binary/ third gender, prefer not to say (choose one option
- Ethnicity/race: Asian, Black/African, White/Caucasian, Hispanic/LatinX, Native American, Pacific Islander, Prefer not to say (choose one option)
- Sport: (choose one option)
  - Men's: baseball, basketball, cross country, golf, soccer, track and field
  - Women's: basketball, cross country, golf, lacrosse, soccer, softball, track and field, and volleyball
- Have you suffered a 2023-2024 season ending injury: yes or no (choose one option)
- Have you been diagnosed with a mental health illness: yes or no (choose one option)

# **Open Ended Questions:**

- What are some reasons you would seek student athlete mental health services? Why?
- What are some reasons you wouldn't seek student athlete mental health services? Why?
- What are some reasons you would stop seeking student athlete mental health services if you were receiving them? Why?
- What current student-athlete mental health services are you aware of being offered on your campus?
- What mental health services do you wish your athletic department would offer? Why?
- Is there anything else you want to share regarding seeking student athlete mental health services?

# APPENDIX B

# BASIC NEEDS SATISFACTION IN SPORT SCALE

### Part A Modified BNSSS

Please answer the questions below by keeping the following context in mind:

Answer the questions below as if you were attending mental health services provided by your athletics program, and project into the future about how it would create differences in each of the specific contexts created by each proposed statement:

"Mental health services" will be referenced in the surveys and by "mental health services", I am referring to any kind of workshop, therapy, group therapy, discussions, education session, etc, that are provided to you as an athlete by your University and Athletic Department.

- 1. After attending mental health services, I will be able to overcome challenges in my sport.
- 1- Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  - 2. After attending mental health services, I will be skilled at my sport
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree

  3. After attending mental health services. I will feel I am good at my sport.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  - 4. After attending mental health services, I will get opportunities to feel that I am good at my sport.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  - 5. After attending mental health services, I will have the ability to perform well in my sport
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  - 6. After attending mental health services, In my sport, I will get opportunities to make choices
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  - 7. After attending mental health services, In my sport, I will have a say in how things are done
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  - 8. After attending mental health services, In my sport, I will take part in the decision-making process
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  - 9. After attending mental health services, In my sport, I will get opportunities to make decisions
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree 10. After attending mental health services, In my sport, I will feel I am pursuing goals that are my own.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  11. After attending mental health services, In my sport, I will really have a sense of wanting to be there.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree 12. After attending mental health services, In my sport, I will feel I am doing what I need to be doing.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree

- 13. After attending mental health services, I will feel I participate in my sport willingly
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  14. After attending mental health services, In my sport, I will feel I am being forced to do things that I don't want to do.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree 15. After attending mental health services, I will choose to participate in my sport according to my own free will.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree 16. After attending mental health services, In my sport, I will feel close to other people.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree 17. After attending mental health services, I will show concern for others in my sport.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  18. After attending mental health services, there will be people in my sport who care about me.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
  19. After attending mental health services, In my sport, there will be people who I can trust.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree 20. After attending mental health services, I will have close relationships with people in my sport.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree

### Part B Original BNSSS

I can overcome challenges in my sport I am skilled at my sport I feel I am good at my sport. I get opportunities to feel that I am good at my sport. I have the ability to perform well in my sport

In my sport, I get opportunities to make choices In my sport, I have a say in how things are done In my sport, I can take part in the decision-making process In my sport, I get opportunities to make decisions

In my sport, I feel I am pursuing goals that are my own. In my sport, I really have a sense of wanting to be there. In my sport, I feel I am doing what I need to be doing.

I feel I participate in my sport willingly In my sport, I feel I am being forced to do things that I don't want to do. I choose to participate in my sport according to my own free will.

In my sport, I feel close to other people. I show concern for others in my sport.

There are people in my sport who care about me. In my sport, there are people who I can trust. I have close relationships with people in my sport.

7-point Likert scale (1= strongly disagree, 7= strongly agree)
Competence (1-5)
Autonomy- choice (6-9)
Autonomy- IPLOC (10-12)
Autonomy- volition (13-15)
Relatedness (16-20)

# APPENDIX C ATHLETIC IDENTITY MEASUREMENT SCALE

- 1. I consider myself an athlete.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
- 2. I have many goals related to sport.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
- 3. Most of my friends are athletes.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
- 4. Sport is the most important part of my life.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
- 5. I spend more time thinking about sport than anything else.
- $1-Strongly\ disagree,\ 2-Disagree,\ 3-Somewhat\ disagree,\ 4-Neither\ agree\ or\ disagree,\ 5-Somewhat\ agree,\ 6-Agree,\ 7-Strongly\ agree$
- 6. I need to participate in sport to feel good about myself.
- $1-Strongly\ disagree,\ 2-Disagree,\ 3-Somewhat\ disagree,\ 4-Neither\ agree\ or\ disagree,\ 5-Somewhat\ agree,\ 6-Agree,\ 7-Strongly\ agree$
- 7. Other people see me mainly as an athlete.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
- 8. I feel bad about myself when I do poorly in sport.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
- 9. Sport is the only important thing in my life.
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree
- 10. I would be very depressed if I were injured and could not compete in sport
- 1 Strongly disagree, 2 Disagree, 3 Somewhat disagree, 4 Neither agree or disagree, 5 Somewhat agree, 6 Agree, 7 Strongly agree

The AIMS consists of 10 items rated on a 7-point Likert scale (1= strongly disagree, 7= strongly agree), and a higher total score is interpreted as a more salient athletic identity.

### APPENDIX D

# ATTITUDES TOWARD SEEKING PROFESSIONAL PSYCHOLOGICAL HELP

#### **Modified Scale**

1. If I believed I was having a mental breakdown due to my sport, my first inclination would be to get professional attention within my athletic department (S)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

2. The idea of talking about problems with a sport psychologist strikes me as a poor way to get rid of emotional and sport specific conflicts. (R)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

3. If I were to experience a serious emotional crisis at this point in my life, I would be confident that I could find relief in a mental health service provided by my athletic department. (S)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

4. There is something admirable in the attitude of a person who is willing to cope with his or her sport specific conflicts and fears without resorting to professional help provided by their athletic program. (R)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

5. I would want to get psychological help from a sport psychologist if I were worried or upset for a long period of time relating to something about being a student athlete. (S)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

6. I might want to have sport-related psychological counseling in the future.

(S) 1-agree, 2-partly agree, 3-partly disagree, 4-disagree

7. A person with an emotional or sport specific problem is not likely to solve it alone; he or she is likely to solve it with professional help from a mental health service provided by the athletic department. (S)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

8. Considering the time and expense involved in sport related psychotherapy, it would have doubtful value for a person like me. (R)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

9. A person should work out his or her own sport-related problems; getting sports specific psychological counselling would be a last resort. (R)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

10. Personal and emotional troubles related to my sport, like many things, tend to work out by themselves. (R)

1-agree, 2-partly agree, 3-partly disagree, 4-disagree

Note. Straight items (S) are scored 3-2-1-0, and reversal items (R) 0-1-2-3, respectively, for the response alternatives agree, partly agree, partly disagree, and disagree

#### **Original Scale (for reference)**

- 1 . If I believed I was having a mental breakdown, my first inclination would be to get professional attention.
- 2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.
- 3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.
- 4. There is something admirable in the attitude of a person who is willing to cope with his or

her conflicts and fears without resorting to professional help.

- 5. I would want to get psychological help if I were worried or upset for a long period of time.
- 6. I might want to have psychological counseling in the future.
- 7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.
- 8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.
- 9. A person should work out his or her own problems; getting psychological counseling would be a last resort.
- 10. Personal and emotional troubles. like many things, tend to work out by themselves.

The sum of the 10 items: higher score showing more positive attitudes toward seeking professional mental healthcare.

# APPENDIX E

## INSTITUTIONAL REVIEW BOARD APPROVAL



### Institutional Review Board

Date: 05/27/2023

Principal Investigator: Megan Stellino

Committee Action: IRB EXEMPT DETERMINATION - New Protocol

Action Date: 05/27/2023

Protocol Number: 2305049502

Protocol Title: Athletic identity association and prospective basic psychological needs satisfaction predict attitudes of collegiate athletes toward seeking help from the athletic department

**Expiration Date:** 

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(702) (703) for research involving

Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

Category 3 (2018): BENIGN BEHAVIORAL INTERVENTIONS IN CONJUNCTION WITH THE COLLECTION OF INFORMATION FROM ADULT SUBJECTS through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection and at least one of the following criteria is met: (A) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (B) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or

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civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (C) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7). For the purpose of this provision, benign behavioral interventions are brief in duration,

harmless, painless, not physically invasive, not likely to have a significant adverse lasting impact on the subjects, and the investigator has no reason to think the subjects will find the interventions offensive

or embarrassing. Provided all such criteria are met, examples of such benign behavioral interventions would include having the subjects play an online game, having them solve puzzles under various noise conditions, or having them decide how to allocate a nominal amount of received cash between themselves and someone else. If the research involves deceiving the subjects regarding the nature or purposes of the research, this exemption is not applicable unless the subject authorizes the deception through a prospective agreement to participate in such research.

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

### As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:

- You wish to deviate from the described protocol and would like to formally submit a modification request. Prior IRB approval must be obtained before any changes can be implemented (except to eliminate an immediate hazard to research participants).
- You make changes to the research personnel working on this study (add or drop research staff on this
  protocol).
- At the end of the study or before you leave The University of Northern Colorado and are no longer
  a student or employee, to request your protocol be closed. \*You cannot continue to reference UNC
  on any documents (including the informed consent form) or conduct the study under the auspices of
  UNC if you are no longer a student/employee of this university.
- You have received or have been made aware of any complaints, problems, or adverse events that are related or possibly related to participation in the research.

If you have any questions, please contact the Interim IRB Administrator, Chris Saxton, at 970-702-5427 or via e-mail at <a href="mailto:chris.saxton@unco.edu">chris.saxton@unco.edu</a>. Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - <a href="http://hhs.gov/ohrp/">http://hhs.gov/ohrp/</a> and <a href="http://www.unco.edu/research-integrity-and-compliance/institutional-review-board/">http://www.unco.edu/research-integrity-and-compliance/institutional-review-board/</a>.

Sincerely, Michael Aldridge Interim IRB Administrator

University of Northern Colorado: FWA00000784

# APPENDIX F EMAIL TO PARTICIPANTS

Hello,

My name is Allie Zerr, and I am a Masters Student in Sport and Exercise Science at UNC leading a research project for my thesis at the University of Northern Colorado.

The purpose of this study is to investigate the possible ways that feelings of autonomy, competence, and relatedness need satisfaction predict whether athletes will seek mental health services and identify how athletic identity plays into this relationship. Student athlete participation in our study will help me evaluate and explore the ways in which I can use information about the satisfaction autonomy, competence, and relatedness to ensure student athletes are getting the support they need and deserve. By agreeing to the consent form, you are agreeing to participate in a 15-20-minute online survey on these topics.

Once you consent by clicking the arrow on the first page, it will take you directly to the survey.

Your responses to the questions will be anonymous and kept confidential. Your name and other information that could identify you will not be included in any portion of the study.

If you wish to participate, click on this link and fill out a quick form! This research will help UNC and other universities with their club sport programs.

Please feel free to reach out to me with any questions.

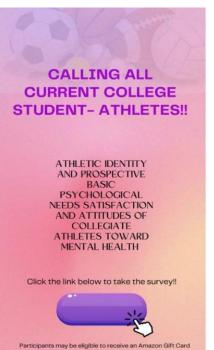
Thank you, Allie Zerr

Email: <u>Allie.zerr@unco.edu</u> Phone Number: 970-351-1893

# APPENDIX G SOCIAL MEDIA POSTING



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ATHLETIC IDENTITY AND
PROSPECTIVE BASIC PSYCHOLOGICAL
NEEDS SATISFACTION AND ATTITUDES
OF COLLEGIATE ATHLETES TOWARD
MENTAL HEALTH

RESEARCH OPPORTUNITY!

CLICK THE LINK IN THE CAPTION FOR THE SURVEY

Participants May Be Eligible to Receive a \$10 Amazon Gift Card

## APPENDIX H

## CONSENT FORM



Collegiate Athlete Mental Health: Athletic identity association and prospective basic psychological needs satisfaction predict attitudes of collegiate athletes toward seeking help from the athletic department

Researcher(s): Allie Zerr, Masters Student, Dr. Megan Stellino, Professor, Sport and Exercise

Science

Phone Number: 720-878-3665 Email: allie.zerr@unco.edu, megan.stellino@unco.edu

My name is Allie Zerr, and I am a Masters Student in Sport and Exercise Science at UNC leading a research project for my thesis at the University of Northern Colorado. Dr. Megan Stellino is the research advisor on the study. The purpose of this study is to look into the possible ways identifying basic psychological needs satisfaction can help athletes with their mental health, and identify the relationship athletic identity plays into these psychological needs. Student athlete participation in our study will help us evaluate and explore the ways in which I can use information about the satisfaction of psychological needs—autonomy, competence, and relatedness—to ensure student athletes are getting the support they need and deserve. By signing this consent form, you are agreeing to participate in a 15-20-minute online survey

regarding your basic psychological needs' satisfaction and athletic identity. I will take every precaution to protect your confidentiality. I will be asking for demographic data that includes year in school and sport, but I will not collect any specific induvial identifiable information. Data collected and analyzed for this study will be kept on a password-protected computer, which is only accessible by the researcher and advisor.

"Mental health services" will be referenced in the surveys and by "mental health services", I am referring to any kind of workshop, therapy, group therapy, discussions, education session, etc, that are provided to you as an athlete by your University and Athletic Department.

Potential risks in this project are minimal. Due to the nature of online data collection, there is the possibility of online data being hacked or intercepted. Anytime information is shared online there are risks. I are using a secure system to collect this data, but I can't eliminate this risk. You will receive no direct benefits from participating in this research study. After completion of the surveys, you will be able to enter a raffle to win a 1 of 50 \$10 Amazon gift card.

If you want to participate, please **CLICK THE ARROW BELOW**. Please fill out the entire surveyas honestly as possible. There are no right or wrong answers. Thank you for assisting me with my research.

Participation is voluntary. You may decide not to participate in this study and if you begin participation, you may still decide to stop and withdraw at any time. Having read the above and having had an opportunity to ask any questions, please click 'Next' below if you consent and would like to participate in this research. If you would like a copy of this form, you may print or screenshot it at this time. If you have any concerns about your selection or treatment as a research participant, please contact The Office of Research and Sponsored Programs, Phone: 970-351-1907, email: orsp@unco.edu.

(ARROW FOR NEXT PAGE)