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Understanding the Help-Seeking Behaviors of Student-Athletes: Effect of a

Multidisciplinary Healthcare Team and the Perception of Barriers and Facilitators for

Seeking Help

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A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

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Abstract

This study was aimed at identifying barriers and facilitators that influence help-seeking as well as the effect of implementing an integrated healthcare approach based on current recommendations. A total of 411 student-athletes from 18 intercollegiate teams at a midmajor Division I institution in the mid-Atlantic region completed a 12-item instrument comprised of ten quantitative items and two open-ended questions. The quantitative data was analyzed using SPSS software, and a constant comparative method was used to code responses from the open-ended questions. Findings suggested a prevalence of mental health challenges among student-athletes, especially overwhelming stress, struggles with time management, and anxiety. Female student-athletes seek help more often and are more satisfied with the care they receive from friends, teammates, and athletic trainers. Their male counterparts seek out peers and faculty members for support. There are also gender differences present in the perceptions of barriers and facilitators to seeking care. Qualitative findings were divided into positive help-seeking experiences, negative helpseeking experiences, and neutral/no help-seeking experiences. Conclusions drawn from this study include incorporating stronger and more frequent education on resources for student-athletes, coaches, support staff, and faculty members and establishing a peer support network within the athletics department.



CHAPTER 1

INTRODUCTION

College students are particularly susceptible to mental illness because they are at a transitionary period of their lives (NCAA, 2016). They are away from home for the first time and are not accustomed to the stress of a collegiate academic load. Students face social stressors including that of establishing and maintaining friendships and relationships with their peers. According to the Spring 2017 American College Health Association (ACHA) survey data, in the last 12 months 40.2% of college students reported feeling so depressed that it was difficult to function and 62% reported feelings of overwhelming anxiety (ACHA-NCH, 2017). Additionally, 44.8% of students reported feeling an above average level of stress (ACHA-NCHA, 2017). While traditional college student mental health is of concern, there is also a growing concern for the mental health of collegiate student-athletes. They face all of the challenges of a typical college student in addition to time constraints, an often-overwhelming schedule, and added pressure from their teammates, coaches, and competition. The mental health challenges of depression, anxiety, and overwhelming stress have been identified within the student-athlete population (Yang, Peek-Asa, Corlette, Chang, Foster, & Albright, 2007; Wolanin, Hong, Marks, Panchoo, & Gross, 2016).

If mental health challenges exist among student-athletes, it is unclear why they are still underrepresented in counseling centers' patient load. According to Prince (2015), there have been two specific trends on college campuses. One is that students seeking counseling services is increasing significantly. Another is that the illnesses documented are also increasing in severity (Prince, 2015). Despite these two trends, there is still a



discrepancy between those suffering from poor mental health and those who are receiving the health care they need. Student-athletes face several barriers when it comes to seeking help on college campuses (Gulliver, 2012; Lopez, 2013; Rensberg, 2011; Watson 2005, 2006).

Student-athletes focus on intellectual and social wellness, but pay less attention to physical and emotional wellness (Rensberg, 2011). Reasons contributing to that discrepancy are time, education, and the perception of others. The schedule of a typical college student-athlete must include time for practice and weight lifting, travel and competition days (that often result in missed classes), meetings with coaches, support staff, and medical personnel. It can be difficult to find time to dedicate to mental health care. If they are not educated properly on what resources are available and how to access those resources, they will be less likely to seek help. Lastly, with stigma being a significant barrier, all of those aforementioned people they come in contact with daily can potentially play a role in their help-seeking behaviors and attitudes.

Student-athletes' attitudes toward help-seeking are also influenced by their perceptions and expectations of what counseling will be like. The expectations of counseling were found to have a significant influence on whether student-athletes or their non-athlete peers would seek professional help for their mental health care (Watson, 2005). Because expectations play such a significant role in student-athletes' decisions to seek help, they also express preferences about the ideal counselor. Student-athletes show a preference for a counselor who is familiar with the culture of sport, the life demands associated with being a student-athlete, and often prefer someone who is older, but close



enough in age to relate to the life of a college student (Lopez & Levy, 2013; Watson, 2005).

The National Athletic Trainer's Association (NATA) published a consensus statement (Neal et al., 2013) outlining best practices for managing the mental health of student-athletes. The consensus statement discusses:

- 1. How to identify the behaviors of someone in distress
- 2. How injury could influence mental health
- 3. Incorporating a mental health screening in the pre-participation examination
- 4. Creating a routine and emergency referral protocol
- Establishing the appropriate relationships with the university's counseling and psychological services
- 6. Legal considerations in developing your plan

Kroshus (2016) examined how NCAA institutions were screening and identifying mental health concerns. Of the respondents, 39% reported that they had some form of written plan for identifying mental health needs in their student-athletes. However, about onethird of the sample did not screen for any mental health issues (Kroshus, 2016). Sudano and Miles (2017) assessed the mental health services provided at NCAA Division I institutions and found that 98% of the respondents reported mental health services available to their student-athletes. The majority of these services were provided by clinicians located in the university counseling center, although 26 reported they had mental health services provided on site in the athletic training room (Sudano & Miles, 2017).



The NCAA Sport Science Institute (2016) published recommendations on best practices for the management of student-athlete mental health. Four best practices were emphasized:

- 1. Clinical licensure of practitioners providing mental health care
- 2. Procedures for identification and referral of student-athletes to qualified practitioners
- 3. Pre-participation mental health screening
- 4. Health-promoting environments that support mental well-being and resilience (p. 6)

Each of these guidelines are strong recommendations for how to approach the mental health care of student-athletes.

Statement of the Problem

Despite recommendations for how to screen, evaluate, identify, manage, and support student-athletes suffering from mental illness, colleges and universities have still not established sufficient support structures within the athletics department (Neal et al. 2013; Kroshus, 2016). It is clear that college students and collegiate student-athletes are suffering emotionally and psychologically, and there is a disconnect between those suffering and those seeking help (Yorgason et al. 2008). There are still barriers that prevent student-athletes from seeking out the professional help they need. While efforts have been made to establish protocols and support systems, it is still unclear of their effect on the help-seeking environments on college campuses, especially in athletic departments.



T The purpose of this research was to identify attitudes surrounding help-seeking behaviors, barriers and facilitators of current collegiate student-athletes. This allows for the assessment of whether the implementation of a collaborative care team has influenced a positive help-seeking environment for student-athletes. A collaborative approach also allows for more holistic care of the student-athlete in distress. Instead of trying to figure out which "box" they fit into, input from each member of an integrated healthcare team would ideally allow for the most appropriate course of action when it comes to their treatment. This assessment will provide those responsible for mental health care with feedback on how to improve programs and services. Prior research has examined the prevalence of mental illness in a student-athlete population. Recommendations have been made on how colleges and universities should approach the mental health care of their student-athlete population, specifically encouraging an integrated, multidisciplinary approach. Research has also explored how colleges and universities are approaching mental health of student-athletes (Kroshus, 2013; Sudano & Miles, 2017). While research has examined the problems, and provided suggestions for solutions, research has not assessed the efficacy of following these recommendations and how programs that are in place can improve.

Significance of the Study

The literature recommends that the best method to handling mental health issues among student-athletes is to utilize a team approach (NCAA, 2016; Neal et al., 2013). This team should consist of those working in multiple disciplines that are involved with the care of student-athletes on campus. The literature also shows that there are still a



substantial number of universities with inadequate mental health services or a lack of education about services offered on campus (Kroshus, 2016; Sudano & Miles, 2017). At the institution within the current study, a screening process, a referral protocol, as well as a collaborative care team has been established to identify, refer, and manage those student-athletes that may be struggling with a mental or physical illness. The study will show the efficacy of establishing these systems and will provide those working within this team with information on how they are succeeding and how they can improve their services to best meet the needs of the student-athlete population.

Research Questions

The following research questions guided this study:

RQ1: What are the perceived barriers preventing help-seeking?

RQ2: What are the perceived facilitators enabling help-seeking?

- RQ3: Has the implementation of a multidisciplinary, collaborative care team and mental health protocol met the needs of current student- athletes?
- RQ4: What is the perception of the help-seeking environment that has been established in a NCAA Division I athletic department?

Definition of Terms

Barriers – A reason why a student-athlete would not seek professional help for a mental health challenge and may include thoughts, ideas, constructs, or people.
Facilitators – A reason why a student-athlete would feel encouraged to seek professional help for a mental health challenge; and could include thoughts, ideas, constructs, or people.



Help-Seeking Behaviors – A student-athlete's willingness and ability, or lack thereof, to seek out professional mental health care services.

Help – To give or provide what is necessary to accomplish a task or satisfy a need; contribute strength or means to; render assistance to; cooperative effectively with; aid; assist (https://www.dictionary.com). For the purpose of this study, "help" refers to any of the services or resources sought whether from a peer or professional.

Care – To provide physical needs, help, or comfort for; the provision of what is needed for the well-being or protection of a person or thing (https://www.dictionary.com). For the purpose of this study, "care" refers to the extent of services provided to the student-athlete.



CHAPTER 2

REVIEW OF THE LITERATURE

The mental health of collegiate student-athletes is a significantly growing concern. It is believed that student-athletes are at a decreased risk for mental illness because of their increased physical activity levels, team environment, and more established facilitators for help seeking. However, current research suggests that mental illness is under-diagnosed and quite prevalent in an athletic population (Reardon, 2010; Yang et al, 2007; Wolanin et al. 2012, 2016; Rao & Hong, 2016). Student-athletes have reported a variety of barriers to seeking help, such as lack of knowledge of mental disorders and their symptoms, not knowing when they should seek help, and worry about how they will be perceived by others (Gulliver, 2012). There have also been studies of student-athletes that suggest an inability to establish effective coping mechanisms has significant effects on student-athlete mental health (Mahmoud et al., 2012, 2015). Yorgason, Linville, and Zitzman (2008) explored the general college student population to understand the relationship between college students' mental health and their knowledge of on-campus resources. They found that students reported not having enough time, did not have adequate knowledge of services, were embarrassed to utilize services, and had doubts about services ability to help them.

Student-athlete's experience mental health challenges and are not seeking help because of social stigmas and other barriers prevalent on college campuses. In order to provide more comprehensive care to those who are struggling, independent researchers, the NATA, and the NCAA have published recommendations and guidelines so that mental illness can be identified, evaluated, and treated in an appropriate, safe, and



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supportive manner for the student-athlete (Fletcher, Benshoff, & Richburg, 2003; Kroshus, 2016; NCAA, 2016; Neal et. al 2013).

Mental Health Concerns of Collegiate Student-Athletes

The first step in addressing student-athlete metal health is understanding the prevalence of the mental health challenges they face. According to Reardon (2010), athletes often under-report mental illness because of an atmosphere of mental toughness associated with athletics. It is also often difficult to diagnose mental illness in an athletic population because the practitioner must acknowledge the demands of being a college athlete and stressors specific to their sport while remembering to separate the athlete from their athletic person (Reardon, 2010). Despite this, the prevalence of mental illness in the student-athlete population is apparent. Wolanin, Gross, and Hong (2015) found that injury, sports performance, end of sports career, and the culture of athletics all contribute to the symptoms and prevalence of depression. Yang et al. (2007) found that 21% of student-athletes surveyed reported significant symptoms associated with depression. These symptoms were also associated with high scores of state anxiety and trait anxiety. Similarly, Wolanin et al. (2016) found that 23.7% of student-athletes were found to be experiencing clinically significant levels of depressive symptoms. A survey of sports medicine practitioners showed that 80% of team physicians reported some experience discussing emotional and or behavioral problems with their student-athlete patient population (Mann, 2015). These statistics show that mental illness in the athletic population is not only prevalent but substantial.

A survey of sports medicine physicians found that 80% of respondents had reported some type of frequent discussion with patients about emotional and/or behavioral problems



(Mann, 2015). The topics they discussed most often included stress, pressure, anxiety, family and relationship problems, disordered eating, disordered body image, and depression (Mann, 2015). The research discussed in this section identifies the mental health challenges faced by college students and college student-athletes. The prevalence of these issues is quite considerable. See Table 1 for a summary of the literature on college student-athlete mental health.



Table 1

College Student Athlete Mental Health

Author	Purpose	Instrument	Participants	Procedure	Main Findings
"The Relationships of Coping, Negative Thinking, Life Satisfaction, Social Support, and Selected Demographics With Anxiety of Young Adult College Students"	The purpose of this study was to synthesize theoretical explanations of anxiety into an integrated model and evaluate it through a sample of college students.	Depression Anxiety Stress Scales; Brief Cope Inventory; Brief Students' Multidimensional Life Satisfaction Scale; Positive Automatic Thoughts Questionnaire; Cognition Thoughts Checklist; Multidimensional Scale of Perceived Support	N= 257; n=166 female and n=229 male	This study was a cross sectional online survey. 4,000 undergraduate students were randomly selected and were emailed the survey to complete.	Social Support, life satisfaction, positive thinking, and adaptive coping were inversely related to anxiety. Negative thinking and maladaptive coping were associated with higher levels of anxiety.
Mahmoud, Staten, Lennie, & Hall (2015)					
"The Relationship among Young Adult College Students' Depression, Anxiety, Stress, Demographics, Life Satisfaction, and Coping Styles" Mahmoud, Staten, Hall, & Lennie (2012)	The purpose of this study was to look at the relationship of depression, anxiety, and stress and related demographics, life satisfaction, and coping strategies. The study also tried to determine the main predictors of depression, anxiety, and stress and their influence on each of the factors.	Depression Anxiety Stress Scale; Brief COPE Inventory; Brief Students' Multidimensional Life Satisfaction Scale	N=508	This study was a secondary analysis of a research study that was completed in 2007. Surveys were mailed to 1,700 undergraduates by mail.	29% of the students were depressed, 27% of the students were anxious, 24% were stressed. Higher depression scores were seen in sophomores. Students with roommates were less depressed/anxious/stressed than those who lived alone. Students who were religious were less stressed than those who were not. Students who used maladaptive coping strategies reported significantly higher levels of depression and anxiety.
"A Survey of Sports Medicine Physicians Regarding Psychological	The purpose of this study was to determine the types of psychological issues that sports		N=827 respondents: 386 orthopedic surgeons, 255 family	4347 physician members were contacted via email to complete the online survey. A	80% of respondents reported that they had some type of frequent discussion with their patients about emotional and/or behavioral problems with their

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Issues in Patient- Athletes" Mann (2015)	medicine practitioners are most commonly presented with. It also looked at how each of these practitioners managed psychological issues.		physicians, 32 pediatricians, and 83 "other"	total of 827 respondents completed the study and were included in the study.	patient-athletes. The most frequent topics discussed were stress/pressure, anxiety, family/relationship problems, disordered eating or disordered body image, and depression.
"Understanding depression and suicide in college athletes: emerging concepts and future directions" Rao & Hong (2016)	The purpose of the article was to discuss the prevalence of depression and suicide in a collegiate athletic population. Risk factors and management of mental health concerns were discussed.	None	None	None	The study presented the facts that male African American college athletes are at an increased risk for suicide and that female college athletes are more likely to report depressive symptoms and less likely to complete suicide. Strong efforts have been put forth to screen and recognize psychological disorders however, there is still ground to cover when it comes to discussing mental health and establishing protocols to guide referrals and treat those in distress. They emphasize the NCAA best practices that suggest implementing a multidisciplinary team.
"Prevalence of clinically elevated depressive symptoms in college athletes and differences by gender and sport" Wolanin, Hong, Marks, Panchoo, & Gross (2016)	This research study was completed to investigate the prevalence of clinically relevant symptoms of depression in collegiate athletes over a period of three years.	Center for Epidemiological Studies Depression Scale	N=465 NCAA DI athletes; 199 male and 263 female	Participants were recruited at the time they were receiving their sports physicals. Those who chose to participate completed the outcome measure at some point throughout the course of their physical examination.	The prevalence of clinically relevance symptoms of depression among collegiate athletes was 23.7%. The highest depression prevalence was found in track and field with the lowest being found in lacrosse. When comparing gender, females (28.1%) showed significantly higher rates of depressive symptoms than males (17.5%).



"Athletic Participation and Wellness: Implications for Counseling College Student- Athletes" Watson & Kissinger (2007)	The purpose of this article was to assess the effectiveness of a wellness approach when working with student-athletes.	Five Factor Wellness Inventory	N= 157 undergraduate students; 62 student-athletes and 95 non- athletes	Participants were recruited for the study over the course of two semesters.	They found significant differences between student-athlete groups and non-athlete groups. The non-athlete group reported higher wellness scores. This study supports the method of adopting a wellness approach in the counseling of collegiate student-athletes. There should be a focus on the social interactions of student-athletes with their environments and athletic identity. Allowing student-athletes to discover how to identify themselves beyond athletics is crucial.
"Depression in Athletes: Prevalence and Risk Factors" Wolanin, Gross, & Hong (2015)	The purpose of this study was to review current literature on the relationship between depression in athletes and possible risk factors that may contribute to depressive symptoms.	None	None	None	This review found that the prevalence of depression among athletes is significant, but research is also inconsistent. There have been several studies looking at the relationship between sports injury and depression, most finding a strong relationship between the two, specifically including concussion and overtraining syndrome. Loss of athletic identity following career termination was found to be associated with depression, anxiety, and maladaptive coping mechanisms. They also explored the phenomenon of underreporting of symptoms. Lastly, they discussed how college athletes are just as susceptible to suicidal ideation, attempts, and completion as the regular population for that age group.
"Prevalence of and Risk Factors Associated With	The purpose of this study was to discuss the prevalence of	Center for Epidemiological Studies	N=257; 13 NCAA D1 teams	This study was part of a baseline survey for a prospective cohort	21% of participants reported significant scores on the CESD that indicate symptoms of depression.



Symptoms of Depression in Competitive Collegiate Student Athletes" Yang, Peek-Asa, Corlette, Cheng, Foster, & Albright (2007)	symptoms of depression among collegiate student athletes and how different individual factors affect these symptoms.	Depression Scale; State- Trait Anxiety Inventory	6 mens and 6 womens, 1 coed	study that was investigating the recovery post-athletic injury. The cohort used was from a Big Ten university. With the approval of their coaches, student- athletes were given surveys to complete during preseason team meetings.	Median scores of trait and state anxiety were lower than median scores for traditional college students. Athletes who reported symptoms of depression were associated with higher scores of state and trait anxiety.
"Mental Health Among College Students: Do Those Who Need Services Know About and Use Them?" Yorgason, Linville, & Zitzman (2008)	The purpose of this study was to assess college students knowledge of mental health resources on their campus and understand the relationship between mental health, knowledge of services, and use of those services.	Outcome Questionnaire (OQ-45.2); Question about knowledge of services; question about whether knowledge of services was adequate; How they learned about services; Whether or not they used services; Why they had or had not used services; and what would prevent them from using services.	N= 266 college students	Students from an eastern US university were sent a recruitment email where they were asked to complete the anonymous online survey.	37% of respondents reported having inadequate information about mental health services, therefore feeling unable to seek them out. 30% of respondents had never heard of services. 38% had heard of services but did not have any further knowledge about them. 17% of respondents had used services. They found that living on campus and more years in college were predictive of mental health services usage. The reasons they found that students were not using services were because of insufficient time, lack of education of services, and that they did not believe services would help.



Help-Seeking Behaviors

To understand why there is a discrepancy between those suffering from mental health challenges and those receiving care and support for those challenges, it is helpful to understand service utilization trends and the barriers and facilitators to seeking help. Prince (2015) found two trends of mental health service use on college campuses. Not only is the number of students seeking help for mental illness increasing, but the severity of their challenges is increasing as well. Over the past 10 years, counseling centers saw a 15% increase in the rate of treatment and diagnosis, an increase in service utilization, and a decrease in perceived and personal stigma (Lipson, Lattie, & Einsberg, 2017).

Additionally, help-seeking behaviors differ among collegiate student-athletes and non-athletes. While there is not much difference in the number of people seeking help, the barriers they face are different. According to Gulliver, Griffiths, and Christensen (2012), the top three barriers to seeking help were: a) Not knowing enough about mental illnesses or how to recognize symptoms; b) Not knowing when they should seek help; and c) Fear of how others would perceive them. Barriers to attaining optimal wellness include peer pressure, culture and ethnic background, lack of funds, and poor scheduling of events (Rensberg, 2011). A difference in barriers plays a role in the attitudes and behaviors student-athletes exhibit towards seeking professional counseling help when they struggle with their mental health. Watson (2005) found that when compared to their non-athlete peers, student-athletes had less positive attitudes and expectations toward counseling. Daltry, Milliner, and James (2018) found that both men and women's expectations and personal commitment to counseling influence their attitudes about the counseling experience (Daltry, Milliner, & James, 2018).



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Gulliver, Griffiths, and Christensen (2012) also discovered several facilitators to help-seeking. These include already having an established relationship with a healthcare professional, having an awareness of one's emotions and knowing how to express them, and those surrounding the student-athletes exhibiting a positive attitude toward seeking help (Gulliver, Griffiths, & Christensen, 2012). Moreland, Coxe, and Yang (2017) were also able to identify a multitude of facilitators found in the studies included in their review. Some of these include positive expectations of counseling; appropriate referral from parent, athletic trainer, coach, teammate, or administrator; and ease of access to support services (Moreland, Coxe, & Yang, 2017). See Table 2 for a summary of literature on help-seeking behaviors.



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Table 2

Help Seeking Behaviors

Author	Purpose	Instruments	Participants	Procedure	Main Findings
"Understanding Gender Differences in Collegiate Student- Athletes' Help-Seeking Behaviors and Attitudes Toward Counseling" Daltry, Milliner, & James (2018)	This study looks to investigate what athlete specific factors may impact their attitudes and expectations about counseling along with examining the influence of athletic identity. They examined barriers to seeking counseling services.	Demographic questions, Expectations About Counseling Questionnaire, Attitudes Toward Seeking Professional Help Scale, Athletic Identity Measurement Scale	N= 414 student- athletes, N=215 female, N=195 male, N=4 transgender	A questionnaire consisting of each measure was distributed to athletic teams at predetermined meeting times.	Results showed that both mer and women expectations about counseling significantly predicted one's attitudes toward seeking professional help. Also, one's personal commitment to counseling predicted attitudes toward seeking help. For women, athletic identity was significantly related to their expectations about counseling. However, athletic identity did not significantly influence attitudes toward seeking help.
"Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study" Gulliver, Griffiths, & Christensen (2012)	The purpose of this study was to report perceived barriers and facilitators for help- seeking behaviors in young elite athletes. It specifically focused on the mental health conditions of depression, anxiety, and general emotional stress.	Focus group interviews	Three focus groups (n= 2,5,8); N=15 elite athletes		Major themes found in the focus group discussions were related to performance, sport related injuries, athlete appropriate behavior, weight control, and lifestyle issues.
"Athletes Connected: Results from a Pilot Project to Address Knowledge and Attitudes About Mental	The purpose of this study is to promote the current understanding of mental health culture in a collegiate student-athlete	Pre-and post surveys were administered.	N= 626 varsity collegiate student- athletes at the same university	The Athletes Connected team presented an educational overview of mental health related to student-athletes, showed two brief testimonial videos, had	The study found that post intervention: Student-athletes were more comfortable discussing mental health with their teammates, felt more confident in their abilities to identify signs and symptoms



Health Among College Student-Athletes" Kern, Heininger, Klueh, Salazar, Hansen, Meyer, & Eisenberg (2017)	population. A second goal is to assist in the direction of future research based on the outcomes of the study.			actual student-athletes discuss their struggles first hand, and facilitated an open discussion with former student-athletes.	in a struggling teammate, and felt more confident in their ability to assist a teammate in seeking out the appropriate resources.
"Increased Rates of Mental Health Service Utilization by U.S. College Students: 10- Year Population Level Trends (2007-2017)" Lipson, Lattie, & Eisenberg (2017)	The purpose of this study was to determine whether an increase in prevalence of mental health challenges translates to an increase of mental health service utilization.	Patient Health Questionnaire-2	N=155,026	The Healthy Minds Study is an annual web- based survey that is distributed to undergraduate and graduate students.	They found that mental health challenges are prevalent at large institutions, public, and nonresidential communities. Resource utilization is the lowest at large, public, nonresidential institutions with low graduation rates. There are links between different university characteristics and mental health service utilization. Factors influencing those connections include the availability of resources and social capital.
"Student Athletes' Perceived Barriers to and Preferences for Seeking Counseling" Lopez & Levy (2013)	The purpose of this study was to examine student-athletes' perceived barriers to seeking help from professional counseling services as well as preferences of counselor attributes.	Barriers to Help- Seeking Checklist; Counseling and Psychotherapy Preferences Questionnaire	N=165 NCAA DI athletes.	197 NCAA DIA and DIAA athletic departments were contacted through email with a request to participate in this study.	The most common perceived barriers to seeking help were time constraints, social stigma associated with mental illness or seeking help for mental health care, and the perceptions that others would have of them for seeking mental health care. There was preference shown for a counselor who had a strong understanding of the culture of sport and the life demands associated with being a student-athlete. Respondents had neutral opinions on the



					race/ethnicity and gender of their counselor. Respondents preferred to have a counselor that was older than them but close enough in age to still relate to what they experience as college students.
"Collegiate athletes' mental health services utilization: A systematic review of conceptualizations, operationalization, facilitators, and barriers' Moreland, Coxe, & Yang (2017)	The purpose of this review was to analyze and synthesize the current literature concerning collegiate athltes' utilization of mental health services, including the barriers and facilitators to seeking those services.	None	N= 21 articles		This study looked at the barriers and facilitators across multiple studies existing in current literature. They created a comprehensive list based on the results of 21 articles They differentiated them based on athlete, parent, teammate, coach, athletic trainer, and administrator. Distinguishable barriers include gender, perceived stigma, peer norms, and
"University student counseling and mental health in the United States: Trends and challenges" Prince (2015)	The purpose of this article was to review the previous and current trends of mental health services on college campuses in the United States.	None	None	None	service availability. They found two specific trends: students seeking out counseling services is significantly increasing and the severity of the mental health challenges they are seeking help for are also increasing. However, even with dramatic increases in the prevalence of mental illness, students still are not seeking help from professional counselors or counseling services. They also emphasize the importance of forming committees dedicated to discussing students of concern. They also discuss keeping lines of



			N 00 1		communication open for those who interact with those students on a regular basis so that they can receive the best care possible.
"Exploring wellness practices and barriers: a qualitative study of university student- athletes" Rensburg, Surujlal, & Dhurup (2011)	The purpose of this study was to examine the different aspects of wellness among college student athletes as well as the perceived barriers that they feel prevents them from achieving healthy levels of overall well-being.	Semi-structured open- ended focus group interviews. The interview guide was based on previous relative research studies.	N=32; there were four focus groups with 8 participants in each, each group included male and female student athletes	Four focus groups met for semi-structured interviews that lasted between 40 and 60 minutes. The interviews were done during training sessions on their practice fields.	They found that when it came to overall wellness, student athletes struggled with adjustment to college life. Student-athletes paid the most attention to their intellectual wellness, specifically making sure that they put the majority of their efforts into their academics. Social wellness was another main focus of the student- athletes, specifically time spent with friends, church, and support from their families. The findings on physical wellness were interesting because they actually did not pay much attention to it. Specifically, they said they were aware of the importance of factors such as sleep and nutrition but did not actually execute those skills well. They reported that they maintained their emotional wellness through self-perception and how they were perceived by others. Barriers to attaining optimal wellness included peer pressure, culture and background, lack of funds, and poor scheduling of events.



"College Student Athletes' Attitudes Toward Help-Seeking Behavior and Expectations of Counseling Services" Watson (2005)	The purpose of this research article was to assess the attitudes that student-athletes had toward seeking professional help for their mental health and the expectations they had of counseling services.	Expectations About Counseling – Brief Form; Attitudes Toward Seeking Professional Psychological Help Scale; demographic questionnaire	N=267 students of all academic levels; N=135 student-athletes and N=132 non- athletes.	Professors were contacted to administer the surveys during designated class time. Coaches were contacted to administer surveys during designated team practices.	There were significant differences between stent- athletes and non-athlete's attitudes toward help-seeking behavior and expectations of counseling. It was also found that the expectations they had of professional counseling had an impact on the attitudes they had toward help-seeking behaviors. They also discussed the importance of having counselors on staff who understand the culture of college athletics and experiences of college athletes. They also discussed using a collaborative team approach to providing care for student athletes to achieve the best results.
"Student-Athletes and Counseling: Factors Influencing the Decision to Seek Counseling Services" Watson (2006)	This study looked at influencing factors that play a role in the help-seeking behaviors of student- athletes (SA). They make a specific comparison to non- athletes (NA). This study was done to update previous research in this area.	Participants were given a specific questionnaire that was developed for this study. The questionnaire included demographic questions and a question asking about reasons for not seeking counseling services.	N= 267 participants; 135 in the student-athlete group; 132 in the comparison group	Student athletes completed questionnaires during designated practice times. Non-athletes completed questionnaires during designated class times.	The article began by discussing internal and external forms of resistance that could influence SA help- seeking behaviors. The results showed that there was a difference in which factors influenced seeking help between the SA and NA groups. The most common reasons for not seeking help among SAs were no need, personal discomfort, perceptions of others, and time. The most common reasons for NAs were perceptions of others, no need, personal reasons, and



personal discomfort. The
biggest difference between
the two groups was that time
was a significant influencing
factor for the SA population.



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How to Address Mental Health Concerns in Student-Athletes

There are guidelines in the literature that provide suggestions and recommendations for how sports medicine and other support staff should manage mental health concerns. Specifically, the NATA and NCAA released documents with extensive recommendations for how to best manage the mental health concerns of collegiate student-athletes (Neal et al., 2013; NCAA, 2016). The literature suggests establishing a multidisciplinary team to assess the needs and provide services so that student-athletes are receiving more comprehensive care.

In 2016, the NCAA released a consensus statement titled "Mental Health Best Practices: Understanding and Supporting Student-Athlete Mental Wellness" (NCAA, 2016). This document provides a guideline and recommendation on how athletic departments can best serve and support their student-athletes' mental well-being. In the document, it outlines four best practices:

- 1. Clinical licensure of practitioners providing mental health care
- Procedures for identification and referral of student-athletes to qualified practitioners
- 3. Pre-participation mental health screening
- 4. Health-promoting environments that support mental well-being and resilience

Section One discusses the importance of having specific providers who are licensed in providing mental health services. It is common that a student-athlete would seek out a specialist for an injury to the shoulder or knee to ensure the best care. Similarly, it is crucial to see a specialist for mental health. An interdisciplinary team should also be



established to allow for a better continuum of care for the student-athlete. Section Two discusses the importance of creating a "mental health emergency action and management plan." This plan should outline when and to whom an appropriate referral should be made in an emergency situation. It educates those working with athletes of the signs and symptoms to be aware of to better recognize emergency situations. Section Three recommends the implementation of a mental health screening tool into the preparticipation examination. Based on that screening, appropriate referral procedures should be established.

The final section focuses on education and promoting a positive help-seeking environment. It should be the goal of those associated with student-athletes (e.g., coaches, support staff, peers) to create an environment where it is safe and encouraged for staff and student-athletes to communicate about mental health and mental health concerns. Resources should be made readily available and easily accessible for studentathletes to educate themselves and each other on warning signs of mental illness, how to identify and intervene with themselves and their teammates, and the importance of selfcare. Similar resources should also be made available to those working with the athletes, especially coaches and faculty representatives. They should be aware of signs and symptoms as well as when and how to intervene appropriately. They should also commit to creating a positive team culture so that student-athletes feel safe and supported (NCAA, 2016). See Table 3 for further information.



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Table 3.

Author	Purpose	Instruments	Participants	Procedure	Main Findings
"A Systems Approach to Understanding and Counseling College Student-Athletes" Fletcher, Benshoff, & Richburg (2003)	The purpose of this article was to provide college counselors with information about the dynamic of college athletics so that they can better understand and provide the best care to college student-athletes.	None	None	None	The article discusses how the NCAA, individual institutions, and the athletic departments within those institutions has influence on the care student- athletes receive. Counselors should familiarize themselves with NCAA regulations, understand the standards they are being held to at their individual institutions, and understand the resources provided to them as well as the norms within each athletic department. They must also understand the different team dynamics among each sport and the different roles athletes are expected to play based on their place on the team.
"Variability in Institutional Screening Practices Related to college Student-Athlete Mental Health" Kroshus (2016)	The purpose of this study was to assess how NCAA institutions were screening and identifying mental health concerns in the student-athlete population	Questions were asked in 4 categories: sports medicine department policy, pre- participation examination screening, other screening initiatives, and institutional characteristics	N=365 head AT's or team physicians	A Questionnaire was sent out via email to 1076 NCA institutions trying to reach the head AT or team physician	Results showed that 38.3% of sports medicine departments had a clinical psychologist on staff. 39% of respondents reported that their institution had an implanted written plan for identifying mental health challenges in their student-athletes. The majority of respondents reported that their PPE included questions about previous eating disorders, depression, or anxiety. However, less than half indicated screening procedures for current symptoms of disordered eating, depression,

Recommendations for the Mental Health Care of Student-Athletes



					or anxiety. About 1/3 of the sample did not screen for any mental health issues. This study shows the variability in screening procedures among NCAA level institutions.
"Inter-Association Recommendations for Developing a Plan to Recognize and Refer Student-Athletes With Psychological Concerns at the Collegiate Level: An Executive Summary of a Consensus Statement" Neal, Diamond, Goldman, Klossner, Morse, Pajak, Putukian, Quandt, Sullivan, Wallack, & Welzant (2013)	The purpose of this article is to provide recommendations for managing mental health concerns of collegiate student-athletes.	None	None	None	The consensus statement discussed the behaviors to identify of someone experiencing mental distress; different circumstances such as injury that could influence student-athlete mental health; the importance of a mental health; the importance of a mental health screen in PPEs; the importance of creating a referral protocol, how to approach an athlete of concern, and establishing relationships with counseling services; confidentiality; emergency referral steps; catastrophic incident concerns; and legal considerations in developing your mental health protocol plan.
"Mental Health Services in NCAA Division I Athletics: A Survey of Head ATCs" Sudano & Miles (2017)	The purpose of this research study was to assess the mental health services at NCAA DI institutions and how accessible they were to student-athletes.	The study used a quantitative online survey which consisted of 31 questions.	N=127 head athletic trainers at NCAA DI schools.	The web-based survey that was created through Qualtrics and sent to 336 head athletic trainers at NCAA DI institutions.	98% of respondents reported that student-athletes had access to a mental health services. The majority of them noted that the mental health services were provided by clinicians located in a counseling center. 26 ATCs reported that they had mental health services available in site in the athletic training room. Out of 127, only 54 used a screening tool to assess for mental health challenges. Ultimately the article suggests that more research be done to discover how NCAA institutions can implement



integrated health care for the
betterment of their student-
athlete populations.



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Literature Overview

Sudano and Miles (2017), Neal et al. (2013), Fletcher, Benshoff, and Richburg (2003), and Watson (2005, 2006) suggest that colleges and universities can better serve their student-athlete population when it comes to mental health. Best practices on screening, recognition, evaluation, and treatment of mental illnesses have also been published by the NCAA (2016). However, a significant portion of the student-athlete population still reports facing challenges in managing their mental and emotional wellbeing (Mahmoud, Staten, Hall, & Lennie, 2012; Wolanin, Hong, Marks, Panchoo, & Gross, 2016; Yang et al., 2007). With recommendations to increase resources, improve education on counseling services, and promote efforts to reduce stigma, one might assume that the population of student-athletes struggling would be decreasing. However, Prince (2015) reported trends that have shown more college students are suffering from mental illness and those mental illnesses are gradually increasing in severity. Despite these trends, student-athletes remain underrepresented in counseling centers and are not seeking professional mental health care (Prince, 2015). Their reasons for not seeking help include time constraints, lack of education of resources, how to know when to use those resources, and the fear of how they will be perceived by others.

Purpose Statement

The purpose of this research was to identify attitudes surrounding help-seeking behaviors, barriers and facilitators of current collegiate student-athletes. This allows for the assessment of whether the implementation of a collaborative care team has influenced a positive help-seeking environment for student-athletes. A collaborative approach also allows for more holistic care of the student-athlete in distress. Instead of trying to figure



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out which "box" they fit into, input from each member of an integrated healthcare team would ideally allow for the most appropriate course of action when it comes to their treatment. This assessment will provide those responsible for mental health care with feedback on how to improve programs and services. Prior research has examined the prevalence of mental illness in a student-athlete population. Recommendations have been made on how colleges and universities should approach the mental health care of their student-athlete population, specifically encouraging an integrated, multidisciplinary approach. Research has also explored how colleges and universities are approaching mental health of student-athletes (Kroshus, 2013; Sudano & Miles, 2017). While research has examined the problems, and provided suggestions for solutions, research has not assessed the efficacy of following these recommendations and how programs that are in place can improve.

Research Questions

The following research questions guided this study:

- RQ1: What are perceived barriers preventing help-seeking?
- RQ2: What are perceived facilitators enabling help-seeking?
- RQ3: Has the implementation of a multidisciplinary, collaborative care team and mental health protocol met the needs of current student- athletes?
- RQ4: What is the perception of the help-seeking environment that has been established in a NCAA Division I athletic department?



CHAPTER 3 METHODOLOGY

Research Design

The study employed a survey research design along with two open-ended questions. Quantitative results provide insight about trends and relationships of variables while qualitative results provide insight to the perspective of the individual participant in the study (Creswell, 2015). These allowed the researcher to gain multiple points of data surrounding mental health service utilization. The qualitative portion of the study was the open-ended questions asked on the survey. These open-ended questions allowed the participant to expand on their quantitative responses and provide insight into their thoughts and feelings surrounding the topic of mental health.

Research Procedure

Research site. Recommendations by the NATA and NCAA exist to establish a holistic, multidisciplinary, and innovative team of professionals with a focus of integrated health and sport performance. The focus should be a collaboration of services with an emphasis on communication. This model is used at the institution where data was collected for this study, a mid-sized public university in the mid-Atlantic region of the United States. This institution is a member of the NCAA Division I. The researcher is a member of the athletics staff and had access to all student-athletes because of this relationship to the department. The researcher had support from the director of sports medicine who facilitated access to student-athletes.

Study participants. Participants in the study included 411 student-athletes from each of the university's 18 intercollegiate teams. Participants of the study were recruited



through non-probability sampling (Leman, 2010). The sample aimed to include the entire student-athlete population consisting of approximately 450 individuals. These student-athletes were identified through team rosters and through communication with coaching staff. Only those 18 years or older were eligible for participation. Consent forms were included with each survey and participation was entirely voluntary.

Access

After Institutional Review Board approval was obtained, the researcher moved forward with the data collection process. The researcher spoke at the first head coaches meeting in the fall to inform coaches about the project and make them aware that they would be contacted. The researcher then coordinated meetings with each intercollegiate team to administer the survey. During the head coaches meeting, the director of sports medicine and sport psychologist offered support for the research project. Their support assisted in allowing the researcher access to each team. The director of sports medicine facilitated access with one team. Athletic training students assisted the researcher with the administration of the survey by distributing questionnaires and then collecting upon completion.

Instrument

A questionnaire was used to assess the knowledge and attitudes of mental health services, help-seeking behaviors of collegiate student-athletes, and what their barriers and facilitators were to seeking professional mental health care. The survey included both closed- and open-ended questions. This allowed participants to expand on their answers and provide insight to their experiences with the mental health care that they have or have not received. The content areas addressed in the student-athlete survey were gender, year



in school, education of resources on campus, education of mental illness signs and symptoms (identifying in self, identifying in teammates), help-seeking behaviors and attitudes, barriers and facilitators to seeking help, and explanation of needs that were not being met.

The instrument was adapted from Murray's Help Seeking Survey (1997) that sought to understand the counseling needs of collegiate athletes. Other questions were adapted from an unpublished needs assessment conducted at another university (Stewart, Miller, Daniels, & Brewer, 2017). The Barriers to Care Checklist (Vanheusden, Mulder, van Lenthe, Mackenbach, & Verhulst, 2008) was used to address barriers to seeking help in this instrument. The checklist of facilitators in question 10 of the instrument was established based on the systematic review conducted by Moreland, Coxe, and Yang (2017).

Data Collection

Paper surveys were administered to each student-athlete at a pre-determined time and location through communication with coaching staff, athletic trainers, and strength and conditioning coaches. If there was any problem with organizing a meeting, the director of sports medicine assisted in scheduling. Student-athletes were verbally instructed that their participation was voluntary and anonymous. Before surveys were handed out, a brief description of the project was given. Participants were instructed to read the informed consent page which discussed the goals of the research study, how long it would take, any benefits or risks, and how data would be handled. Student-athletes completed the survey if they chose to participate. If they did not choose to participate, they were instructed to return the uncompleted survey when the others were collected.



The survey consisted of 8 closed-ended questions and 2 open-ended questions and took between 5-10 minutes to complete. The survey was cross sectional in nature, examining the population at a single point in time. By collecting both qualitative and quantitative data, more thorough analysis was completed (Creswell, 2003). See Appendix B to reference the questionnaire.

Trustworthiness

The trustworthiness of a questionnaire is determined by its validity and reliability. The questions for the questionnaire were developed based on already validated instruments and through consultation with experts in the fields. To ensure validity and reliability of the qualitative data, triangulation of data occurred by examining the data collected in different formats at different times.

Data Management

All survey responses were recorded on paper and then input through the online Qualtrics software. Once all data was recorded in Qualtrics it was downloaded and saved on the password-protected computer of the researcher. The researcher was the only one with access to the data. Completed paper surveys were stored in a locked cabinet in the office of the researcher. Upon the completion of the project, the data will be shared with the director of sports medicine. All data are anonymous and de-identified. The data will be stored on his password-protected computer. He will be the only person with access to the data.

Data Analysis

Quantitative data were analyzed using SPSS version 25.0 for descriptive statistics. T-tests were used in comparing gender for each of the stated research questions.



Correlation analysis was also employed to determine the strength of the relationship between each variable in the study. Open-ended responses were coded using the constant comparative method. Similar data points were grouped into identified themes or categories. These themes were analyzed and compared within and among groups.

Human Participants and Ethics

To conduct this study, permission was requested by the thesis committee of the researcher and the university's Institutional Review Board (IRB). Data collection began upon IRB approval. Participation in this study was entirely voluntary. Each participant received a cover letter explaining the study and consent form to participate in the study. These can be found in Appendix A. Participants of this study were student-athletes. All questionnaire responses were anonymous and no identifying information was obtained throughout the study.

Reporting Procedure

The audience of the results of this study is the thesis committee of the researcher, athletic department staff, and other scholars in the sport industry. This research will be presented in a classroom setting to the thesis committee. Ideally, this research will be submitted for publication and presentation at local, regional, or national research conferences and scholarly research journals.



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CHAPTER 4

RESULTS

A total of 411 student-athletes participated in this study and 54% of participants were female (n=221) and 46% male (n=190). Freshmen made up 31.14% of the sample (n=128) followed by 26.52% (n=109) being sophomores, 24.57% (n=101) being juniors, 17.03% (n=70) being seniors, and 0.73% (n=3) were graduate students. Student-athletes were asked, "Have you experienced any of the following mental health related challenges during your time as a collegiate student-athlete?" The three most frequent responses were overwhelming stress at 68.86% (n=283), time management at 67.15% (n=276), and anxiety at 43.55% (n=179). The lowest three responses were disordered eating habits at 4.31% (n=59), sexual abuse/assault at 0.51% (n=7), and substance abuse at 0.44% (n=6). See Table 4 for mental health challenges experienced.



Mental Health Challenge	# of respondents	Percentage of sample
Overwhelming Stress	N=283	68.86%
Time management	N=286	67.15%
Anxiety	N=179	43.55%
Burnout	N=143	34.7%
Poor Athletic Performance	N=138	33.5%
Depression	N=107	26.03%
Problems with a significant other	N=91	22.14%
Family difficulties	N=71	17.27%
Disordered Eating Habits	N=59	14.36%
Sexual Abuse/Assault	N=7	1.7%
Substance Abuse	N=6	1.46%

Table 4

Mental Health Challenges

Research Question 1: Barriers

The first research question asked what were perceived barriers preventing helpseeking. To assess the reasons that student-athletes would not seek out help from a professional resource for their mental health, the Barriers to Care checklist was utilized. There are two categories in this checklist, attitudinal barriers and practical barriers. Of the attitudinal barriers, the three most frequent responses were "I wanted to solve problems on my own" at 46.45% (n=195), "I did not think my problems were serious" at 38.69%



(n=159), and "I thought my problems would go away" at 31.87% (n=131). Of the practical barriers, the top three responses were "I did not have time to seek help" at 16.06% (n=66), "I did not know how to get help" at 6.08% (n=25), and "I could not arrange to get a consultation timely enough at 3.89% (n=16). The full checklist can be found in the survey in Appendix B.

There were significant gender differences between the perceptions of barriers and the perception of a positive help-seeking environment. Four attitudinal barriers showed significant differences and one practical barrier showed differences. Table 5 exhibits the extent of those difference.

Table 5

Item No.	Item Description	Gender difference
12.2*	I did not think my problems were serious enough	Significant difference existed. A total of 43% of female said yes compared to 34% of males.
12.3*	I thought my problems would go away.	Significant difference existed.
12.4*	I had enough support in my social network	Significant difference existed. Males reported a higher percentage of support systems (90.5%) as compared to females (79.6%).
12.5*	I found it hard to talk about personal problems	Significant difference existed. More 33% and female 19.5%.
12.16*	I did not have time to seek help.	Significant difference existed. Females 22.8% as compared to 10.5% for males

Gender Differences Among Barriers to Seeking Help

Research Question 2: Facilitators

The second research question asked what were perceived facilitators enabling help-seeking. Student-athletes were asked what assisted them in making the decision to seek help for their mental health challenges. The top three responses were, "I knew the resources available to me" at 19.22% (n=79), "My family supports seeking help for my



problems" also at 19.22% (n=79), and "My friends support seeking help for my problems" at 16.79% (n=69). The bottom three responses were, "I was referred appropriately" at 7.54% (n=31), "I had enough time to seek help" at 5.10% (n=21), and "I already had a relationship with a healthcare professional" at 3.16% (n=13). Significant differences were found between the responses to why student-athletes felt assisted in their decisions to seek help. See Table 6 for further description of those gender difference.

Table 6

No	Reason	% aware of	Gender	
			Male & Female	Chi-square
1	I knew the resources available to me.	19.2	12.1 < 25.3	11.52***
2	My family supports seeking help for my problems.	19.2	9.5 < 27.6	21.62***
3	My friends support seeking help for my problems.	16.8	7.4 <24.9	22.44***
4	My teammates support seeking help for my problems.	14.8	5.8 < 22.6	22.91***
5	I knew how to access the resources.	12.4	6.8 < 10.0	10.07**
6	I knew the signs and symptoms of different mental illness.	11.8	7.4 < 17.2	8.93**
7	My coaches support seeking help for my problems.	11.4	4.7 < 17.2	15.66***
8	I am aware of my feelings and know how to express them.	11.2	6.3 < 15.4	8.45**
9	There is a positive help-seeking atmosphere within my team.	8.3	3.2 < 12.7	12.18***
10	I was not afraid of what others would think of me.	7.8	5.3 & 10.0	3.13
11	I was referred appropriately.	7.5	3.2 < 11.3	9.74**
12	I had enough time to seek help.	5.1	3.2 & 6.8	2.78
13	I already have a relationship with a heal care professional.	3.2	1.1 < 4.5	5.14*

Gender Differences Among Facilitators to Help-Seeking

Note: *p < .05; **p < .01; ***p < .001



Research Question 3: Meeting Needs

The third research question asked whether the implementation of a multidisciplinary, collaborative care team and mental health protocol met the needs of current student-athletes. A MANOVA was conducted to examine differences based on respondents' gender and class on the perception of positive seeking environments and the adequacy of the orientation program. A multivariate ANOVA is a multivariate extension of ANOVA. It compares the means of two or more groups simultaneously. A MANOVA can compare means on multiple continuous dependent variables at the same time. These answer the question of whether there are differences between any two groups on any of the dependent variables examined. The results indicated that there were multivariate differences based on gender, Wilks' Lambda = .982, F(2, 405) = 3.814, p = .023, and class, Wilks' Lambda = .985, F(2, 405) = 3.176, p = .043.

T-tests were conducted to examine differences based on respondents' gender and class on the perception of positive seeking environments and the adequacy of the orientation program. The results indicated that there was a gender difference on whether student-athletes believed they received an adequate orientation to resources and support services on campus, t(408) = 2.714, p = 007. However, no other statistical differences were found.

A Pearson correlation measures the strength of the relationship between two variables. Specifically, the relationship between education of resources and perception of help-seeking environment was examined. Results of the Pearson correlation indicated that there was a significant positive association between receiving an adequate orientation



to support services and resources and a positive help-seeking environment within the team (r(410) = .60, p = .221).

Participants were asked, "Who have you sought help from for any of the previously selected challenges?" The top three responses were family member at 63.26% (n=260), friend at 61.56% (n=253), and teammate at 53.28% (n=219). The lowest three responses were counseling services at 9.00% (n=37), faculty member at 5.35% (n=22), and a tie between sports dietitian and team physician at 4.87% (n=20). This question was followed by asking the participants' level of satisfaction of the care they received for the previously selected support system. The results indicated that student-athletes were satisfied with the care received from family members (72.0%), friends (69.8%), and teammates (62.8%). Those responses and the gender differences among them are explained further in Table 7.

Table 7

No	Source	% Satisfied	Gender	
			Male & Female	Chi-square
1	Family member	72.0	69.2 & 73.8	0.72
2	Friend	69.8	61.6 < 76.9	11.42***
3	Teammate	62.8	54.7 < 69.7	9.77**
4	Coach	37.5	37.4 & 37.6	.002
5	Athletic trainer	33.8	26.8 < 39.8	7.69**
6	Faculty member	18.0	22.6 > 14.0	5.12*
7	Team physician	17.8	18.9 & 20.1	0.34
8	Sport psychologist	17.0	17.4 & 16.7	0.03
9	Counseling services	15.3	16.3 & 14.5	0.27
10	Sport dietician	13.4	13.7 & 13.1	0.03

Satisfaction of Care

Note: *p < .05; **p < .01; ***p < .001المتسارات



Pearson's chi-square tests were conducted to investigate the gender differences concerning the satisfaction with the care. The results indicated that there were gender differences in four sources of the care, namely friends, teammates, athletic trainers, and faculty members. Female respondents reported a higher level of satisfaction with the care received from friends, $\chi^2(1, N = 411) = 11.42$, p < .001, teammates, $\chi^2(1, N = 411) = 9.77$, p < .01, and athletic trainers, $\chi^2(1, N = 411) = 7.69$, p < .01, in comparison to their male counterparts. For example, 76.9% of female respondents, in comparison to 61.6% of males, received satisfactory care from their friends. On the other hand, male respondents received a greater level of satisfactory support from faculty members, $\chi^2(1, N = 411) = 5.12$, p < .05, in comparison to their female counterparts. As reported, 22.6% of male respondents received the care from faculty members in comparison to 14% of female counterparts.

To identify the current state among knowledge and perception of services participants were asked to respond how much they agree with the following statements; "I believe a positive help-seeking environment exists within my team," "If I suspected a friend or teammate was suffering from mental health problem (depression, anxiety, suicidal behavior, etc) I would know what steps to take to help them," "I received an adequate orientation to the support and resources available at my college/university." The majority of participants responded with strongly agree, agree, or somewhat agree. A breakdown of responses can be seen in Table 8:



Table 8

	Strongly Agree	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree	Strongly Disagree
I believe a positive help seeking environment exists within my team.	35.04% (n=144)	36.74% (n=151)	18.98% (n=78)	1.95% (n=8)	4.14% (n=17)	2.43% (n=10)	0.73% (n=3)
If I suspected a friend or teammate was suffering from a mental health problem (depression, anxiety, suicidal behavior, etc.) I would know what steps to take to help them.	13.87% (n=57)	25.06% (n=103)	39.66% (n=163)	8.76% (n=36)	7.06% (n=29)	5.35% (n=22)	0.24% (n=1)
I received an adequate orientation to the support and resources available at my college/university.	18.54% (n=76)	35.61% (n=146)	24.15% (n=99)	10.73% (n=44)	5.86% (n=24	4.39% (n=18)	0.73% (n=3)

Agreement Statements

Qualitative Results

When exploring the open-ended responses included in the survey, they were classified into the following categories: Positive help-seeking experience, negative helpseeking experience, and a neutral help-seeking experience. The question asked participants to expand on their experience with the university's support services. There was a total of 107 respondents who reported a positive help-seeking experience. Positive experiences were identified as those that elicited an affirmative emotional response. These responses mainly touched on how respondents have felt an improvement in their mental health or expressed satisfaction with the resource discussed. Conversely, 35



respondents reported a negative help-seeking experience. A response was considered negative if they reported an adverse experience with a provider or expressed any explicit barriers to care. Lastly, 93 respondents reported a neutral feeling or no experience with seeking help. These responses were identified by the respondent reporting not utilizing a resource or not feeling strongly in either direction about the resources available to them. See Table 9 for greater detail.

Table 9

Theme	Subtheme	Explanation
Positive Help-Seeking E	xperience	
	Availability	Appropriate referral, easy process, accessibility, variety of services
	Good Connection	Felt connected to the provider of the service
	Experienced Results	Received benefits from utilizing the resource
	Sought help Elsewhere	Support from peers, family, and other staff
Negative Help-Seeking I	Experience	
	Access Issues	Lack of education, time constraints, fear of stigma/perception
	Bad Experience	Not achieving results, misunderstanding of structure, lack of connection with provider
Neutral feeling/ No expe	rience	
	Not used resources	Did not need or want resources

Positive Help-Seeking Experience

Themes that were found in the positive experience category were availability, good

connection with the person they interacted with, and seeing results.



Availability. Availability was a frequently reported reason why an experience was positive. Within this category participants reported that an appropriate referral to the correct resource in a timely manner was helpful. A respondent said, "I was struggling and immediately was given the email of our sports psychologist. Then one week after receiving his email, I was asked by my coach if I had set up an appointment. I did and it helped loads." They reported that the process was easy, quick, and required little to no effort on their part other than showing up to the appointment. They reported that the resources on campus were accessible meaning easy to find, easy to get to, and open for use at times that worked with busy schedules. They also reported a good variety of services available. This means multiple resources that can assist with an array of potential issues from diet to counseling.

Good connection. To support a positive experience overall, a positive interaction or good connection with the provider of that service was mentioned frequently. The words, "Helpful," "caring," "understanding," and "supportive" were used to describe athletic trainers, counselors, dieticians, and team physicians. Specifically, one respondent said, "They were very understanding and helpful with everything. It felt good knowing someone cared."

Experienced results. Participants reported that a significant reinforcement and contributing factor to a positive experience was seeing results. Some reported a better understanding of their emotions, thoughts, and feelings as well as learning how to manage those difficult emotions, thoughts, and feelings. One respondent said, "I saw the sport psychologist and he really helped me cope with my anxiety and performance. My



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teammates told me his email and that's how I contacted him. I learned other strategies as well."

Sought help elsewhere. Participants reported that if they had not sought out university support services, they had sought help from third-party providers or nonprofessional resources. Support from peers, family, and appropriate staff such as coaches and athletic trainers were reported to be the most helpful to student-athletes who experienced some mental health challenge throughout their time at the university. One respondent said that they usually seek coaches, teammates, and athletic trainers for help because he/she feels they best understand how hard it is to be an athlete and understand what he/she is going through.

Negative Help-Seeking Experience

Access issues. Those who reported negative experiences with university support services either did not know how to get help, felt they did not have enough time to get help, or were afraid to get help because of stigma or the perception of their coaches and teammates. One respondent said:

I am afraid to utilize support services for mental health for fear it will change my coaches' perception of me in a negative way. They may seem understanding but I feel as though it will come back to bite me in the butt.

Bad experience. The other reported negative responses were truly poor experiences with support services. These included the participant not getting the results they hoped for, a misunderstanding of the structure of counseling (thinking it was long term, not thinking 3-5 sessions was long enough, and not having a true understanding of what counseling is supposed to be like), or felt uncomfortable/did not connect well with



the practitioner. One respondent said, "The counseling center was a little uncomfortable for me. I felt like they couldn't get through to me."

Neutral Feeling/No Experience

Participants responded that they had either not used support services at all, had not felt the need to utilize support services, had not used but are aware of how to access support services if needed, or they had not used and were unaware of how to get access to support services.



CHAPTER 5

DISCUSSION

In this study, it was found that student-athletes reported experiencing overwhelming stress, time management struggles, and feelings of anxiety. The high percentages found, support the claim that collegiate student-athletes are struggling with their mental health. These numbers are higher than what has been found in previous literature for college students and collegiate student-athletes. Specifically, a study of similar size by Mahmoud, Staten, Hall, and Lennie (2012) found that 27% of respondents reported feelings of anxiety compared to the 43.7% of respondents that reported feelings of anxiety in the current study.

The findings from Research Question 1 (What are the perceived barriers preventing help-seeking) indicate that the most common perceived attitudinal barriers to seeking professional help are wanting to solve problems on their own, not thinking problems are serious enough, and thinking problems will just go away. The most common practical barrier was not having enough time to seek help. These barriers are comparable with those identified by Watson (2006) including seeing no need for help, personal discomfort, perceptions of others, and time (Watson, 2006). This is also consistent with the findings of Lopez and Levy (2013) stating that time constraints, social stigma associated with mental illness or seeking help for mental health care, and the perception that others would have of them served as barriers to seeking counseling services.

Noteworthy gender differences were found among the barriers to care checklist. For the item, "I did not think my problems were serious enough," 43% of females selected this option compared to 34% of males. For the item, "I thought my problems



would go away," there was also a significant gender difference. For the item, "I had enough support in my social network," males actually responded higher to this response at 90.5% compared to females at 79.6%. It is noteworthy that males believe their social circles are a stronger support system for them because a perception exists that males typically do not discuss mental health topics among friends and peers. For the item, "I found it hard to talk about personal problems," males responded 33% and females just 19.5%. This is also interesting following up the fact that males believe they have a stronger social support system; however, they find it more difficult than females to discuss personal problems.

Previous research has not thoroughly explored how males and females choose to express their struggles with mental health or the differences between who they seek help from. It is noteworthy that male student-athletes feel they have a stronger social support system but choose not to share their personal problems within that support system. This could be due to the fact that stigma and perception of others is a frequently reported barrier (Gulliver, Griffiths, & Christiansen, 2012; Lopez & Levy, 2013; Moreland, Coxe, & Yang, 2017; Watson, 2006). Lastly, for the item, "I did not have time to seek help," females responded more frequently at 22.8% compared to 10.5% of males.

The findings of Research Question 2 indicate that the most prevalent perceived facilitator of seeking help was awareness of the resources available and support from family and friends to seek help for mental health challenges. This is consistent with the themes found in the open-ended responses such as accessibility and experiencing positive results from seeking help from their peers, family, and support staff. One respondent reported that they felt the institution was very helpful in offering multiple services to



reach out to when needed and was provided with enough information in order to find those resources easily. These findings remain consistent with the NCAA's (2016) recommendations to create a health-promoting environment that supports mental wellbeing and resilience. On the other hand, one of the lowest responses was an appropriate referral. While 31 respondents reported that they received a proper referral, that still leaves a significant portion of student-athletes who reported feelings of overwhelming stress and anxiety that were not identified and referred. Intervention programs that address and incorporate these facilitators will likely have greater success.

The findings from Research Question 3 indicated that there was a significant positive association between receiving an adequate orientation to support services and resources and a positive help-seeking environment within the team. In a study done by Kern et al. (2017) with Athletes Connected at University of Michigan, the researchers found that after an orientation session about mental health, resources available, and how to seek help, student-athletes reported feeling more comfortable discussing mental health with their teammates, felt more confident in their abilities to identify signs and symptoms in a struggling teammate, and felt more confident in their ability to assist a teammate in seeking out the appropriate resources (Kern et al. 2017). This means that when studentathletes are educated on what resources are available, where those resources are located, and how to access them, they perceive an environment that fosters help-seeking behaviors. This aligns with the NCAA's (2016) fourth best practice point: Creating a health-promoting environment that supports mental well-being and resilience. By creating environments that foster help-seeking for mental health challenges, studentathletes will better utilize the support services available to them.



The findings further indicate that the student-athlete population believe that there is a positive help-seeking environment within their teams and that they believe that if a friend or teammate of theirs was struggling with a mental health challenge, they would know what steps to take to help them. They also believe that they received an adequate orientation to the university's support services. This supports the strong positive correlation found between education of resources and perception of a positive helpseeking environment.

Participants reported that they most often seek help from family members, friends, and teammates. When asked about satisfaction of care, the highest satisfaction percentages were with family members, friends, and teammates. There were significant differences between males and females with their satisfaction of care, with females having higher levels of satisfaction from friends, teammates, and athletic trainers. On the other hand, males reported higher levels of satisfaction with the care they received from faculty members. It is stated earlier that male student-athletes reported difficulty discussing their personal problems. They may find it easier to discuss these things with a faculty member because they are one of the only existing supports that is not housed in the athletics realm. There may be less stigma and less fear of their perception because they are not as strongly associated with their athletic identity. These results show that student-athletes are turning to their peers and existing social supports for help with their mental health challenges instead of professional resources. This is consistent with literature that suggests student-athletes are not seeking help from the appropriate resources to receive mental health care. However, it should be noted that a strong social support system is indicated as a positive. A frequently reported facilitator to seeking help



was receiving support from family and friends. In the open-ended responses, participants reported several positive experiences when seeking support from their peers. Some respondents expressed an awareness on when to seek peer support versus when they should seek professional care. However, there is still a discrepancy on that knowledge.

Implications for Future Research

Future research could approach multiple avenues based on this study. It would be interesting to could examine not only at what prevents student-athletes from seeking help, but what is their perception of a help-seeking worthy problem. It would be helpful to explore the threshold of "how bad" something is before a student-athlete will seek help for that problem. Individual components of the NCAA best practices could be identified and studied further to assess how institutions are implementing these recommendations. This could include how that institution identifies a student or student-athlete in distress.

The current study found that males are most satisfied with the care received from faculty members. This is an opportunity to analyze the gender differences between the source of mental health care sought. Future research could focus on who student-athletes seek out most often for mental health support and what motivates those decisions. Gender differences and class differences could be explored within that topic as well.

Lastly, future research is needed to establish educational programming and peer support networks. This educational programming would be diverse and specific to faculty members, coaches, and student-athletes based on the needs presented by each group respectively.



Implications for Practice

Conclusion 1: Education of Student-Athletes. The most significant takeaway from these findings is that education is imperative for the success of any mental health care team and protocol. While programs and protocols can exist, they are useless unless the appropriate recipients are educated on what, how, where, and when to receive the help that is offered to them. Adequate orientation procedures allow for student-athletes to become familiar with the resources and support services available to them on their college campuses. When student-athletes know whom to go to, where and how to reach that provider, and when they should seek help, they are more empowered to follow through with that process. This in turn leads to a stronger perception of a positive help-seeking environment within a team and ultimately the athletic department as a whole. Of the recommendations made by the NCAA (2016) for supporting the mental health of student-athletes, the findings of this study most appropriately support the fourth best practice of creating a health-promoting environment that supports mental well-being and resilience.

It appears that there are is still room for improvement. This research serves as a suggestion to similar institutions that there should be strong efforts placed into the education that student-athletes receive about what support services and resources are available to them, how and where they can access those resources, and when they should seek help from those support systems.

Conclusion 2: Build a Peer Support Network. A serious consideration for institutions is a continued emphasis on establishing a strong peer support network. Based on the findings of this study, student-athletes are most often reaching out to the peers in



their social network. By establishing a network of strong support among peers, this will empower student-athletes to better cope with their mental health challenges. It may also empower them to seek further help from a professional resource. One of the most frequent selected facilitators of help-seeking was having the support of friends and family to seek help for their problems. Receiving support from both peers and professionals allows for a more comprehensive approach to the care of student-athletes. This support network can be a formal group that exists within the athletics department or a subcommittee of the Student-Athlete Advisory Committee (SAAC). Regardless, it is recommended that this support network exists as a foundation within the athletics department to educate, support, and empower student-athletes to take care of their mental health needs.

Conclusion 3: Education of Coaches, Faculty, and Support Staff. It is

necessary to maintain continuous improvement of the education received by coaches, faculty, and support staff. It is clear that student-athletes are not only reaching out to their peers, but to others in their social support system including coaches, athletic trainers, and faculty members. Each of these providers must have appropriate training on how to identify and appropriately refer student-athletes to the necessary professional resources should mental health concerns arise. Assistance in this education would be provided by definitive and thorough mental health protocols.

Specifically, institutions may want to design educational programming for coaches, faculty members, and support staff. It would be helpful for this education to include: how to identify and locate resources on campus, how to identify and approach a student or student-athlete exhibiting signs or symptoms of distress, how to hold a



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conversation and appropriately refer a student or student-athlete who approaches them while in distress, and how to promote and environment that supports help-seeking and well-being. Programming of these sessions/workshops should incorporate role-playing to gain experience having these difficult conversations. It would be beneficial for this to be done in a consistent and systematic manner, instead of a one-time education session that attempts to encompass each of these education points. Programming can cover a range of related topics over a period of time so that there is reinforcement and the opportunity to practice and improve these skills.

Limitations and Delimitations

There are several limitations to this study. First is time. The researcher was bound by the time allotments given by coaches and staff for this survey to take place and student-athletes may have felt rushed to complete it. Also, the researcher had a set amount of time in which this project needed to be completed. Second, the topic of mental health is sensitive and the respondents may have been hesitant to respond honestly and completely to this survey.

There are also several delimitations that exist. First, the participants are all from the same NCAA institution. This makes it difficult to generalize the findings to the general population of student-athletes. However, this information can inform practice for other institutions. Second, the questionnaire used in this study was created through influence from multiple sources. A more consistent, validated instrument may produce more reliable results. Third, there is a risk of bias and influence in the administration of data collection. The researcher was a member of the support staff to the athletic department which may have influenced responses in a positive or negative way. While it



was expressed that participation was entirely voluntary, student-athletes still may have felt pressured to participate. They also may have been more open to participation because of the familiarity with the researcher.

CONCLUSION

This study was aimed at identifying barriers and facilitators that influence helpseeking as well as the effect of implementing an integrated healthcare approach based on current recommendations. There is a prevalence of mental health challenges among student-athletes, especially overwhelming stress, struggles with time management, and anxiety. There are significant gender differences between resource utilization, satisfaction of care, and in the perceptions of barriers and facilitators. Based on these findings, we can draw three conclusions. First, student-athletes require frequent and substantial educational programming about how to manage mental health as a student-athlete. Second, a foundational peer support network should be established within an athletic department. Lastly, there should be educational programming specifically for coaches, support staff, and faculty members including how to identify struggling student-athletes, how to appropriately refer them, and how to support them throughout their mental health struggles.



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Appendix A

Understanding the Help-Seeking Behaviors of Student-Athletes

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Lauren Sander from James Madison University. The purpose of this study is to assess attitudes, help-seeking behaviors, and mental health needs of collegiate student-athletes. This study will contribute to the student's completion of her master's thesis.

Research Procedures

This study consists of a survey that will be administered to individual participants in a team meeting. You will be asked to provide answers to a series of questions related to attitudes, help-seeking behaviors, and mental health needs of collegiate student athletes.

Time Required

Participation in this study will require 5-10 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

Potential benefits from participation in this study include providing useful feedback on the implementation of integrated mental health care efforts. This feedback will lead to the improvement of mental health care services for student-athletes and provide an example for other colleges and universities to follow and meet the needs of their student-athletes.

Confidentiality

The results of this research will be presented to a thesis committee. While individual responses are obtained and recorded anonymously and kept in the strictest confidence, aggregate data will be presented representing averages or generalizations about the responses as a whole. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location accessible only to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, data will be shared with the athletic department to further improve the mental health care provided to student-athletes.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study



If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Lauren M. Sander Sport and Recreation Leadership James Madison University Sande2lm@dukes.jmu.edu wallacje@jmu.edu Julia Wallace Carr Sport and Recreation Leadership James Madison University Telephone: (540) 568-7341

Questions about Your Rights as a Research Subject

Dr. David Cockley Chair, Institutional Review Board James Madison University (540) 568-2834 <u>cocklede@jmu.edu</u> Giving of Consent I have read this cover letter and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. I certify that I am at least 18 years of age.

Lauren Sander Name of Researcher (Printed)

Name of Researcher (Signed)

Date

This study has been approved by the IRB, protocol # 19-0074.



Appendix B

Q1) What gender do you identify with? (Circle One)

- a) Male
- b) Female
- c) Choose Not to Answer

Q2) What year are you in school? (Circle One)

- a) Freshman
- b) Sophomore
- c) Junior
- d) Senior
- e) Graduate Student

Please respond with how much you agree with the following statements:

Q3) I believe a positive help seeking environment exists

within my team. (Circle One)

- a) Strongly agree
- b) Agree
- c) Somewhat agree
- d) Neither agree nor disagree
- e) Somewhat disagree
- f) Disagree
- g) Strongly disagree

Q4) If I suspected a friend or teammate was suffering

from a mental health problem (depression, anxiety,

suicidal behavior, etc) I would know what steps to take

to help. (Circle One)

- a) Strongly agree
- b) Agree
- c) Somewhat agree
- d) Neither agree nor disagree
- e) Somewhat disagree
- f) Disagree
- g) Strongly disagree

Q5) I received an adequate orientation to the support services and resources available at my college or university. (Circle One)

- a) Strongly agree
- b) Agree
- c) Somewhat agree
- d) Neither agree nor disagree
- e) Somewhat disagree
- f) Disagree
- g) Strongly disagree

Q6) Have you experienced any of the following mentalhealth related challenges during your time as a collegiate student-athlete? Check all that apply:

- □ Time management
- Overwhelming Stress
- □ Burnout
- Disordered Eating habits
- □ Substance abuse
- □ Family difficulties
- Poor athletic performance
- □ Depression
- □ Anxiety
- Problems with a significant other
- □ Sexual abuse/assault
- □ Other ____

Q7) Who have you sought help from for any of the

previously selected challenges? Check all that apply:

- □ Family Member
- Coach
- □ Friend
- □ Teammate
- Athletic Trainer
- Sport Psychologist
- □ Sport Dietician
- Team Physician



UNDERSTANDING THE HELP SEEKING BEHAVIORS OF STUDENT-ATHLETES

- □ Counseling Services
- □ Faculty Member
- □ Other: _____

	Yes	No	Not Applicable
Family Member	0	\bigcirc	\bigcirc
Coach	0	\bigcirc	\bigcirc
Friend	0	\bigcirc	\bigcirc
Teammate	0	\bigcirc	\bigcirc
Athletic Trainer	0	\bigcirc	0
Sport Psychologist	0	\bigcirc	\bigcirc
Sport Dietician	0	\bigcirc	\bigcirc
Team Physician	0	\bigcirc	\bigcirc
Counseling Services	0	\bigcirc	\bigcirc
Faculty Member	0	\bigcirc	\bigcirc

Q8) Were you satisfied with the care you received from the following:



Q9) If you have experienced a struggle with your mental health but have not sought help from a professional source, please check any of the following reasons that may have prevented you:

- \Box I wanted to solve problems on my own
- \Box I did not think my problems were serious
- \Box I thought my problems would go away
- \Box I had enough support in my social network
- □ I found it hard to talk about personal problems
- □ I thought help-seeking was a sign of weakness
- I was afraid of what people might think of me if I sought help
- □ I thought help-seeking was too indulgent
- □ I did not think treatment would help
- □ I did not trust mental health services
- □ I thought treatment could only make things worse
- □ I have had a bad experience with mental health services
- \Box I did not know how to get help
- □ I could not afford treatment
- □ I could not arrange to get a consultation timely enough
- \Box I did not have time to seek help
- Services were too far away or difficult to reach
- \Box I sought help, but did not receive it
- □ Other:

Q10) If you have sought help from a professional source, please check any of the following reasons that assisted you in making that decision:

- □ I knew the signs and symptoms of different mental illnesses
- □ I knew the resources available to me
- I knew how to access those resources
- □ I was not afraid of what others would think of me
- □ I am aware of my feelings and know how to express them
- □ I already have a relationship with a heal care professional
- □ I was referred appropriately
- There is a positive help-seeking atmosphere within my team
- My coaches support seeking help for my problems
- My family supports seeking help for my problems
- My friends support seeking help for my problems
- My teammates support seeking help for my problems
- □ I had enough time to seek help
- Other



Q11) Please elaborate on your experience with the university's support services or other resources here:

Q12) Do you have any additional concerns or comments that will help us improve your experience as a student-athlete

