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Depression and Anxiety Amongst College D1 Athletes

Jessica Radford
University of the Pacific

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DEPRESSION AND ANXIETY AMONGST COLLEGE D1 ATHLETES

By

Jessica Renee Radford

A Thesis submitted to the

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By

Jessica Renee Radford

APPROVED BY:

Thesis Advisor: Qingwen Dong

Committee Member: Graham Carpenter

Committee Member: Steven Farias

Department Chair: Theresa Bergman

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DEDICATION

This thesis work is dedicated to five people that makes my heart complete and has been constant cheerleaders while pursuing my master's degree. To my loving parents, Tim and Jackie Radford whose always been supportive of me no matter how far away I am from home. My twin sister, Tiera for being there through every challenge I've endured during this process. My brother, Jon and aunt, Tami whose always been a listening ear and gave words of encouragement when needed. I will forever be grateful for having you all in my life. This work is also dedicated to all the student-athletes who have lost their lives due to their battles with mental health.

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Depression and Anxiety Amongst College D1 Athletes

Abstract

By Jessica Renee Radford

University of the Pacific
2022

College student-athletes are having an increasingly amount of mental health concerns recently at an alarming rate. Therefore, researchers should attempt to better understand how student-athletes can cope with their mental health problems to improve their mental and physical well-being. The researcher administered a questionnaire to 300 college students, 150 student-athletes and 150 non-athletes from the University of the Pacific using various modified scales examining emotional intelligence, depression, anxiety, coping strategies, intentions to seek help, self-stigma, public stigma, social network stigma, alcohol consumption, sleep deprivation, and communication competence. The data were analyzed to determine the severity of student-athletes' mental health and the effect emotional intelligence, perceived stigmas, intention to seek help, and communication competence has on their depression and anxiety compared to their non-athlete counterparts. Emotional intelligence has a significant positive relationship with depression, anxiety, and intention to seek help. Therapy has a significant positive relationship in reducing anxiety and depression symptoms as well. Communication competence also has a significant positive relationship with intention to seek help. In addition, the correlation analysis found a significant positive relationship between low emotional intelligence and negative coping strategies such as substance abuse, self-blame, and denial. These results suggests that a student-athlete's ability to engage in high levels of communication competence and openly share

concerns about their depression and anxiety can contribute to important relationships between emotional intelligence, therapy, and intentions to seek help to reduce these mental health problems. This study also determines that open communication about depression and anxiety can decrease engaging in negative coping strategies and the perceived stigmas that surrounds mental health.

Keywords: Mental Health, Emotional Intelligence, Depression, Anxiety, Coping Strategies, Help-Seeking, Communication Competence.

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CHAPTER 1: THE PROBLEM

Statement of the Problem

Mental health has always been a subject that is examined closely. The area of mental health amongst college student-athletes has not been widely studied. Most National Collegiate Athletic Association (NCAA) institutions could provide the necessary tools as well as additional assistance to help college athletes with their mental health. Over the past two years during the COVID-19 pandemic, college athletes have developed an increased amount of stress due to concerns about their academic progress with virtual learning and lack of access to their sports. Student-athletes mental health has become a pandemic of its own: five NCAA student-athletes died by suicide in less than two months. Researchers in sport psychology have recently started to examine the relationship between emotional intelligence and sport behavior. Past emotional intelligence studies in sports have focused mostly on whether emotional intelligence is related to physical activity involvement, athletes' performance, and coaches' behavior (Lu, Li, Hsu, & Williams, 2010). Emotional intelligence is examined closely because it plays a key role within communication, helping to develop the processes of social awareness, social understanding, social management, and empathy that helps elevate the understanding of emotions. College students, including student-athletes are not immune to struggles with mental well-being. About thirty percent of the 195,000 respondents to a recent American College Health Association (ACHA) survey reported having felt depressed in the last 12 months, and fifty percent reported having felt overwhelming anxiety during the same period (Davoren & Hwang, 2014). It's very important to learn if student-athletes are struggling with depression and anxiety along with how they are coping with these mental health problems compared to non-athletes. Prior studies have

shown that college student-athletes are less likely to seek out mental health treatment than other college students (Barnard, 2016; Watson, 2005). Given that student-athletes are rewarded for their accomplishments on the playing field, admitting personal needs or issues could conceivably damage their chances to succeed by weakening their self-efficacy in their ability to perform, damaging the level of trust established with their teammates, reducing playing time, or weakening their coach's confidence in their ability to perform (Watson, 2005; Etzel, Pinkney, & Hinkle, 1994). Therefore, it is also crucial to examine if student-athletes believe they would be viewed negatively if sought help because the likelihood of developing negative coping strategies increases. Examining how student-athletes cope with their mental health will help determine the most effective ways for them to self-manage. Coping strategies such as active coping, therapy, self-blaming, and alcohol consumption will be examined to both demonstrate the positive and negative effects of their mental health. In addition, sleep deprivation is examined because studies have shown that lack of sleep can lead to increased depression, anxiety, and alcohol consumption. The proportion of university and college students who consume alcohol is similar to the number of students reporting poor sleep, the proportion being greater in student-athletes (Bastien et al., 2019). Turning to alcohol to cope with these mental health problems can be deemed as an impulsive behavior which relates to one of the symptoms that anxiety causes. Communication competence will also be examined in this study, with research determine student-athletes are incapable of having difficult conversations and believe thru have no one to confide in with personal issues. Effective communication between student-athletes and their coaches, peers, and administration can greatly improve their mental health. Overall, this study can help NCAA institutions determine if student-athletes self- manage their mental health

effectively and if not, determine coping strategies that promote more positive techniques to benefit student-athletes.

Purpose of the Thesis

The purpose of this thesis is to assess college student-athletes' relationship with communication based emotional intelligence, depression, and anxiety compared to non-athletes. Its purpose is to identify if a student's emotional intelligence, perceived stigmas, alcohol consumption, and sleep deprivation is directly correlated with their depression and anxiety during their time playing sports for their university. Emotional intelligence consists of self-awareness, self-management, social management, and social awareness which are all key parts of communication. Having high emotional intelligence has been proven to reduce depression and anxiety amongst student-athletes (Lu et al., 2010). It is important to gain an understanding of how student-athletes cope with their mental health problems. If student-athletes engage in either positive or negative coping strategies, then it can be compared to the severity of their depression and anxiety. Perceived stigmas about mental health problems have proven to deter student-athletes away from seeking help (Barnard, 2016). This study aims to examine student-athletes notion of perceived stigmas and its effects on their mental health self-management. Alcohol consumption and sleep deprivation is measured because of the demanding schedules of student-athletes, it's crucial to compare with non-athletes. Communication competence amongst student-athletes and non-athletes is examined to investigate how likely they are to communicate with peers, family, coaches, or a professional about their depression and anxiety to determine if it has a direct cause on decreasing their mental health symptoms.

Definition of Key Terms

Mental Health

Mental health is defined by the Centers for Disease Control and Prevention, includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also determines how we handle stress, relate to others, and make healthy choices.

Depression

Depression is defined by the American Psychiatric Association as a common and serious mental health problem that negatively affects how one feels, thinks, and acts. Student-athletes can develop depression due to factors such as injuries, social anxiety, and poor athletic performance. Conceptually poor athletic performance may result in lack of external reinforcement, behavioral deactivation, negative self-perceptions, and evaluations, and feeling of helplessness or hopelessness, which are consistent with depression symptoms (Wolanian, Gross, & Hong, 2015). High performing athletes may have an increased risk of depression symptoms when performance outcomes are significantly lower than expected.

Anxiety

Anxiety occurs when fear or worry is so intense it affects a person's ability to function, it is associated with fear of the future (Stock & Levine, 2016). Anxiety can be categorized as competitive, generalized, or social. Competitive, or performance anxiety, occurs when anxiety symptoms are related to competition or performance (Ryan, Gayles, & Bell, 2018). An athletes' fear of having a poor performance, making a mistake within a game, and letting down coaches and teammates are all high factors that increase competition and performance anxiety.

Oftentimes anxiety is a big factor that can lead people into experiencing depression symptoms.

Emotional Intelligence

Emotional intelligence has been defined as, “a set of abilities that involve the way in which people perceive, express, understand, and manage their own emotions as well as the emotions of others” (Cherniss, 2004). Bar-On emotional intelligence model (2002) defined emotional intelligence as an array of emotional, personal, and social abilities and skills that enable people to cope effectively with environmental demands and pressures. Goleman (1995,1998) said that emotional intelligence represents four major competencies: self-awareness, self-management, social management, social awareness, and relationship management, all of which can predict success in human relations, work, and life in general.

Coping Strategies

Coping is defined as a response aimed at diminishing the physical, emotional, and psychological burden that is linked to stressful life events (Snyder, Ford, & Harris, 1987). Researchers tend to recognize two broad coping strategies: (1) approach vs. avoidance and (2) problem focused vs. emotion focused (Moos, 1993). In approach coping, attempts are made to directly address the perceived problems, while in avoidance coping, attempts are made to manage stress by ignoring the problems or repressing the anxiety associated with the problems (Sawhney, Kunen, & Gupta, 2020).

Mental Health Self-Management

Self-management is an approach to take initiative in improving one’s own well-being. Mental Health Self- Management is defined as, “strategies that range from improving coping with and managing the stressors of daily living, via preventing and managing milder psychiatric conditions, such as burn-out or mild depression, up to prevention of, or intervening in severe psychiatric conditions” (Wolf, 2011). Student-athletes may benefit from mental health self-

management skills to empower them in prevention and promotion strategies (Shannon et al., 2019).

Sleep Deprivation

Sleep Deprivation is suffering from a lack of sleep. Division I sports can result in many student-athletes not obtaining restful sleep, which can have a deleterious effect on their physical and mental health, and overall well-being (Charest & Grandner, 2020). Sleep deprivation can have a negative impact on student-athletes' athletic and academic performance. Poor sleep can create an increased risk of sports-related injuries and result in poor academic performance (Wahesh, Khan, & Moreton, 2021).

Help-Seeking

Help-Seeking is commonly described by basic models as a multistage process consisting of several interrelated behaviors (Mechanic, 1996). Individuals experience a health problem, perceive a need for professional help, evaluate the costs and benefits of receiving treatment (within the context of social norms regarding seeking help), and take action to receive care by choosing one of several types of help for mental health problems. Beliefs and attitudes about mental health and treatment are likely to influence an individual's propensity to perceive a need for help as well as an individual's assessment of the costs and benefits of receiving treatment (and consequently whether the individual pursues treatment) (Eisenburg, Downs, Golberstein, & Zivin, 2009).

Stigmas

Stigma is defined in the Oxford dictionary as "a mark of disgrace associated with a particular circumstance, quality, or person." Stigma is often identified as a barrier to seeking counseling services for college student-athletes. Public stigma is external and refers to a belief that society

perceives seeking help for mental health treatment as undesirable and individuals who seek help are socially unacceptable. Self-stigma represents an internalization of public stigma in that an individual believes he or she is socially undesirable for seeking treatment (Hilliard, Watson II, & Zizzi, 2020). Social network stigma is a form of external stigma that specifically refers to perceived stigma from individuals who are directly within one's social network (Vogel, Wade, & Ascheman, 2009).

Communication Competence

Communication competence refers to the knowledge of effective and appropriate communication patterns and the ability to use and adapt that knowledge in various context (Cooley & Roach, 1984). Communication competence requires not only the ability to perform adequately certain communication behaviors, but it also requires an understanding of those behaviors and the cognitive ability to make choices among behaviors (McCroskey, 1988). Contrary to different definitions, most would agree that competence is effective communication that achieves an individual's goals in a way that maintains or enhances the relationship between the persons involved (Ray, 2020; Spitzberg & Cupach, 1984).

Significance of the Study

Studies examining depression and anxiety amongst college student-athletes have just recently become a topic to study closely, especially by the National Collegiate Athletic Association (NCAA). Emotional intelligence has been studied widely but there are minimal studies examining the emotional intelligence of student-athletes and how it affects their mental health. Mental health-self management, stigmas, and help-seeking behaviors of student-athletes is important to study in order to determine how they influence a student-athletes' intention to self-manage or seek professional help for their depression and anxiety and there is minimal

research on these topics. Student-athletes communication competence is evaluated because if they have high levels then the willingness to communicate their mental health concerns to coaches, peers, teammates, etc. is increased. The variables within this study were chosen specifically to determine what can reduce college student-athletes' anxiety and depression, whether that's through increasing an athlete's emotional intelligence, increasing mental health self-management with positive coping strategies, reducing perceived stigmas, improving sleep, or communication competence. Overall, understanding the severity of student-athletes' anxiety and depression can provide the necessary techniques to significantly decrease these symptoms and increase both their mental and physical well-being.

CHAPTER 2: REVIEW OF THE LITERATURE

Emotional Intelligence

Emotional intelligence is the ability to perceive, manage, express, and understand your own emotions as well as the emotions of others (Salovey & Mayer, 2004). Sports psychologists have recently begun research in the relationship between emotional intelligence and sport behavior. Despite the sincere interest in emotions and sport performance, the construct of emotional intelligence has only been studied in the context of sport on a few occasions (Lott & Turner, 2018; Stough, Saklofske, & Parker, 2009). Although, there is research that suggests student-athletes have higher levels of emotional intelligence compared to the general population. In sports settings, researchers have hypothesized that emotions, especially negative emotions such as anxiety, play an important role in athletes' performance (Gould, Petlichkoff, Simons, & Veveva, 1987). Bar-On emotional intelligence model (2002) defined emotional intelligence as an array of emotional, personal, and social abilities and skills that enable people to cope effectively with environmental demands and pressures.

In a study conducted by Lu et al. (2010), Bar-On's emotional intelligence model was used to examine if athletes with high emotional intelligence experienced precompetitive anxiety differently than athletes who have low emotional intelligence, and to explore which emotional intelligence scales predicted precompetitive anxiety. The hypothesis stated that athletes with high emotional intelligence will view precompetitive anxiety more positively because they have the ability to cope with sport demands and competitive pressures. The data analysis included 112 Taiwanese intercollegiate student-athletes and the results concluded that the low emotional intelligence group experienced higher cognitive anxiety intensity than those in the high

emotional intelligence group. Since Bar-On's EQ-i (2002) was developed to target the general population and daily life situations, it may not be an ideal tool for assessing participants' competence in understanding, controlling, managing, and using their emotions in a sports setting. A sports-specific emotional intelligence measure would allow researchers to examine the relationship between athletes' emotional intelligence and sports behavior (Lu et al., 2010).

Past findings suggest that higher levels of emotional intelligence are related with higher levels of physical and psychological health, effective coping mechanisms, lower levels of perceived stress, high levels of belongingness, and higher performance levels in school and in the workplace, which increases overall levels of well-being (Bar-On, 2007; Uruijo, Extremera, & Villa, 2015; Moeller, et al., 2020). In a recent study by O'Neill (2021) examines the relationship between emotional intelligence and the mental well-being among college student-athletes. The sample in the study included 476 NCAA Division III student-athletes, who were in their freshman, sophomore, and junior year. Student-athletes took a pretest in September 2020 and a posttest in April 2021, it is important to note that this study took place during the COVID-19 pandemic. Student-athletes are twice as likely to experience a decrease in mental-health during the pandemic than during pre-pandemic times (Johnson, 2020). Although this study results showed that athletes with high emotional intelligence had lower levels of mental well-being, the cause of this could be that these student-athletes just had fewer symptoms of anxiety and depression than their counterparts with low emotional intelligence. The results also showed the student-athletes mental well-being significantly decreased between September 2020 to April 2021. This finding supports previous research that mental health among college students, specifically student-athletes, is decreasing (O'Neill, 2021; Mauer & Roh, 2016; Wilcox, 2010).

Depression

One major outcome of student-athletes having low emotional intelligence is developing depression. Student-athletes can develop depression due to factors such as injuries, social anxiety, and poor athletic performance. The thought process one experiences can be absolutely grueling, and student-athletes will experience a loss of interest and pleasure, with thoughts of hopelessness, worthlessness, guilt, and suicide (Mentink, 2001; Dennis, 1995). The first researchers to compare rates of depression symptoms between college athletes and nonathletes was, Storch et al. (2005). The study hypothesized that student-athletes would report higher levels of alcohol use, depression symptoms, and social anxiety because athletes deal with more stress due to their sport participation than non-athletes. The results showed that female athletes experience higher levels of depression symptoms, social anxiety, and nonsupport in comparison to their male athlete counterparts and male and female non-athletes.

In another study by Yang et al (Yang et al., 2007), included a sample size of 257 Division I athletes also found similar findings in female student-athletes experiencing higher levels of depression. Student-athletes can also develop depression symptoms when they experience a decline in their athletic performance. Conceptually poor athletic performance may result in lack of external reinforcement, behavioral deactivation, negative self-perceptions and evaluations, and feeling of helplessness or hopelessness, which are consistent with depression symptoms (Wolanian, Gross, & Hong, 2015). High performing athletes may have an increased risk of depression symptoms when performance outcomes are significantly lower than expected. This can psychologically affect the student-athlete, which sports medicine personnel needs to be aware of. This not only affects the athlete's viewpoints about themselves but can also affect the

athlete's perception of how coaches, teammates, and family will view them after the poor performance.

A case study by Mentink (2001) examined major depression in collegiate student-athletes and explored the need for increased awareness of depressive illness in this population. Three case studies were examined, and all played collegiate athletics and experienced major depression during their time being a student-athlete. The first was of a female cross-country runner who encountered major depression while competing at a prominent Pacific Ten university, the second examined a male who suffered depression while playing basketball at a community college, and the third conveys a story of a former football quarterback at a NCAA Division II university who dealt with this illness (Mentink, 2001). Interviews were used to evaluate the student-athlete's reality of their respective depressive illness. Their coach or parent was also interviewed to compare their perception of the student-athlete's reality of his/her major depression. The results showed that student-athletes have trouble recognizing if they are experiencing major depression and they are not willing to approach their coach about their illness. These case studies are a clear sign that there is a need for increasing awareness of major depression in student-athletes.

Anxiety

An additional outcome for student-athletes with low emotional intelligence is experiencing anxiety. Anxiety is one of the most commonly measured constructs in sport psychology, with at least 22 published scales devoted to its measurement (Cox, Matthew, & Russell, 2003; Ostrow, 1996). There are different forms of anxiety that can affect a student-athletes life such as physique anxiety, precompetitive anxiety, and performance anxiety. Oftentimes anxiety is a big factor that can lead people into experiencing depression symptoms. Athletes spend a big part of their time training and lifting weights for their respective sports. This

can increase social physique anxiety which is anxiety in how others evaluate their physiques in both male and female student-athletes. Of course, this is most common in female athletes due to increased exercise, women's bodies can change drastically in a short amount of time.

According to Hart et al. (1989) social physique anxiety is a subtype of social anxiety, i.e., fear of negative evaluation, low social self-esteem, self-consciousness, shyness, and loneliness (Anshel & Seipel, 2007; Frost & DiBartolo, 2002). Performance anxiety can directly affect a student-athlete's performance due to being anxious about playing a game. As anxiety either falls below or exceeds moderate levels, performance rapidly worsens (Raglin & Morris, 1994). One area of sports research involves investigation into the relation between anxiety and stress and their effects on motor performance (William & Jenkins, 1986). An athletes' fear of having a poor performance, making a mistake within a game, and letting down coaches and teammates are all high factors that increase performance anxiety. This can typically happen before a big game, when an athletes' anxiety levels are increased, their performance tends to decrease.

Approximately 1 in 10 college students in the United States is estimated to have an anxiety disorder (Blanco et al., 2008). The Generalized Anxiety Disorder Scale 7 (GAD-7) and GAD-2 was used to assess anxiety and other clinical mental health concerns (depression, past-year, and recent suicidality) in student-athletes by Tran (2020). The study focused on data from respondents taking the Healthy Minds Study (HMS) who identified as currently participating in intercollegiate varsity athletics in the 2015-2016, 2016-2017, 2017-2018, and 2018-2019 seasons. A total number of 6,355 student-athletes who completed the GAD-7 and GAD-2 were analyzed. The results showed that for the GAD-7, 17.59% had scores of 10 or above meaning they have moderately severe anxiety. For the GAD-2, 24% had scores of 3 or above meaning

they have mild anxiety. Female athletes reported higher average GAD-7 and GAD-2 sum scores than males (Tran, 2020).

Coping Strategies

It is also important to examine how student-athletes cope with depression and anxiety symptoms, especially because not all NCAA institutions have the means to provide proper mental health counseling to their athletes. Many people think that student-athletes are less likely to develop depression based on their continued amount of social support from coaches, teammates, and advisors. Research on depression among athletes has recently gained importance, especially within the National Collegiate Athletic Association (NCAA). Up to 20 percent of college student-athletes may suffer from depression (Wolanian, Gross, & Hong, 2015), the NCAA created many initiatives to bring awareness and to help cope with mental health. In November 2013, the NCAA formed a task force to address mental health issues that face NCAA student-athletes (Sudano & Miles, 2016). A team consisting of twenty-four different mental health organizations created the consensus document called “Mental Health Best Practices.” This document provided NCAA institutions with understanding mental wellness and outlines the best practice strategies to manage it.

A study conducted by Hoedaya and Anshel in 2003 examined the most common coping strategies used by Australian and Indonesian competitive athletes and the effectiveness of those strategies following stressful events experienced prior to pre-game and during game sport competition (Hoedaya & Anshel, 2003). The COPE inventory by Carver et al. (1989) was used as a conceptual framework to measure athletes’ usage of coping strategies. In this study six dimensions of Carver et al.’s COPE was used which included active coping, restraint, acceptance, denial, seeking social support for emotional reasons, and venting emotions. The

extent of using coping strategies and the perceived effectiveness of those strategies for game stressors were also measured and these game stressors included: injury to a key player, teammate is dismissed, making a performance error, making a mental error, opponent scores in close game, a bad call from the umpire, verbal threat by opponent, spectator booing, and failing to meet self-expectations to perform well. 136 Australian athletes and 147 Indonesian athletes participated in the study. The results showed that Indonesians used "denial", "restraint", and "active" coping more than their Australian counterparts. While Australians perceived their coping efforts as more effective as compared to Indonesians for eight of the nine sources of game stress (Hoedaya & Anshel, 2003).

In previous studies it was found that alcohol misuse was associated with depression and anxiety among high school and college athletes. These athletes use alcohol as a “self-medication” to give them the impression that they are relieving their symptoms of depression and anxiety. Turning to alcohol to cope with their mental health can be deemed as an impulsive behavior which relates to one of the symptoms that anxiety causes. In a study by Miller et al. (2002) at East Tennessee State University, they surveyed a group of 262 athletes where 21 percent of athletes reported high alcohol use. In this study, it was shown that high alcohol use was related to self-reported symptoms of depression. Since the group was relatively young and healthy, both mentally and physically, the possibility that their psychiatric symptoms might be driving their misuse of alcohol is heightened (Miller, 2002).

Based on the review of literature discussed above, the study is proposing the following hypotheses:

H1: There is a positive correlation between athletes’ emotional intelligence and reduced anxiety and depression.

H2: There is a positive correlation between athletes' low emotional intelligence and using substance abuse, self-blame, and denial as coping strategies.

Mental Health Self-Management, Help-Seeking, and Stigmas

Student-athletes with high levels of depression and anxiety need to manage their mental health in order to increase their well-being. Due to student-athletes demanding and busy schedules, they tend not to manage their mental health well which prevents them from participating in positive coping strategies and increases their chances of hiding insecurities. Mental health self-management are strategies that range from improving coping with and managing the stressors of daily living, via preventing and managing milder psychiatric conditions, such as burn-out or mild depression, up to prevention of, or intervening in severe psychiatric conditions (Wolf, 2011). Reasons for such maladaptive coping styles range from society derived stigma perceptions, to a lack of social support, personal resources, and tailored mental health interventions (Gulliver, Christensen, & Griffiths, 2010). In regard to help seeking, there are two types of stigmas that exist: public and self-stigma. Public stigma is external and refers to a belief that society perceives seeking help for mental health treatment as undesirable and individuals who seek help are socially unacceptable. Self-stigma represents an internalization of public stigma in that an individual believes he or she is socially undesirable for seeking treatment (Hilliard, Watson II, & Zizzi, 2010). Social network stigma is a form of external stigma that specifically refers to perceived stigma from individuals who are directly within one's social network (Vogel, Wade, & Aschman, 2009). All three of these stigmas combined increases the reluctance of student-athletes to seek professional help.

An estimated 10%–15% of college student-athletes suffer from clinically relevant psychological distress (Barnard, 2016; Watson, 2005). Other research has shown that a campus-

wide average of 8%–9% of student-athletes seek help from campus mental health services (Barnard, 2016; Watson & Kissinger, 2007). Martin et al. (1997) developed the Athletes' Attitudes Toward Seeking Sport Psychology Consultation Questionnaire (ATSSPCQ), a 50-item questionnaire with dimensions for stigma tolerance, confidence in a sports psychology consultation, and interpersonal openness/willingness, to examine perceptions among athletes toward sport psychology consultations (Barnard, 2016). The questionnaire was administered to a total of 225 student-athletes at a NCAA Division I university, 48 African Americans and 177 Caucasians. The results showed that stigma towards mental health negatively correlates with an athlete's willingness to consult with a sport psychologist (Barnard, 2016). An interesting finding within the study suggested that compared to their white counterparts, black athletes stigmatize sport psychologist consultations to a greater extent and are less likely to seek assistance of a sports psychologist. Martin et al. (1997) suggested that this is possible because the sports psychologist available to the black athletes at their universities are typically white.

The NCAA conducted research on depression and anxiety prevalence in student-athletes. They studied data from eight National College Health Assessments administered by the American College Health Association (ACHA) from 2008 through 2012. The ACHA data showed that sleep difficulties and anxiety brought on by academics was highly correlated with student's depression and anxiety. Most student-athletes and non-athletes in the study indicated a willingness to seek help for mental health concerns in the future (63 percent of student-athletes, compared with 68 percent of their non-athlete peers) (Davoren & Hwang, 2012). The study noted that student-athletes are less likely to report having received support for their depression and anxiety compared to non-athletes. Male athletes are less likely to seek help for mental health issues compared to female athletes. This can be due to the image that male athletes have to

uphold being strong and stoic. Health seeking is viewed as a sign of weakness and is in alignment with the hegemonic masculinity demonstrated in sports (Wahto, 2016).

H3: There is a negative correlation between athletes' perceived stigmas and help-seeking behaviors.

Sleep Deprivation

Lack of sleep due to athletic and academic stress among student-athletes can also drastically affect their physical and mental health. Student-athletes may face particularly steep barriers to sleep compared to non-athletes. In 2014, the NCAA noted that barriers to sleep among student-athletes include balancing school demands, sport performance, training, and traveling for competitions (Bastien et al., 2019). With an increase of sleep deprivation, cognitive functioning can deteriorate (Fullagar et al., 2015). It can also decrease reaction time, academic performance, and cause sports-related injuries. Student-athletes reported sleep problems across multiple domains, including insufficient sleep, insomnia, and daytime tiredness, which were related to lower self-reported grade point average (Turner et al., 2021).

Rabin et al. (2020) utilized the Athletic Sleep Screening Questionnaire (ASSQ), a clinically validated questionnaire, designed to screen athletes for a clinically significant degree of poor sleep health, and to determine if they require intervention. According to Rabin et al. (2020), the ASSQ arguably provides the most accurate assessment of an athlete's sleep health and is the most cost and time efficient way to evaluate sleep health in a large athletic population. 1055 student-athletes from four different NCAA institutions, competing in 15 different sports participated within the study. The results showed that approximately 25% of participants were found to have a clinically meaningful problem with their sleep (Rabin et al., 2020).

Lack of sleep promotes risky behaviors, especially in university and college students. The proportion of university and college students consuming alcohol is similar to the number of those reporting poor sleep, at approximately 30%, the proportion being greater in student-athletes (Bastien et al., 2019). In January 2019, a study was conducted to examine the association among sleep difficulties, insomnia symptoms, and insufficient sleep on the risk of driving under the influence of alcohol in a sample of university and college students and whether these associations were more pertinent in student-athletes. The results of this study concluded that student-athletes consumed significantly more alcohol than non-athletes, binge-drinking episodes were significantly higher among student-athletes than non-athletes, and insomnia symptoms were significantly higher among student-athletes than non-athletes (Bastien et al., 2019).

H4: There is a negative correlation between sleep deprivation and alcohol abuse, and athletes' anxiety and depression.

Communication Competence

With the recent increase in mental health concerns amongst college student athletes, it is crucial to investigate how athletes communicate. It is often assumed that athletes have a well-rounded skill set of communication and interpersonal skills because of their sport participation. McCroskey (1988) states that "communication competence requires not only the ability to perform adequately certain communication behaviors, but it also requires an understanding of those behaviors and the cognitive ability to make choices among behaviors." This is an area of concern because it has been found that student-athletes are not equipped to communicate their concerns and often struggle to initiate difficult conversations with coaches, professors, and administrators (Fraley et al., 2020, Grisham, 2017). As previously mentioned, the NCAA recently published a "Mental Health Best Practices Guide" to help athletic departments support

and promote student-athletes mental health. It is important that athletics departments are successful with facilitating difficult conversations, as student-athletes fear they have no one to communicate their feelings to.

Using a quasi-experimental design, Fraley et al., (2020) studied the efficacy of an immersive learning experience on the communication skills of student-athletes. Utilizing Mursion® technology, an immersive learning experience focusing on difficult conversations was developed and built. This provided an immersive, interactive learning experience that enables practice-based development through virtual stimulation (Fraley et al., 2020, Dieker et al., 2014; O’Callaghan & Piro, 2016). 79 NCAA Division I student-athletes participated in the study. The results showed that Non-White and female student-athletes reported receiving less support from the university and athletic department and reported high levels of unwillingness to communicate. Student-athletes who engaged with the Mursion® technology indicated increases in interpersonal communication competence.

Effective communication on a team may increase cohesion, social support, and collective efficacy (Ray, 2010; Sullivan, 1993; Sullivan, 2000). Examining how student-athletes evaluate their coaches communication competence is valuable because it can ultimately have a negative effect on the athletes’ communication competence. In a study by Ray (2010), Communicator Competence Questionnaire (Monge et al., 1981), Interpersonal Communication Competence Scale (Rubin et al., 1993), and the Scale for Effective Communication in Sports Teams (Sullivan, 2000) were used to examine the relationship between student-athletes’ perceptions and their coaches’ communication competence. Participants of the study included 135 student-athletes and 40 coaches from a NCAA Division I institution. The study had one significant finding regarding the scores between the student-athletes and coaches communicator competence. Coaches

perceived themselves has having the ability to send messages and listen to their athletes effectively, while athletes didn't believe this to be accurate and scored them lower.

H5: There is a positive correlation between athletes' communication with peers, teammates, and coaches and mental health self-management.

Summary

This study has proposed five hypotheses based on the review of literature. The impact of high emotional intelligence can reduce anxiety and depression, while low emotional intelligence increases it. Perceived stigmas can significantly reduce the probability of a student-athlete seeking help for their mental health. Sleep deprivation and alcohol abuse can be a direct cause of a student-athlete having high depression and anxiety. Lastly, high communication competence can notably influence a student-athlete's decision to speak with peers, teammates, coaches, or professionals about their mental health to engage in mental health self-management.

Emotional intelligence has been studied in communication research, to see if student-athletes with high emotional intelligence manage their depression and anxiety more effectively than those with low emotional intelligence. Few studies have researched if student-athletes have higher emotional intelligence compared to their non-athlete counterparts. Studies examining the substance abuse coping strategy amongst low emotional intelligent athletes, have not been conducted. As well as, if student-athletes' depression and anxiety cause high levels of sleep deprivation and alcohol consumption. Studies have researched the relationship between sleep deprivation and increased alcohol consumption in college student-athletes, finding this to be higher with student-athletes. Mental health self-management has been shown in previous studies to improve one's mental health through positive coping strategies, but the examination of how perceived stigmas affect the chances of student-athletes seeking help are less relevant. In recent

studies, student-athletes have an unwillingness to communicate with their peers, coaches, administrators, etc. Researchers also found that student-athletes have a low perception of their coaches' communication competence. High levels of communication competence can contribute to an increase in mental health and interpersonal skills, as supported by previous research. The combination of these variables can give insight on how to better assist student-athletes with their mental health by participating in high emotional intelligence, positive coping strategies, and communication competence. It can also determine how to significantly decrease both perceived stigmas and negative coping strategies.

The impact of high emotional intelligence can reduce anxiety and depression, while low emotional intelligence increases it. Perceived stigmas can significantly reduce the probability of a student-athlete seeking help for their mental health. Sleep deprivation and alcohol abuse can be a direct cause of a student-athlete having high depression and anxiety. High communication competence can notably influence a student-athlete's decision to speak with peers, teammates, coaches, or professionals about their mental health to engage in mental health self-management.

CHAPTER 3: METHODOLOGY

Sample

Participants for this study included 300 individuals who were between 18 and 42 years of age. 150 participants are current student-athletes and 150 are current non-athletes who are enrolled at the University of the Pacific. This sample was chosen to compare the severity of the two groups depression and anxiety and how they tend to cope with these mental health problems. The survey was electronically distributed with Qualtrics through an anonymous link for participants to complete.

Procedure

A questionnaire was distributed to students at the University of the Pacific using the online software Qualtrics. The researcher's university institutional review board reviewed, approved, and granted permission for this study prior to research being conducted. All respondents to the survey were 18 years of age or older and completed the survey voluntarily. Participants were given a brief description of the survey and its purpose prior to starting the questionnaire. Students were given 15 to 20 minutes to complete and submit the questionnaire.

Measurement

The questionnaire contained twelve sections to measure the participants personal reports of behaviors and experiences they are currently dealing with. The specific sections pertained to emotional intelligence, depression, anxiety, coping strategies, intentions to seek help, self-stigma, public stigma, social networking stigma, alcohol consumption, sleep deprivation, communication competence, and demographics. The dependent variables for this study were depression, anxiety, self-stigma, public stigma, social networking stigma, and alcohol

consumption. The independent variables were emotional intelligence, coping strategies, sleep deprivation, and help-seeking.

Section 1 is designed to measure the demographic information about the respondents to the survey. It contains four questions regarding age, student-athlete or non-athlete, gender, and ethnicity. These items are important to allow the researcher to segment the responses of the population between student-athletes and non-athletes in the study. The information gathered in the sections of emotional intelligence, depression, and anxiety may help in understanding if one group of respondents have higher levels than the other.

Section 2 is designed to measure emotional intelligence. The Bar-On's EQ-i (2002) scale is a fifteen item Likert scale. In 1997, Bar-On defined emotional intelligence as "an array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures." It was designed to measure an individual's interpersonal, decision-making, self-expression, self-participation, and stress management. This scale was modified to fit the needs of student athletes and non-athletes to determine their emotional intelligence relating to sports and academics. The Likert scale utilizes the numbers from one to five for respondents to indicate how much they agree with each statement. On the scale, a response of "1" indicates "strongly disagree," and "5" represents "strongly agree." The adapted version of the scale proved to be highly reliable for this study ($\alpha = .83$).

Section 3 is designed to measure depression. This scale was developed by the researcher to collect data specifically for this study. The measure contains a 11-item semantic differential scale. The questions ask the respondent to rate each question on a scale from one to five with a "1" indicating "strongly disagree" and a "5" indicating "strongly agree." This scaled helped

determine the levels of respondents' depression. An example of an item from this is number 4 that reads, "You have lost interest in your sport or studies."

Section 4 is designed to measure anxiety. Spitzer et al., (2006) developed the Generalized Anxiety Disorder Scale (GAD-7) to measure the scale of anxiety from mild to severe. The GAD-7 is commonly used to measure general anxiety disorder symptoms within primary care settings. Spitzer et al., (2006) reported a Cronbach Alpha of .92. This 7-item Likert scale displays a range of choices from one to four. One corresponds with "not at all," and four corresponds with "nearly every day." The scale was highly reliable for this study ($\alpha = .90$).

Section 5 is designed to measure coping strategies. This scale was adapted from a version of a scale originally designed by Carver et al., (1989) called the COPE Inventory. Carver (1997) then developed the Brief COPE Inventory, a 28-item Likert scale because earlier patients became impatient at responding to the full instrument. The items indicate ways respondents have been currently dealing with the stress in their life. The statements ask the respondents to rate each question on a scale from one to five with a one stating "strongly disagree," and five stating "strongly agree." It is designed to determine how respondents tend to cope with anxiety and depression. The researcher only used 14 statements from the Brief COPE Inventory focusing on seven dimensions of active coping, emotional support, substance abuse, self-blame, and positive reframing, denial, and therapy. The shortened scale was reliable for this study ($\alpha = .80$). The researcher utilized the dimensions of substance abuse, self-blame, and denial thoroughly within this study, each had a Cronbach Alpha of .95, .83, and .76 respectively.

Section 6 is designed to measure intentions to seek help and respondents' mental health self-management. Ajzen (2006) produced the first scale to measure planned behavior called Constructing a Theory of Planned Behavior Questionnaire. It was adapted by Hammer & Spiker

(2018) naming it the Mental Help Seeking Intention Scale (MHSIS). This scale utilized the 3-item intention instrument within Ajzen's (2006) questionnaire to measure respondents' intention to seek help from a mental health professional if they had a mental concern. The three-items provided a range of choices from one to seven. One is associated with "extremely unlikely," and "extremely likely." This scale has historically proved to be highly reliable with alpha reliability reports regularly above .90. The scale was highly reliable for this study ($\alpha = .95$).

Section 7 is designed to measure self-stigma. The Self-Stigma of Seeking Help Scale (SSOSH) was developed by Vogel, Wade, & Haake (2006) to measure respondents' decisions to engage in therapy. The 10-item scale are comments frequently used for inquiry of determining if individuals believe he/she is socially undesirable for seeking treatment. On the scale, "1" represents "strongly disagree," and "5" represents "strongly agree." The initial alpha reliability was .40, and an adjustment was made. Items 2, 3, 5, 8, 9, and 10 were used to represent negative feelings towards seeking help and proved to be reliable ($\alpha = .86$).

Section 8 is designed to measure public stigma. A scale was first developed for measuring public stigma by Komiya et al., in 2000 called the Stigma Scale for Receiving Professional Psychological Help (SRRPH) and has been thoroughly used in studies among young children and adults. The scale was reliable for Komiya et al., reporting a Cronbach's Alpha of .72. This study utilized the same scale that includes a 5-item set of measures. The items are a semantic differential scale that has the choice of numbers from one to five. The one corresponds to "strongly disagree," and the five corresponds with "strongly agree." An example of an item from this scale is number 1 that says, "Seeing a psychologist for emotional or interpersonal problems carries social stigma."

Section 9 is designed to measure social network stigma. In 2009, Vogel, Wade, and Ascheman created the Perceptions of Stigmatization by Others for Seeking Help Scale (PSOSH). This scale was designed to assess individuals' perceptions of how people who they interact with consistently would respond to them seeking professional help. The initial alpha for Vogel, Wade, and Ascheman (2009) was .91. The scale was highly reliable for this study ($\alpha = .90$). The five-item Likert scale included a range of choices from one to five. One indicates not at all and five indicates a great deal. An example of an item from this scale is number 3 that reads, "See you as seriously disturbed."

Section 10 is designed to measure alcohol consumption. The Athlete Drinking Scale (ADS) was developed by Martens et al., (2005), in search for if intercollegiate athletes consume more alcohol and experience more negative related consequences than non-athletes. The scale uses three subscales of positive reinforcement, team/group, and sport-related stress. The 19-item scale is measured on a semantic differential scale from one to five. One denotes strongly disagree to five that denotes strongly agree. The researcher adapted this scale to fit both student-athletes and non-athletes reasonings for consuming alcohol. The scale was extremely reliable for this study ($\alpha = .90$).

Section 11 is designed to measure sleep deprivation. Samuels et al., (2016) originally designed the Athlete Sleep Screening Questionnaire (ASSQ). The purpose of this questionnaire was to create a subjective, self-report, sleeping screening questionnaire for elite athletes. The 16-item scale relates to sleeping habits that represents the individuals' typical sleep habits over the recent past. The initial alpha reliability was .40, and an adjustment was made. The adjustment included items 1, 3, and 5 of this scale that ask, "During the recent past, how many hours of

actual sleep did you get a night,” “How satisfied/dissatisfied are you with the quality of your sleep,” and “How often do you have trouble staying asleep?”

Section 12 is designed to measure communication competence. McCroskey (1988) developed the Self-Perceived Communication Competence Scale (SPCC). The scale measures self-reports of individuals’ assumptions about how competent they are to communicate in different situations. It includes 12-item statements that individuals can choose from zero to one hundred on a sliding scale of how likely they are to engage in communication. “0” presumes completely incompetent and “100” presumes completely competent. An example of an item from this scale is question 10 that states, “Talk in a large meeting of strangers.” This scale was thoroughly reliable for this study ($\alpha = .94$).

CHAPTER 4: RESULTS

Demographic Information

Demographic background information was collected from the participants. Participants in this study were all students enrolled in classes at the University of the Pacific (N = 300), 150 were student athletes and 150 were non-athletes. The students enrolled were undergraduate and graduate students. The respondents were from 18-42 years of age. The average age of the sample was 19. The sample was made up of 45.3% male, 54% female, .3% third gender/non-binary, and .3% who did not wish to specify. The sample was ethnically diverse with 99 students identifying as Asian American, 39 as African American, 49 as Hispanic/Latino, 100 as white/Caucasian, 1 as Native American, and 12 as other.

Independent and Dependent Variables

All of the scales used in the study proved to be highly reliable. The scale used to determine emotional intelligence produced a Cronbach Alpha of .83 across the 15 items in the scale. The newly created scale to measure depression reported a Cronbach's Alpha of .91 over the 11 items. The scale for anxiety resulted in a Cronbach Alpha of .90 across the seven items in the scale. The scale for measure coping strategies was adjusted to five dimensions of the original scale (active coping, emotional support, substance abuse, self-blame, and positive reframing) produced a Cronbach's Alpha reliability of .80 over 14 items. Substance abuse, self-blame, and denial had a Cronbach Alpha of .95, .83, and .76 respectively. The scale for intention to seek help reported a Cronbach Alpha of .95 across 3 items in the scale. The scale for self-stigma was adjusted resulting in a Cronbach Alpha of .86 over six items in the scale. The scale for public stigma produced a Cronbach's Alpha reliability of .81 across five items. The scale for social

network stigma resulted in a Cronbach Alpha of .90 over five items in the scale. The scale for alcohol consumption reported a Cronbach Alpha of .95 across 19 items in the scale. The scale for communication competence produced a Cronbach's Alpha reliability of .94 over 12 items.

Table 1

Reliability of Emotional intelligence, Depression, Anxiety, Coping strategies, Intention to seek help, Stigmas, Alcohol consumption, and Communication competence.

Variables	Cronbach's Alpha	N of Items
Emotional intelligence	.83	15
Depression	.91	11
Anxiety	.90	7
Coping strategies	.80	14
Substance abuse	.95	2
Self-blame	.83	2
Denial	.76	2
Intention to seek help	.95	3
Self-stigma	.86	6
Public stigma	.81	5
Social network stigma	.90	5
Alcohol consumption	.95	19
Communication competence	.94	12

An issue arose when analyzing the reliability of the scale used for self-stigma. Initial reports showed a Cronbach's alpha score of .40. The result was not reliable enough to provide

generalizable results from the data collected on the variable. When the individual items, of the ten-item scale, were looked at in relation to one another there were four items identified as problematic. The first item read, “I would feel okay about myself if I made the choice to seek professional help.” The fourth item read, “My self-confidence would remain the same if I sought professional help.” The sixth item read, “My view of myself would not change just because I made the choice to see a therapist.” The seventh item read, “My self-esteem would increase if I talked to a therapist.” These four items were worded with positive valence, therefore the researcher solely focused on negative valence items. When the first, fourth, sixth, and seventh items were removed, the alpha reliability improved drastically. For this reason, the six -item self-stigma scale was used for data analysis in this study. As previously reported, the alpha reliability is strong ($\alpha = .86$).

Another issue arose when analyzing the reliability regarding the scale for sleep. Initial reports showed a Cronbach’s alpha score of .40. When the individual items, of the 16-item scale, were looked at in relation to one another there was one major factor identified as problematic. Most of the items ranged in different scales, “1” to denote none and “4” to denote five to seven times, “1” to indicate 8:00PM to 9:00PM and “5” to indicate 1:45AM to 3:00AM, or yes and no scales. The range in scales ultimately could have affected the reliability. Instead, only three items were used that proved significant in correlation to depression, anxiety, and alcohol consumption. The first item read, “During the recent past, how many hours of actual sleep did you get at night?” The third item read, “How satisfied/dissatisfied are you with the quality of your sleep?” The fifth item read, “How often do you have trouble staying asleep?” This will be discussed further in the discussion section.

Table 2 shows descriptive statistics for the independent and dependent variables proposed in the hypotheses. The mean score for emotional intelligence was (M= 4.54). The standard deviation was .52. The mean score for coping strategies was (M= 2.83). The standard deviation was .61. The mean score for intention to seek help was (M= 4.43). The standard deviation was 1.81. The mean score for the dependent variables included depression (M= 2.80), anxiety (M= 2.27), alcohol consumption (M= 5.27), self-stigma (M= 6.52), public stigma (M= 5.69), Social network stigma (M= 6.02), and communication competence (M= 69.07). Standard deviations were reported for depression (.88), anxiety (.81), alcohol consumption (.83), self-stigma (.87), public stigma (.87), social network stigma (.90), and communication competence (20.02).

Table 2
Descriptive Statistics for Independent Variables

	N	Minimum	Maximum	Mean	Std. Deviation
EI	300	1.67	5.47	4.54	.52
Coping	300	1.00	5.00	2.83	.61
Intent	300	1.00	7.00	4.34	1.81

Table 2.1
Descriptive Statistics for Dependent Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Depression	300	1.00	5.00	2.80	.87
Anxiety	300	1.00	4.00	2.27	.81
Alcohol	300	4.21	7.26	5.27	.83
Stigma 1	300	5.00	9.00	6.52	.87
Stigma 2	300	4.00	8.00	5.69	.88
Stigma 3	300	5.00	9.00	6.02	.90
Comm	300	.00	100.00	69.07	20.02

Correlation Analysis

A correlation analysis was run to explore the relationships between the variables in the proposed hypothesis. Table 3 shows a correlation matrix of the bivariate correlations between emotional intelligence, depression, anxiety, intention to seek help, self-stigma, public stigma, social network stigma, alcohol consumption, and communication competence. Table 3 illustrates significantly correlations obtained within the study. More specifically, emotional intelligence was significantly positively correlated with depression ($r = -.31, p < .01$) and anxiety ($r = -.24, p < .01$). Also, intention to seek help was a significant positive correlation with communication competence ($r = .32, p < .01$). Finally, alcohol consumption showed a significant negative correlation with depression ($r = .24, p < .01$).

Table 3

Correlation Analysis of Emotional Intelligence, Depression, and Anxiety.

		EI	Depression	Anxiety
EI	Pearson Collection	1	-.31**	-.24**
	Sig. (2-tailed)		<.001	<.001
	N	300	300	300
Depression	Pearson Collection	-3.05**	1	.60**
	Sig. (2-tailed)	<.001		<.001
	N	300	300	300
Anxiety	Pearson Collection	-.24**	.60**	1
	Sig. (2-tailed)	<.001	<.001	
	N	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3.1
Correlation Analysis of Emotional Intelligence, Denial, Substance Abuse, and Self-Blame

		EI	Denial	Subabuse	Sblame
EI	Pearson Collection	1	-.12**	-.07	-.19**
	Sig. (2-tailed)		.04	.20	.001
	N	300	300	300	300
Denial	Pearson Collection	-.12*	1	.38**	.43**
	Sig. (2-tailed)	.04		<.001	<.001
	N	300	300	300	300
Subabuse	Pearson Collection	-.07	.38**	1	.28**
	Sig. (2-tailed)	.20	<.001		<.001
	N	300	300	300	300
Sblame	Pearson Collection	-.1988	.43**	.28**	1
	Sig. (2-tailed)	.001	<.001	<.001	
	N	300	300	300	300

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3.2
Correlation Analysis of Intention to Seek Help, Self- Stigma, Public Stigma, and Social Network Stigma

		Intent	S Stigma	P Stigma	SN Stigma
Intent	Pearson Collection	1	-.35**	-.14*	-.20**
	Sig. (2-tailed)		<.001	.01	<.001
	N	300	300	300	300
S Stigma	Pearson Collection	-.35**	1	.51**	.52**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	300	300	300	300
P Stigma	Pearson Collection	-.14*	.51**	1	.46**
	Sig. (2-tailed)	.01	<.001		<.001
	N	300	300	300	300
SN Stigma	Pearson Collection	-.20**	.52**	.46**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	300	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correction is significant at the 0.05 level (2-tailed).

The correlations displayed in the data support majority of the hypotheses predicted in the study. The first hypothesis was associated with emotional intelligence, depression, and anxiety. Hypothesis 1 stated, “There is a positive correlation between athletes’ emotional intelligence and reducing their anxiety and depression.” This hypothesis is supported by the correlations. High emotional intelligence shows significant positive correlations with depression ($r = -.31, p < .01$) and anxiety ($r = -.24, p < .01$). Hypothesis 2 stated, “There is a positive correlation between

athletes' low emotional intelligence and using substance abuse, self-blame, and denial as coping strategies." This hypothesis is supported by the correlation analysis. More specifically, low emotional intelligence showed a significant positive correlation with denial, substance abuse, and self-blame ($r = -.12$, $r = -.07$, & $r = -.19$ respectively, all $p < .01$) coping strategies. Hypothesis 3 stated, "There is a negative correlation between athletes' perceived stigmas and help-seeking behaviors." This hypothesis is not supported by the correlation analysis. More concretely, low self-stigma, public stigma, and social network stigma displayed a significantly positive correlation with intention to seek help ($r = -.35$, $r = -.14$, & $r = -.20$ respectively, all $p < .01$). Hypothesis 4 stated, "There is a negative correlation between sleep deprivation and alcohol abuse, and athletes' anxiety and depression." This hypothesis is supported by the correlation analysis. More specifically, high depression and anxiety showed a significant negative correlation with hours of actual sleep ($r = -.22$, $r = -.2$, both $p < .01$), staying asleep ($r = .34$, $r = .33$, both $p < .01$), and satisfaction of sleep ($r = .37$, $r = .35$, both $p < .01$). Also, high depression displayed a significant negative correlation with alcohol ($r = .22$, $p < .01$). Hypothesis 5 stated, "There is a positive correlation between athletes' communication with peers, teammates, and coaches and intention to seek help." This hypothesis was supported by the correlation analysis. High intention to seek help supported a significantly positive correlation with communication competence ($r = .32$, $p < .01$).

Table 3.3
Correlation Analysis of Depression, Anxiety, Staying Asleep, Satisfaction, and Hours of Actual Sleep

		Depressio n	Anxiet y	Stayin g Asleep	Satisfacti on	Hours of Actual Sleep
Depression	Pearson Collection	1	.60**	.36**	.37**	-.21**
	Sig. (2-talied)		<.001	<.001	<.001	<.001
	N	300	300	300	300	300
Anxiety	Pearson Collection	.60**	1	.33**	>.35**	-.20**
	Sig. (2-talied)	<.001		<.001	<.001	<.001
	N	300	300	300	300	300
Staying Asleep	Pearson Collection	.36**	.33**	1	.41**	-.22**
	Sig. (2-talied)	<.001	<.001		<.001	<.001
	N	300	300	300	300	300
Satisfaction	Pearson Collection	.37**	.35**	.41**	1	-.47**
	Sig. (2-talied)	<.001	<.001	<.001		<.001
	N	300	300	300	300	300
Hours of Actual Sleep	Pearson Collection	-.22**	.20**	-.22**	-.47**	1
	Sig. (2-talied)	<.001	<.001	<.001	<.001	
	N	300	300	300	300	300

*. Correlation is significant at the 0.01 level (2-talied).

Table 3.4
Correlation Analysis of Alcohol, Depression, and Anxiety

		Alcohol	Depression	Anxiety
Alcohol	Pearson Collection	1	.22**	.04
	Sig. (2-tailed)		<.001	.55
	N	300	300	300
Depression	Pearson Collection	.22**	1	.59**
	Sig. (2-tailed)	<.001		<.001
	N	300	300	300
Anxiety	Pearson Collection	.04	.59**	1
	Sig. (2-tailed)	.55	<.001	
	N	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3.5
Correlation of Intention to Seek Help and Communication Competence

		Intent	Comm
Intent	Pearson Collection	1	.32**
	Sig. (2-tailed)		<.001
	N	300	300
Comm	Pearson Collection	.32**	1
	Sig. (2-tailed)	<.001	
	N	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

An Independent sample T-test analysis was conducted to explore the relationship between student-athletes and non-athletes emotional intelligence, depression, anxiety, coping strategies, intention to seek help, self-stigma, public stigma, social network stigma, alcohol consumption, and sleep. Table 4 shows two Independent sample T-test were run to split variables into two data tables. Research could not find any statistical difference between the top eight variables. For the second data table, two variables were outstandingly significant in alcohol and sleep. In terms of alcohol, student-athletes drink more than non-athletes (t value = 4.56, $p < .01$). There was a marginal statistically significant found in sleep, with non-athletes obtaining more sleep than student athletes (t value = -1.96, $p < .052$).

Table 4

Independent Sample T-Test Analysis of Emotional Intelligence, Depression, Anxiety, Coping Strategies, Intention to Seek Help, Self-Stigma, Public Stigma, and Social Network Stigma

	Are you a student-athlete or non-athlete?	N	Mean	Std. Deviation	Std. Error Mean
EI	Student-Athlete	150	4.55	.57	.05
	Non-Athlete	150	4.54	.46	.04
Depression	Student-Athlete	150	2.79	.91	.07
	Non-Athlete	150	2.82	.84	.07
Anxiety	Student-Athlete	150	2.24	.81	.07
	Non-Athlete	150	2.30	.82	.07
Coping	Student-Athlete	150	2.84	.70	.06
	Non-Athlete	150	2.81	.51	.04
Intent	Student-Athlete	150	4.40	1.72	.14
	Non-Athlete	150	4.47	1.90	.15
S Stigma	Student-Athlete	150	6.54	.90	.07
	Non-Athlete	150	6.50	.85	.07
P Stigma	Student-Athlete	150	5.73	.80	.07
	Non-Athlete	150	5.66	.93	.08
SN Stigma	Student-Athlete	150	6.02	.88	.07
	Non-Athlete	150	6.02	.92	.08

Table 4.1
Independent Sample T-Test Analysis of Alcohol Consumption, Sleep, Communication Competence, Denial, Substance Abuse, and Self-Blame

	Are you a student-athlete or non-athlete?	N	Mean	Std. Deviation	Std. Error Mean
Alcohol	Student-Athlete	150	5.49	.84	.07
	Non-Athlete	150	5.06	.76	.06
Sleep	Student-Athlete	150	3.04	.75	.06
	Non-Athlete	150	3.21	.72	.06
Comm	Student-Athlete	150	69.37	18.44	1.51
	Non-Athlete	150	68.78	21.55	1.76
Denial	Student-Athlete	150	2.32	1.09	.09
	Non-Athlete	150	2.18	1.01	.08
Subabuse	Student-Athlete	150	1.99	1.08	.09
	Non-Athlete	150	1.79	1.14	.09
Sblame	Student-Athlete	150	3.37	1.20	.10
	Non-Athlete	150	3.51	1.10	.09

There is another portion of the correlation that is not related to the hypotheses predicted in the study. For reasons that will be explained in the following section, it is important to analyze the correlation data to determine the relationship between positive coping strategies, depression, and anxiety. As well as the relationship between emotional intelligence, intention to seek help, and communication competence. As depicted in Table 5, the results indicate that positive coping strategies like therapy can reduce depression and anxiety. Therapy showed a significantly positive relationship with depression ($r = .20, p < .01$), and anxiety ($r = .15, p < .008$). The results

also showed that emotional intelligence has the same influence as communication competence with intentions to seek help. Emotional intelligence indicated a significantly positive relationship with intention to seek help ($r = .17, p < .004$) and communication competence ($r = .33, p < .01$). These conclusions should be considered important when determining techniques that can greatly reduce depression and anxiety. The findings support existing research regarding these variables.

Table 5
Correlation Analysis of Depression, Anxiety, and Therapy

		Depression	Anxiety	Therapy
Depression	Pearson Correlation	1	.59**	-.20**
	Sig. (2-tailed)		<.001	<.001
	N	300	300	300
Anxiety	Pearson Correlation	>.59**	1	.15**
	Sig. (2-tailed)	<.001		<.001
	N	300	300	300
Therapy	Pearson Correlation	.20**	-.15**	1
	Sig. (2-tailed)	<.001	.01	
	N	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

Table 5.1
Correlation Analysis of Intention to Seek Help, Communication Competence, and Emotional Intelligence

		Intent	Comm	EI
Intent	Pearson Collection	1	.32**	.17**
	Sig. (2-tailed)		<.001	.004
	N	300	300	300
Comm	Pearson Collection	.32**	1	.33**
	Sig. (2-tailed)	<.001		<.001
	N	300	300	300
EI	Pearson Collection	.17**	.33**	1
	Sig. (2-tailed)	.004	<.001	
	N	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

CHAPTER 5: DISCUSSION

Implications of the Study

There are many important takeaways from this research and interesting implications that the data might allude to, especially in terms of emotional intelligence, communication competence, and intention to seek help. To further understand the results of this study, the hypotheses within the study must be considered regarding the results of the data collected. Also, the new scales created for depression and coping strategies in this study will need to be considered.

The first important takeaway is the scale reliability for the newly created and customized scales used for this study. The research was able to produce strong Cronbach's Alpha reports on the scales including depression (.91) and coping strategies (.80). These two scales give researchers new sets of tools to quantify depression and specific coping strategies that student-athletes might engage with. Taken together, they provide a measure that can be used to gain insights into how effective the coping strategies is with reducing depression.

The results are interesting because these variables are important to provide improvements with student-athletes mental health. Depression is difficult to scale because it effects individuals differently and it can greatly depend on the person and their environment. The ability to compare depression with different coping strategies may provide important insights into how student-athletes tend to cope with their mental health, either positively or negatively. The results indicate that depression ($r = .36$). reduces when an individual engages with coping strategies. Although, the results also showed that positive coping strategy, therapy ($r = .20$) reduces high depression. It should also be noted that because the data shows that there is value in both depression and

coping strategies, incorporating both may be beneficial to create the most impact. These two new scales should be important tools for researchers separately as well. Each of the scales individually provides a new way to measure the communication variables they are associated with, and this is important because researchers can use them when testing the behaviors of student-athletes and mental health against other communication variables. Important findings through the ability to assess different behaviors when applied to existing research, may be the result of taking one of the new scales. There are other findings that should be considered significant.

The study results indicate that there is significant correlation regarding student-athletes and non-athletes alcohol consumption and marginal statistically significance in sleep. In terms of alcohol, student-athletes drink more than non-athletes ($t^2 = 4.56$, $p < .01$). This is important because it supports the idea that alcohol consumption can be used as a coping mechanism for many young adults but can be magnified in student-athletes. The NCAA tests for other substances such as marijuana and other drugs that can be used for relaxation. In order to not lose scholarships or eligibility for their sport many student-athletes turn to alcohol to help cope with the demands and expectations that they face with their sport participation. Along with the additional component of depression it drives them to consume more alcohol, as supported by the data collection. In regard to sleep, non-athletes obtain more sleep than student-athletes. In some but not all cases many student-athletes have more on their day-to-day plate compared to non-athletes. This also supports research that non-athletes are able to achieve more and better sleep than student-athletes. When considering practice, study hall, games, training, and time spent in recovery student-athletes have much less time to focus on studies. While traveling for competition, student-athletes have study hall time, but it is not nearly as much time as non-

athlete students. This can cause student-athletes to stay up later in order to study. These are the biggest factors that contribute to the differences in sleep between student-athletes and non-athletes.

Important findings include emotional intelligence reduces anxiety and depression, high perceived stigmas increase intentions to seek help, and emotional intelligence and high communication can significantly increase the intention to seek help. Higher emotional intelligence decreased feelings of depression and anxiety. This is consistent with the results of the study by Lu et al. (2010), when students have higher emotional intelligence, they have the ability to easily recognize emotions that arise from depression and anxiety. Higher emotional intelligence may not eliminate anxiety and depression, but it can allow student-athletes to handle those emotions more efficiently. Emotional intelligence can be lower in younger collegiate athletes as college is the first time in many of their lives that they are outside of the area they grew up in. The culture at the university or college that they attend can be vastly different from home and learning to adapt can be challenging for students who were not prepared.

Perceived stigmas and intention to seek help results are interesting because the original hypothesis stated that high self-stigma, public stigma, and social network stigma will decrease the intention to seek help, as supported by Barnard's (2016) study. In this study, the results indicated that high self-stigma, public stigma, and social network stigma increases the intention to seek help. With the recent suicides amongst student-athletes within the NCAA, it is bringing an increased amount of awareness about the mental health concerns of student-athletes. There is not as much stigma that surrounds mental health as there once was because it has become a concerning topic. This is shown in the data as it did not correlate with the hypothesis. There are more positive notions to seek help than there has been in the past.

Student-athletes having high communication competence with their family, teammates, and coaches increases their intention to seek help. According to McCroskey (1988) communication competence requires not only the ability to perform adequately certain communication behaviors, but it also requires an understanding of those behaviors and the cognitive ability to make choices among behaviors. Meaning, student-athletes are aware of their mental health concerns and can communicate effectively how they're feeling with family, coaches, and teammates which can ultimately lead them to seek help. This also coincides with what has been previously stated about high perceived self-stigma, public stigma, and social network stigma. Regardless of high perceived stigmas, student-athletes still have the ability to want to communicate and seek help. The likelihood a student-athlete is willing to communicate about their mental health concerns will promote the intention to seek help. With these findings, it is evident that the NCAA needs to put in place mental health practitioners at every university immediately. Doing so, will provide student-athletes a space that will work around their demanding schedules and give them the opportunity to comfortably express their mental health concerns.

Emotional intelligence and communication competence has similar influences on the intention to seek help. Emotional intelligence indicated a significantly positive relationship with intention to seek help ($r = .17, p < .004$) and communication competence ($r = .33, p < .01$). These conclusions should be considered important when practitioners are determining techniques that can greatly reduce depression and anxiety. Practitioners can determine if student-athletes have low emotional intelligence or communication competence by utilizing the scales within the research. Based on the results, it can indicate if there is a need of improvement in either department. Once that is established techniques to improve a student-athletes emotional

intelligence or communication competence should be established. Ultimately, this should greatly impact the reduction of mental health amongst student-athletes.

Limitations and Suggestions for Future Research

This study has some important limitations that should be taken into consideration. Although, each variable was valuable to the research, the survey was very long in length. There were many incomplete surveys that could not be included in data collection because they were less than 40% completed. The survey should be altered to be shorter, maybe in terms of longer scales such as emotional intelligence, alcohol consumption, and sleep deprivation. Also, since this is a smaller institution with a small population of student-athletes, bigger universities may not produce the same results. The results could be that those student-athletes have less intention to seek help since administration are balancing too many athletes and cannot provide the time to help when necessary. Depending on where student-athletes are from can also yield different results based on their upbringing. Student-athletes were not asked to disclose what specific sport they participated in; this was to examine the entire athlete population but exploring each sport may have been beneficial to the results. Examining by sport could have provided a different angle of research if one sport had a high number of athletes reporting depression and anxiety symptoms over others. Lastly, gender and ethnicity were not compared in this study. This could have also benefitted the results to examine if there is a significant difference between gender, ethnicity, and each variable.

There are multiple types of future research that can follow this study. It is extremely important to examine the coaching staff and administrations at NCAA institutions. With many student-athletes succumbing to their mental health recently, it is clear that athletic departments are not catering to their needs effectively. Coaches' communication competence and self-

awareness needs to be evaluated because they are essentially the main point of contact for student-athletes. Does student-athletes at the institution believe they can communicate their mental health to their coach? Is it because the coach or the student-athlete lacks communication competence? In addition, this study suggests that if student-athletes have high communication competence then the intention to seek help increases. Researchers should examine if coaches and administrations are prepared and trained adequately to assist student-athletes with their mental health once they seek help.

Research needs to be conducted on how many NCAA institutions already have a mental health practitioner in place. Is it benefitting student-athletes? Is their mental health reducing or increasing? It is important to examine this type of research because it will provide statistical data for other colleges and universities to implement a mental health practitioner. Research can also include if most NCAA institutions have funds to provide a mental health practitioner on their campuses. If not, what are other techniques that can be implemented to provide help for student-athletes while being mindful of a specific budget. If money is a factor on why institutions are not providing resources for mental health, research can then explore the NCAA reasonings behind not establishing a budget for mental health awareness at all institutions.

Additional research should be conducted to better understand how the COVID-19 pandemic has affected the mental health of student-athletes. This study only provides results regarding the recent mental health concerns of student-athletes. Since the results indicated that student-athletes are affected by depression and anxiety, research can examine how student-athletes felt before the pandemic compared to now. Previous research has found that females and minorities have higher levels of depression and anxiety than their counterparts. During the pandemic, social injustices were also an eye-opening experience for individuals across the

United States. Specifically, for minorities, researchers can examine how that has affected both student-athletes and non-athletes depression and anxiety. This study suggest that low emotional intelligence increases the likelihood of engaging with negative coping strategies such as substance abuse, denial, and self-blame. Therefore, a study should be conducted to determine if witnessing social injustices within the U.S. is detrimental to student-athletes and non-athletes emotional intelligence and coping strategies.

Conclusion

This study sought to understand the severity of student-athletes' anxiety and depression and provide the necessary techniques to increase their mental and physical well-being. After analyzing the data collected there are multiple clear correlations indicated in the results. This study resulted in numerous highly significant findings. High emotional intelligence was positively related to anxiety and depression. The data indicates this relationship is highly statistically significant. Perceived stigmas were positively related to intentions to seek help. The relationship is noteworthy because this study originally believed it would produce a negative relationship. The fact that the results didn't support the negative relationship, can provide insight that mental health awareness is increasing, and stigmas associated with it are starting to decrease. Therapy is a positive coping strategy that student-athletes engage with to reduce depression and anxiety symptoms. High communication competence and emotional intelligence had similarities in this study with its influence on intentions to seek help. This is important because it provides more than one technique to increase the intention to seek help. This study suggests that each of the variables are valuable to the research. It also indicates the influence these variables have on the contribution to reduce depression and anxiety.

We must understand that the mental health crisis amongst student-athletes is a pandemic of its own. A deeper understanding of how to better assist student-athletes in reducing their mental health will contribute to future research related to communication between the NCAA, coaches, and administration. Therapy was the best positive coping strategy amongst student-athletes in reducing their mental health. The research conducted demonstrates that the stigmas about mental health are evolving into increased intention to seek help. Emotional intelligence and communication competence has been shown to have effects on student-athletes that can attempt to gain a better understanding of its relationship with their mental health concerns.

This thesis can offer insights into the research that encourages the NCAA to implement more mental health resources for their student-athletes. Emotional intelligence, coping strategies, intentions to seek help, perceived stigmas, alcohol consumption, sleep deprivation, and communication competence proved reliable enough to be considered important tools in communication and mental health research. The correlation analysis that resulted from the data in the study indicates that emotional intelligence, high communication competence, and therapy are important aspects to improving depression and anxiety amongst student-athletes. The COVID-19 pandemic may need to be considered more fully to examine if it had an increased effect on student-athletes' mental health. In addition, implementing a mental health practitioner at every NCAA institution may be an immediate solution to decrease the alarming mental health crisis student-athletes are currently in.

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APPENDIX A: QUESTIONNAIRE

Dear Participant,

The Communication Department at the University of the Pacific would like to invite you to take part in this survey; we understand your time is very important. The data being collected will be used in research pertaining to the direct relationship between emotional intelligence and anxiety and depression in college student-athletes and non-athletes. Completion of this survey will indicate your consent in participation. Please answer the questions as fully and honestly as you can, as failure to do so can alter the results. By taking this survey, it may trigger symptoms of depression or anxiety. You may skip any question or stop taking the survey at any point.

My name is Jessica Radford, and I am a grad student at University of the Pacific, California. I am currently doing research on college student-athletes and non-athletes emotional intelligence and their anxiety and depression within their respective sports and studies. Also, research is being conducted on student-athletes and non-athletes coping strategies with these mental illnesses. It is up to you whether you would like to take this survey. It will take 15-20 minutes of your time. If you experience depression/anxiety, you can get help at the National Alliance on Mental Illness (NAMI) Helpline: 1-800-950-NAMI (6264).

If you have any questions about the research at any time, please email me at jradford@pacific.edu.

By completing and submitting this survey you indicate that you are at least 18 years of age and have read and understand the information provided above. Results of the study can be obtained via e-mail request at jradford@pacific.edu

If you have any questions about your rights as a participant in this research project, please contact the IRB Manager, Office of Research and Sponsored Programs, University of the Pacific by phone (209) 946- 3903 or email IRB@pacific.edu.

Section 1: Demographics

1. What is your age?
 - a. _____
2. Are you a student-athlete or non-athlete?
 - a. Student-athlete
 - b. Non-athlete
3. What is your gender?
 - a. Male
 - b. Female
 - c. Non-Binary/Third Gender
 - d. Prefer not to say
 - e. Other (Please Specify): _____
4. What is your ethnicity?
 - a. Asian
 - b. Black or African American
 - c. Hispanic/Latino
 - d. White
 - e. Native American
 - f. Other (Please Specify): _____

Section 2: Emotional Intelligence

The 15 statements below are comments frequently made by people determining their emotional intelligence relating to sports. Please indicate how much you agree with these statements, by marking a choice representing your response to each statement using the following choices: Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree.

1. I know myself very well.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
2. I am aware of my reactions.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

3. I know what I want in life.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
4. I know my strengths and weaknesses within my sport.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
5. I am able to stop and think before I react.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
6. I am able to set realistic goals for myself.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
7. I am a good listener.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
8. I am very goal-oriented.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

9. I always do my best in every situation.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
10. I am able to identify with my teammates.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
11. I am able to see my coaches and teammates' points of view.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
12. I am committed to achieving success.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
13. I am good at leading my team in the accomplishment of a task.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
14. I discuss my thoughts with other teammates, players, and advisors.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

15. I often influence my teammates in tough competitions.
- Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

Section 3: Depression

The 11 statements below are comments frequently undertaken for inquiry by people determining their level of depression. Please indicate how much you agree with these statements, for the following things that have been observed in the last week by marking a choice representing your response to each statement using the following choices: Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree.

- All the tasks you have performed (in both your sport and school), are taking much more time than usual.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- You are facing a lack of concentration (in both your sport and school).
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- You are feeling you have no future.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
- You are facing problems with making decisions.
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

5. You feel, your life is sad, as there is no joy in your life anymore.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
6. You have lost interest in your sport.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
7. You have been very irritated and angry recently.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
8. You are having a lack of sleep.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
9. You are feeling that everything you have done has been a failure.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
10. You are having trust issues with coaches, teammates, and advisors around you.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

11. You are having trust issues with everyone around you (home and school environment).
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

Section 4: Anxiety

The 7 statements below are comments frequently made for people determining if you have an anxiety disorder that needs treatment. This scale also helps you calculate how severe your anxiety is by giving scores of mild to severe anxiety. Please indicate how much the following statements over the past 2 weeks have been bothering you by marking a choice representing your response to each statement using the following choices: Not At All; Several Days; More Than Half the Days; Nearly Every Day.

1. Feeling nervous, anxious or on edge (before, during, or after a sports performance).
 - a. Not At All
 - b. Several Days
 - c. More Than Half the Days
 - d. Nearly Everyday
2. Not being able to stop or control worrying (about a game, practice, or training).
 - a. Not At All
 - b. Several Days
 - c. More Than Half the Days
 - d. Nearly Everyday
3. Worrying too much about your performance in your sport.
 - a. Not At All
 - b. Several Days
 - c. More Than Half the Days
 - d. Nearly Everyday
4. Trouble relaxing.
 - a. Not At All
 - b. Several Days
 - c. More Than Half the Days
 - d. Nearly Everyday
5. Being so restless that it's hard to sit still.
 - a. Not At All
 - b. Several Days
 - c. More Than Half the Days
 - d. Nearly Everyday

6. Becoming easily annoyed or irritable.
 - a. Not At All
 - b. Several Days
 - c. More Than Half the Days
 - d. Nearly Everyday
7. Feeling afraid, as if something awful might happen (messing up or underperforming within a game).
 - a. Not At All
 - b. Several Days
 - c. More Than Half the Days
 - d. Nearly Everyday

Section 5: Coping Strategies

The 10 statements below are comments that determine how you tend to cope with anxiety and depression. Please indicate how much you agree with these statements, by marking a choice representing your response to each statement using the following choices: Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree.

2. I have been actively coping a little bit.
 - a. a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
2. I've been taking action to make the situation better.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
3. I've been getting emotional support from an advisor, counselor, therapist.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
4. I've been getting comfort and understanding from family members, coaches, and teammates.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

5. I've been using alcohol or other drugs to make myself feel better.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
6. I've been using alcohol or other drugs to help me get through it.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
7. I've been criticizing myself.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
8. I've been blaming myself for the things that have happened.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
9. I've been seeing the situation in a different light, to make it seem more positive.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
 - f.
10. I've been learning to deal with it.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

11. I've been telling myself "this isn't real."
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
12. I've been refusing to believe that I am feeling like this.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
13. I've been helping and advice from a therapist or an advisor. – instrumental support
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
14. I've been trying to get help from a therapist or an advisor about what to do.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

Section 6: Intentions to Seek Help (Mental Health Self-Management)

The 3 statements below are comments that determine your intention to seek help from a mental health professional if needed. Please indicate how much you agree with these statements by marking a choice representing your response to each statement using the following choices: 1 (extremely unlikely) to 7 (extremely likely).

1. If I had a mental health concern, I would **intend** to seek help from a mental health professional.
 - a. Extremely Unlikely
 - b. Quite Unlikely
 - c. Slightly Unlikely
 - d. Neither Unlikely nor Likely
 - e. Slightly Likely
 - f. Quite Likely
 - g. Extremely Likely

2. If I had a mental health concern, I would **try to** seek help from a mental health professional.
 - a. Extremely Unlikely
 - b. Quite Unlikely
 - c. Slightly Unlikely
 - d. Neither Unlikely nor Likely
 - e. Slightly Likely
 - f. Quite Likely
 - g. Extremely Likely

3. If I had a mental health concern, I would **plan** to seek health from a mental health professional.
 - a. Extremely Unlikely
 - b. Quite Unlikely
 - c. Slightly Unlikely
 - d. Neither Unlikely nor Likely
 - e. Slightly Likely
 - f. Quite Likely
 - g. Extremely Likely

Section 7: Self- Stigma

The 10 statements below are comments frequently used for inquiry of determining if individuals believe he/she is socially undesirable for seeking treatment. Please indicate how much you agree with these statements, for the following things that have been observed in the last week by marking a choice representing your response to each statement using the following choices: Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree.

1. I would feel okay about myself if I made the choice to seek professional help.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

2. It would make me feel inferior to ask a therapist for help.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

3. I would feel inadequate if I went to a therapist for psychological help.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
4. My self-confidence would remain the same if I sought professional help.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
5. My self-confidence would NOT remain the same if I sought professional help.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
6. My view of myself would not change just because I made the choice to see a therapist.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
7. My self-esteem would increase if I talked to a therapist.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
8. I would feel worse about myself if I could not solve my own problems.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

9. Seeking psychological help would make me feel less intelligent.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
10. If I went to a therapist, I would be less satisfied with myself.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

Section 8: Public Stigma

The 5 statements below are comments frequently used to assess individuals' perceptions of the societal stigma associated with seeking psychological help. Please indicate how much you agree with these statements, for the following things that have been observed in the last week by marking a choice representing your response to each statement using the following choices: Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree.

1. Seeing a psychologist for emotional or interpersonal problems carries social stigma.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
2. It is a sign of weakness or inadequacy to see a psychologist for emotional or interpersonal problems.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
3. People will see a person in a less favorable way if they come to know that he/she has seen a psychologist.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

4. It is advisable for a person to hide from people that he/she has seen a psychologist.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

5. People tend to like less those who are receiving professional psychological help.
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

Section 9: Social Network Stigma

The 5 statements below are comments frequently used to assess individuals' perceptions of how people who they interact with consistently would respond to them seeking professional help. Please indicate how much you agree with these statements, for the following things that have been observed in the last week by marking a choice representing your response to each statement using the following choices: Not At All; Very Little; Somewhat; Quite a Bit; A Great Deal.

1. React negatively to you
 - a. Not At All
 - b. Very Little
 - c. Somewhat
 - d. Quite a Bit
 - e. A Great Deal

2. Think bad things of you
 - a. Not At All
 - b. Very Little
 - c. Somewhat
 - d. Quite a Bit
 - e. A Great Deal

3. See you as seriously disturbed
 - a. Not At All
 - b. Very Little
 - c. Somewhat
 - d. Quite a Bit
 - e. A Great Deal

4. Think of you in a less favorable way
 - a. Not At All
 - b. Very Little
 - c. Somewhat
 - d. Quite a Bit
 - e. A Great Deal
5. Think you posed a risk to others
 - a. Not At All
 - b. Very Little
 - c. Somewhat
 - d. Quite a Bit
 - e. A Great Deal

Section 10: Alcohol Consumption

The 19 statements below pertain to an individual's alcohol consumption. Think of all the times you drink; how often would you say that you drink for each of the following reasons? Please indicate how much you agree with these statements, by marking a choice representing your response to each statement using the following choices: Strongly Disagree; Disagree; Neutral; Agree; Strongly Agree.

1. I enjoy the feeling of getting drunk
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
2. I drink to help me deal with poor performance
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
3. I drink to have a good time with teammates or friends
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

4. I drink to deal with sport or academic related stress
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
5. I drink to "fit" in with my teammates or friends
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
6. After a game/match/meet or exam/quiz/assignments, it is important for me to go out and celebrate with alcohol
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
7. When drinking alcohol with teammates or friends, it becomes a competition
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
8. Because I work so hard at my sport or academics, I should be able to drink to have a good time
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
9. I drink to celebrate athletic or academic victories
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

10. I get a rush out of becoming drunk
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
11. I feel pressure from my teammates or friends to drink alcohol
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
12. Alcohol use is an important part of athletic and academic culture at this institution
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
13. If I've performed well, I feel like I can go out and drink a little more than usual
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
14. Winning or performing well is a good reason to go out and drink
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
15. I drink because I believe in the "work hard-play hard" lifestyle
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

16. I drink because it's part of the culture of being an athlete/non-athlete
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
17. I drink because it helps our team develop cohesion
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
18. I drink because my teammates expect me to drink with them
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree
19. I tend to drink more when I'm not performing well athletically or academically
 - a. Strongly Disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly Agree

Section 11: Sleep Deprivation:

The 16 statements below relate to your sleep habits. Please select the best answer which you think represents your typical sleep habits over the recent past.

1. During the recent past, how many hours of actual sleep did you get at night? (This may be different from the number of hours you spent in bed.)
 - a. 5 to 6 hours
 - b. 6 to 7 hours
 - c. 7to8hours
 - d. 8 to 9 hours
 - e. more than 9 hours
2. How many naps per week do you take?
 - a. none
 - b. once or twice
 - c. three or four times
 - d. five to seven times

3. How satisfied/dissatisfied are you with the quality of your sleep?
 - a. very satisfied
 - b. somewhat satisfied
 - c. neither satisfied nor dissatisfied
 - d. somewhat dissatisfied
 - e. very dissatisfied
4. During the recent past, how long has it usually takes you to fall asleep each night?
 - a. 15 minutes or less
 - b. 16 – 30 minutes
 - c. 31 – 60 minutes
 - d. longer than 60 minutes
5. How often do you have trouble staying asleep?
 - a. none
 - b. once or twice per week
 - c. three or four times per week
 - d. five to seven days per week
6. During the recent past, how often have you taken medicine to help you sleep (prescribed or over the counter)?
 - a. none
 - b. once or twice per week
 - c. three or four times per week
 - d. five to seven times per week
7. Considering only your own “feeling best” rhythm, at what time would you get up if you were entirely free to plan your day?
 - a. 5:00 am – 6:30 am
 - b. 6:30 am – 7:45 am
 - c. 7:45 am – 9:45 am
 - d. 9:45 am – 11:00 am
 - e. 11:00 am – 12:00 pm (noon)
8. How alert do you feel during the first half-hour after having awakened?
 - a. not at all alert
 - b. slightly alert
 - c. fairly alert
 - d. very alert
9. Do you consider yourself to be a morning type person or an evening type person?
 - a. definitely a morning type
 - b. more a morning type than an evening type
 - c. more an evening type than a morning type
 - d. definitely an evening type

10. Considering your own “feeling best” rhythm, at what time would you go to bed if you were entirely free to plan your evening?
 - a. 8:00 pm – 9:00 pm
 - b. 9:00 pm – 10:15 pm
 - c. 10:15 pm – 12:30 am
 - d. 12:30 am – 1:45 am
 - e. 1:45 am – 3:00 am
11. When you are traveling for your sport, do you experience sleep disturbance?
 - a. Yes
 - b. No
12. When you are traveling for your sport, do you experience daytime dysfunction (feeling generally unwell or having poor performance)?
 - a. Yes
 - b. No
13. Are you typically a loud snorer?
 - a. Yes
 - b. No
14. Have you been told that you choke, gasp, or stop breathing for periods of time during sleep?
 - a. Yes
 - b. No
15. On average, how many caffeinated products (caffeine pills, coffee, tea, soda, energy drinks) do you have per day? For coffee and tea, one drink = 6-8oz/177- 237ml; for caffeinated soda, one drink = 1 can (12oz/355ml)?
 - a. Less than 1 per day
 - b. 1-2 per day
 - c. 3 per day
 - d. 4 per day
 - e. 5 or more per day
16. Over the recent past, how often do you use an electronic device (example: cell phone, computer, tablet, T.V. etc.) within 1 hour of going to bed?
 - a. Not at all
 - b. 1-3 times per week
 - c. 4-6 times per week
 - d. Every day

Section 12: Self-Perceived Communication:

The statements below are 12 situations in which you might need to communicate. People's abilities to communicate effectively vary a lot, and sometimes the same person is more competent to communicate in one situation than another. Please indicate how competent you believe you are to communicate in each of the situations below. Indicate in the space provided at the left of each item your estimate of your competence.

Presume 0 = completely incompetent and 100 = competent.

- _____ 1. Present a talk to a group of strangers.
- _____ 2. Talk with an acquaintance.
- _____ 3. Talk in a large meeting of friends or teammates.
- _____ 4. Talk in a small group of strangers.
- _____ 5. Talk with a friend or teammate.
- _____ 6. Talk in a large meeting of acquaintances.
- _____ 7. Talk with a stranger.
- _____ 8. Present a talk to a group of friends or teammates.
- _____ 9. Talk in a small group of acquaintances.
- _____ 10. Talk in a large meeting of strangers.
- _____ 11. Talk in a small group of friends or teammates.
- _____ 12. Present a talk to a group of acquaintances.