

Testing the moderating role of help-seeking behavior on the relationship between anxiety and psychological well-being among college student athletes

Ramos, Emmanuel RJ ✉

Far Eastern University, Philippines (erramos@feu.edu.ph)

David, Adonis P.

Philippine Normal University, Philippines (david.ap@pnu.edu.ph)



ISSN: 2243-7703
Online ISSN: 2243-7711

OPEN ACCESS

Received: 6 February 2025

Available Online: 10 March 2025

Revised: 25 February 2025

DOI: 10.5861/ijrse.2025.25021

Accepted: 10 March 2025

Abstract

Student-athletes are integral members of a school community. Being a student-athlete is associated with both positive and negative benefits. The mental health of athletes is one of the major factors that contribute to an athlete's career and life after being an athlete. Thus, the study investigated the mental health of student-athletes, aiming to understand their well-being and determine whether their help-seeking behavior has a moderating effect on the relationship between anxiety and psychological well-being. Researchers collected data from 307 college student-athletes with an average age of 20.5. Findings revealed that student-athletes experience moderate to severe anxiety, have moderate psychological well-being, and exhibit positive help-seeking behavior. Interestingly, anxiety negatively predicts psychological well-being, but help-seeking behavior does not significantly impact this relationship. Overall, student-athletes expressed a neutral attitude toward seeking professional psychological help for some items while also acknowledging its importance. Additionally, the findings of the study may contribute to developing a psychoeducational intervention that can be offered at state universities to better understand the needs and situations of student-athletes. Such as the proposed program in this study, "Di-Nagiisa," whose main purpose is to focus on improving the mental health and overall well-being of college student-athletes and aims to create a supportive environment where mental health is prioritized alongside athletic pursuits.

Keywords: student-athlete, anxiety, psychological well-being, help-seeking attitude

Testing the moderating role of help-seeking behavior on the relationship between anxiety and psychological well-being among college student athletes

1. Introduction

Student-athletes are integral members of a school community. They are the ones who bring pride and motivate the entire school community (Ines, 2021). Moreover, becoming a student-athlete is associated with positive benefits such as scholarships, becoming physically healthy, and being a role model to their fellow students. It can also contribute to their personal development and help them learn different skills, such as leadership and communication. However, alongside these benefits, student-athletes are still considered a vulnerable group due to their own set of unique obstacles, which can lead to elevated levels of anxiety and sadness (Yang et al., 2007). Athletes experience anxiety as a reaction to a stressful situation that can affect their daily activities and performance (Weber et al., 2023). Situations such as free throws and fighting against five people at the same time can lead to a higher anxiety level for student-athletes (Chen et al., 2018). There is still little literature that investigates the prevalence of anxiety among student-athletes. Thus, determining other risks for depression and anxiety prevalence among student-athletes is needed to help clinicians find and develop interventions that will help student-athletes who are suffering anxiety and depression, affecting their psychological well-being (Weber et al., 2023).

Mental health challenges significantly contribute to the overall health burden experienced by college students worldwide (Drew & Matthews, 2019). Along with other literature, this shows that student-athletes are not exempt from experiencing mental health concerns (Bird et al., 2018a). There are student-athletes who may experience issues such as emotional illness, maladjustment in behaviors, and psychological distress due to the training and balancing of their academic and athletic lives (Watson, 2005). The demands of both athletics and academics can exacerbate stress levels and cause feelings of loneliness and inadequacy. They may encounter various stressors within the sports environment, including overtraining, coach expectations, pressure from peers and family, organizational demands, fear of failure (Drew & Matthews, 2019; Putukian, 2016; Rao & Hong, 2016). Furthermore, according to the National Alliance of Mental Illness, college students who are 18–25 years old are more likely to experience depression, with 17% experiencing depression and 22.3% experiencing anxiety disorders (“Mental health by the numbers,” 2023). Student-athletes participate in their sports while balancing the symptoms, manifestations, and known risk factors of depression and anxiety. Aside from the risk of experiencing depression, student athletes also have a higher chance of experiencing anxiety. Moreover, student-athletes are not used to utilizing mental health services because of the stigma they may receive. To support that claim, according to the study of Eisenberg, there is only a minimal percentage—around 10%—of student-athletes who are experiencing anxiety and other mental health disorders who seek mental health services (Eisenberg et al., 2013). Student-athletes who are not seeking mental health are due to numerous reasons, such as a lack of time as a student-athlete as well as public stigma and self-stigma (Wahto et al., 2016). Also, they face barriers such as lack of access to services, lack of knowledge on how to access services, and negative past experiences with help-seeking (Brown et al., 2023).

Nowadays, there is a growing awareness in the field of sports management research that is related to the relationship between sports services and athletes’ well-being to better understand the ways to improve the psychological well-being of athletes (Kim et al., 2020). Athletes must utilize and understand the importance of utilizing mental health services to improve not only their psychological well-being but also their performance (Bird et al., 2018a). Understanding the importance of help-seeking student-athletes can help them manage stress, anxiety, depression, or other mental health conditions that may affect their daily lives, academic success, or athletic performance (Purcell et al., 2019). Furthermore, through seeking psychological help, student athletes may develop coping strategies and communication skills, which will benefit them in the long run (Sander, 2019).

By seeking professional help, student-athletes can lessen their anxiety. Student-athletes who are seeking

professional counseling help them identify and address the root causes of problems, develop new coping mechanisms, and enhance their decision-making abilities (Gabriel, 2023). Additionally, it can help student-athletes overcome negative patterns of behavior, such as anxiety, addiction, procrastination, and self-doubt, and replace them with positive ones, such as self-care, assertiveness, or goal setting (Nuetzel, 2023). Many studies explore the relationship between the mental toughness of an athlete and their psychological well-being and help-seeking attitude. However, there is little data about how the help-seeking attitude of an athlete may affect the anxiety of student athletes in relation to their psychological well-being. In the world of competitive sports, there is a belief that as a student-athlete they should have a strong mental fortitude, which in the Philippines fuels the stigma of seeking psychological support (Alberto et al., 2021). Furthermore, mental health aid for athletes in the Philippines is completely lacking with mental health professionals, with only 2–3 mental health practitioners per 100,000 population (Lally et al., 2019). Also, Filipino college student-athletes face unique challenges since although mental health influences an athlete's life, sports culture in the Philippines remains hostile regarding this subject, as the stigma on anxiety in the sports scene stems from the culture of being mentally strong depicting vulnerability as weak (Gonzales & Matias, 2021).

Furthermore, some athletes refrain from discussing their mental health struggles due to the fear of stigma or negative consequences. For example, they worry that revealing their inner battles could impact their team standing, regardless of their athletic performance. In this regard, the purpose of this study is to determine whether the help-seeking attitude of student-athletes has a moderating effect on the relationship between anxiety and psychological well-being. This study aims to contribute to the lack of empirical studies about the help-seeking attitude of student-athletes. This study will also serve as a basis for guidance counselors in state universities to develop and give attention to the mental health services that can be offered to student-athletes.

2. Literature Review

Becoming a Student-Athlete - Student-athletes are integral members of a school community. They are the ones who bring pride and motivate the entire school community (Ines, 2021). Moreover, becoming a student-athlete is associated with positive benefits such as scholarships, becoming physically healthy, and being a role model to their fellow students. Normally, people believe that being an athlete will likely lessen the possibility of experiencing mental illness than those who are not athletes because participating in sports provides a protective effect and benefits such as boosting self-esteem and developing social skills (Drew & Matthews, 2019; Matta Mello Portugal et al., 2013). However, alongside these benefits, student-athletes are still considered a vulnerable group due to their own set of unique obstacles, which can lead to elevated levels of anxiety and sadness (Yang et al., 2007). The mental health of athletes is one of the major factors that contribute to athletes' careers and lives after being athletes. Athletes are also vulnerable to mental health disorders and maladaptive behaviors (Reardon, 2021). There are student-athletes that may experience issues that can lead to emotional illnesses and psychological distress due to the training and balancing of their academic and athletic lives (Watson, 2005). Also, being a student-athlete increases exhaustion due to training and other physical activities, which may lead to a decrease in the quality of sleep for student-athletes (Hicks, Karis, 2018). Furthermore, a decrease in sleep quality may cause uneasiness and sometimes anxiety in the brains of student-athletes, which can hinder their ability to fully reach their full potential (Tamaki & Sasaki, 2022). On the other hand, becoming a student-athlete may not only cause negative effects but also positive ones. Student-athletes have been showing higher self-confidence than non-student-athletes (Hicks, Karis, 2018). Also, as a student athlete who learns to work hard, dedicate their time, give attention to small details, and be an integral part of the team, they can also learn skills that they can apply for their future career (Machida et al., 2012).

Help-Seeking Behavior of Student-Athletes - A lot of people see athletes as individuals who have strong mental fortitude, but like normal people, they need social support and help from professionals (Bird et al., 2018a). Moreover, athletes frequently handle emotional distress by essentially “shaking it off.” Denial of emotional issues is one-way athletes avoid seeking help for psychosocial problems (Mentink, 2002). Furthermore, a stigma surrounding student athletes hinders their chance to seek professional help (Bird et al., 2018). Research has shown

that student athletes are facing different stigmas, such as public stigma and self-stigma, when seeking mental health help (Bird et al., 2020). Public stigma is defined as a perspective of discrimination against a certain group of people (Corrigan, 2004). Furthermore, this public stigma contributes to the self-stigma that student-athletes are experiencing and creates a perception from the point of view of student athletes that seeking mental health help can be seen as their weakness (Wahto et al., 2016). These stigmas become hindrances for student-athletes seeking mental help.

Also, the lack of information in detecting signs and symptoms of a mental health disorder or illness also contributes to student-athletes not seeking for a mental health professional (Bird et al., 2018b). Thus, most of the student-athletes do not pay attention to the seriousness of the problem that they are manifesting; they also do not believe that they need to seek professional help to solve these problems (Gulliver et al., 2012). By seeking professional help, student-athletes can lessen their anxiety. Student-athletes who are seeking professional counseling help them identify and address the root causes of problems, develop new coping mechanisms, and enhance their decision-making abilities (Gabriel, 2023). Additionally, it can help student-athletes overcome negative patterns of behavior, such as anxiety, addiction, procrastination, and self-doubt, and replace them with positive ones, such as self-care, assertiveness, or goal setting (Machida et al., 2012). Studies have shown that utilizing help-seeking as a strategic approach holds promise for enhancing student success, particularly in the face of obstacles (Karabenick & Berger, 2013). Similarly, research indicates that seeking assistance is positively linked to academic achievement (A. M. Ryan & Shim, 2012; Sotardi et al., 2021). Furthermore, a recent meta-analysis underscored the potential advantages of help-seeking and social support for adolescent mental health and overall well-being (Heerde & Hemphill, 2018). These studies emphasize the critical role of help-seeking behaviors in supporting adolescents which makes it available to be used as a moderating variable.

Psychological Well-being of Student Athletes - Psychological well-being has a connection to having better physical health and normal cognitive functioning. In the field of sports, it can also be defined as the development of student-athletes' real talents (Baniyadi & Salehian, 2021). Thus, a student-athlete with high psychological well-being turns out to be more active, strong, and emotionally stable and performs well during competitions (Nwankwo, 2015). In addition, psychological well-being is an individual's way to perform and reach their full potential in different fields such as the workplace, academic standing, and sports competition (R. M. Ryan & Deci, 2008). Thus, focusing on the individual's developmental aspects, such as psychological well-being, which includes the overall effectiveness of a person's psychological functioning that affects the performance of a student-athlete, is important to investigate (Kim et al., 2020). Additionally, the psychological well-being of athletes needs to be taken care of since it could help them cope with the stress brought by their sports competition and training as well as fruitfully perform well in their academic standings (Nwankwo, 2015). One of the factors that may influence the psychological well-being of student-athletes is the anxiety that they experience. Nowadays, there is a growing awareness in the field of sports management research that is related to the relationship between sports services and athletes' well-being to better understand the ways to improve the psychological well-being of athletes (Kim et al., 2020). Athletes must utilize and understand the importance of utilizing mental health services to improve not only their psychological well-being but also their performance (Bird et al., 2018b). Understanding the importance of help-seeking student-athletes can help them manage stress, anxiety, depression, or other mental health conditions that may affect their daily lives, academic success, or athletic performance (Purcell et al., 2019). Furthermore, through seeking psychological help, student athletes may develop coping strategies and communication skills, which will benefit them in the long run (Sander, 2019).

Anxiety Among Student-athletes - Experiencing mental illness among student-athletes can affect not only their success in academics and athletics but also their psychological well-being. Although depression and anxiety have been proven to be significant predictors of a lower grade average and poor athletic performance, they are highly correlated with other risky behaviors, including suicide, and also have an effect on the psychological well-being of student-athletes (Davoren & Hwang, 2014). Student-athletes have a 15.6% to 33.2% risk of experiencing anxiety, whereas first-year and female students usually show more symptoms (Wolanin et al., 2015). In the trend of literature related to sports, it is categorized as individual and team sports. When examining the risk of depression,

it showed that there is an increase in individual sports rather than in team sports (Martignetti et al., 2020). Aside from the risk of experiencing depression, student athletes also have a higher chance of experiencing anxiety.

Anxiety is a reaction to a stressful situation that can affect student-athletes' daily activities and performance (Weber et al., 2023). Situations such as free throws and fighting against five people at the same time can lead to a higher anxiety level for student-athletes (Horikawa & Yagi, 2012). There is still little literature that investigates the prevalence of anxiety among student-athletes. Thus, determining other risks for depression and anxiety prevalence among student-athletes is needed to help clinicians find and develop interventions that will help student-athletes who are suffering anxiety and depression, affecting their psychological well-being (Weber et al., 2023). Furthermore, anxiety and depression can affect the psychological well-being of student-athletes in different ways, depending on many factors. These factors can change from one person to another and from one situation to another. It is essential to be aware of the signs and symptoms of anxiety and depression in student-athletes and to offer them the right resources and support to help them manage and succeed in their academic and athletic goals (Egan, 2019).

Sports of Student-Athletes - Sports is any human activity that involves kinesthetic movement and showcasing individual skills, depending on the activity. It is an activity that involves competition or social participation and has formal rules and patterns of movement that are established by organizations and recognized by society (Rossi et al., 2021). Sports such as basketball, volleyball, football, soccer, and many other sports have been around for many years (Šimonek et al., 2017). However, in recent years, there has been a growing type of sport with the use of technology called "esports" (Railsback & Caporusso, 2019). Esports is a type of competition and spectator entertainment that showcases individuals or teams playing video games in front of a large crowd (Railsback & Caporusso, 2019). Furthermore, Esports are a kind of sport that uses virtual networks to support the main areas of the sport. The players, teams, and eSports system interact with each other through human and computer components (Kumari et al., 2022). Lastly, just like basketball and other sports, computer games are seen as a way of gaming that is both competitive and dynamic.

That being said, both esports and traditional sports have the same goal, which is to compete competitively as a team or individually with the goal in mind of bringing home the championship and fighting for glory (Kane & Spradley, 2017). There are people who do not consider esports as a sport because of a lack of physicality, and they believe that esports athletes only sit around all day and just play games in front of their gadgets (Pizzo et al., 2019). There is not much difference when it comes to the training regimen of both esports and traditional sports athletes because the competition in traditional sports and esports is almost the same, where athletes need to continuously train their muscle memory and improve their connection with their teammates (Šimonek et al., 2017). Moreover, sports help people to discover and appreciate their own and others' skills, to compete fairly, to respect others by accepting loss, to be humble in victory, to support others, and to manage their time and effort well by challenging themselves. In this way, sports aim to prepare people for life in many ways and to have a direct effect on their psychological well-being (Gül et al., 2017). Different literature has shown that sports can regulate the psychological well-being and physical self-esteem of an individual (Edwards et al., 2004).

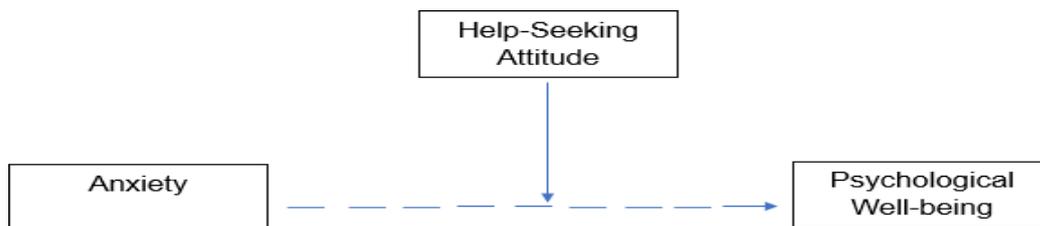
Based on the related literature, there is a strong recommendation to further study the risks of depression and anxiety among student-athletes to their psychological well-being (Davoren & Hwang, 2014; Weber et al., 2023). Also, there is a need to end the stigma that student athletes receive when seeking help from a mental health professional (Alberto et al., 2021). Thus, this study explored whether the help-seeking attitude of student-athletes has a moderating effect on the relationship between anxiety and psychological well-being. Aside from that, investigating the connection and relationship between anxiety and psychological well-being is one of the aims of the current study to further support the research that was conducted by other researchers who are focusing on the connection between anxiety and the psychological well-being of student-athletes.

Conceptual Framework - Student-athletes are integral members of a school community. They are the ones who bring pride and motivate the entire school community (Ines, 2021). Moreover, becoming a student-athlete is

associated with positive benefits such as scholarships, becoming physically healthy, and being a role model to their fellow students. However, alongside these benefits, student-athletes are still considered a vulnerable group due to their own set of unique obstacles, which can lead to elevated levels of anxiety and sadness (Yang et al., 2007). Although a lot of people see athletes as individuals who have strong mental fortitude, they are still like normal people; they need social support and help from professionals (Bird et al., 2018b). However, a stigma surrounding student athletes hinders their chance to seek professional help (Bird et al., 2018a). Experiencing mental illness among student-athletes can affect not only their success in academics and athletics but also their psychological well-being. Common mental illnesses such as depression and anxiety have been proven to be significant predictors of a lower grade average. Moreover, they are associated with other risky behaviors, including suicide, which has an effect on the psychological well-being of student-athletes (Davoren & Hwang, 2014). Student-athletes have a 15.6% to 33.2% risk of experiencing depression, whereas first year and female students usually show more symptoms (Wolanin et al., 2015).

Athletes must utilize and understand the importance of utilizing mental health services to improve their psychological well-being (Bird et al., 2018b). Understanding the importance of help-seeking student-athletes can help them manage stress, anxiety, depression, or other mental health conditions that may affect their daily lives and academic success (Purcell et al., 2019). Furthermore, through seeking psychological help, student athletes may develop coping strategies and communication skills, which will benefit them in the long run (Sander, 2019). Thus, it is hypothesized that anxiety has a negative effect on the psychological well-being of student-athletes. Furthermore, the current study explores if a help-seeking attitude can influence the relationship between anxiety and the psychological well-being of student-athletes.

Figure 1. Conceptual Framework of the Study



Research Problems - The main purpose of this study is to examine the moderating effect of a help-seeking attitude on the relationship between anxiety and the psychological well-being of student-athletes. Specifically, this study aims to address the following research problems:

- Is there a relationship between Anxiety and Psychological Well-Being of Student-Athletes?
- Does the Help-Seeking attitude of the student-Athletes moderate the relationship of their Anxiety with their Psychological Well-Being?
- Based on the findings of the study, what psychoeducational intervention on student-athletes' help-seeking attitude can be proposed?

Hypotheses

- There is a negative relationship between the Anxiety and Psychological Well-Being of Student-Athletes.
- Help Seeking Attitude moderates the relationship between Anxiety and Psychological Well-Being.

3. Method

Research Design - The study that was conducted investigated the relationship between three variables, which are anxiety, psychological well-being, and the help-seeking behavior of student athletes. This study has a cross-sectional, non-experimental research design. In this research design, data were gathered at a single point in time

or in a short span. Moreover, the data were related to one another during that single time frame, helping comparisons across the variables (Johnson, 2001). Specifically, moderation analysis was used to investigate the relationship among variables. Moderation analysis focused on measuring and testing if the independent variable has a differential effect on the dependent variable as a function of a moderator (Memon et al., 2019). Particularly in this study, anxiety among college student-athletes is connected with their psychological well-being, and this association is strengthened or weakened by the levels of their help-seeking behavior.

Sampling and Participants - The participants of the study consisted of 307 college student-athletes (18–24 years old) who are studying in Metro Manila. The researcher utilized purposive sampling in gathering the participants. Participants were selected based on the set criteria, which are: (1) student-athletes competing in e-sports (Mobile Legends, Valorant, Dota 2, League of Legends, PUBG, Wild Rift) or traditional sports (basketball, baseball, softball, volleyball, swimming, dance sports, martial arts, badminton etc.); (2) studying at a state university in Manila; (3) competing in tournaments such as SCUAA and Alliance Games; (4) must be 18 years old or older; and (5) must be 1st and 2nd year student-athletes. Furthermore, the participants of the study were recruited via online postings by the researcher and personal referrals. Additionally, word-of-mouth recommendations from the researcher's network or existing participants were used to identify qualified individuals. Furthermore, the study focused on first and second-year college student-athletes who undergo significant transitions as they adjust to college life, academic requirements, and athletic responsibilities. These initial years are pivotal for comprehending how student-athletes manage stressors, including anxiety related to academics and sports (Wolanin et al., 2015).

Instruments

Anxiety - The anxiety level of the participants was measured through the utilization of the State-Trait Anxiety Inventory. The scale was intended to measure both the state and trait anxiety of an individual. It is a 20-item questionnaire, and some sample questions are: "I am presently worrying over possible misfortunes" and "I feel satisfied." This scale shows an internal consistency ranging from 0.86 to 0.95 and has a test-retest reliability coefficient of 0.65 to 0.72, which indicates that it has good psychometric properties (Greene et al., 2017). Furthermore, in a study of Greene et al. (2017), this scale was measured in a non-clinical setting to measure the state and trait anxiety of caregivers and shows a high reliability with a Cronbach's alpha of 0.97. In this study, the scale shows an excellent Cronbach's alpha internal consistency estimate ($\alpha = .88$) showing the STAI reliability.

Help-seeking Attitude - The Help-Seeking Attitude of student-athletes was measured with the Attitude Towards Seeking Professional Psychological Help Short Form (ATSPPH-SF), a 10-item questionnaire. The scale is intended to address attitudes toward asking for help from mental health professionals. A sample question from this questionnaire is "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." In a study by Chapin et. al. (2020), this scale was utilized with a Cronbach alpha of 0.84, which means it has good internal consistency. In this study, the scale shows a good Cronbach's alpha internal consistency estimate ($\alpha = .83$), showing the ATSPPH-SF reliability.

Psychological Well-Being - The psychological well-being of the participants will be measured using the Ryff Psychological Well-Being Scale 18-item questionnaire. This scale is intended to measure different aspects of positive functioning such as "Autonomy, Personal Growth, Environmental Mastery, Purpose in life, Self-Acceptance and Positive relationship with others". Some sample questions of this questionnaire were "When I look at the story of my life, I am pleased with how things have turned out so far." and "Some people wander aimlessly through life, but I am not one of them.". Furthermore, participants rated items on a scale from 1 (strongly agree) to 7 (strongly disagree). Although the scale covers various dimensions, this study primarily considered the overall well-being and total score, without analyzing each dimension separately. Higher scores correspond to higher levels of psychological well-being. A study shows that the Ryff Psychological well-being scale has a Cronbach Alpha for each subscale at 0.70 which indicates a good consistency (Gao & McLellan, 2018). In this study, the scale shows a good Cronbach's (alpha) internal consistency estimate ($\alpha = .85$).

Data Gathering Procedure - The researcher gathered the data through a survey questionnaire using Google

Forms. The researcher recruited the participants through two methods: social media platforms and referrals from other participants. The researcher created public material displayed on different social media platforms, such as Facebook, Instagram, and Twitter. The public material contained the link to the Google Forms. Included in the Google Forms are the following: (1) informed consent; (2) Benefits; (3) Purpose of the study; (4) As well as the voluntary participation of the participants in the study. Also, in the pen-and-paper data collection, important information such as informed consent, the purpose of the study, and their voluntary participation was included. After the data gathering, the data was stored in a Google Drive, where only the researchers would have the means to see the data to analyze and interpret it.

Data Analysis - For the statistical analysis, the researchers utilized software called JAMOVI. JAMOVI was used for understanding statistical inference (JAMOVI, 2022). To analyze the moderating effect of help-seeking attitude on the effect of anxiety on the psychological well-being of this study, moderation analysis was utilized to analyze the data that were gathered to test if the moderating variable (help-seeking attitude) moderates the independent variable (anxiety) and dependent variable (psychological well-being). In addition, descriptive statistics and bivariate analysis were conducted. Bivariate analysis examines the relationship between the dependent variable (psychological well-being) and the independent variable (anxiety) without implying any causal connection. Furthermore, linear regression was utilized to analyze the relationship between anxiety and psychological well-being among college student-athletes.

Ethical Considerations - The researcher conducted the study considering ethical considerations, specifically observing confidentiality and human subject protection. Informed consent was given first to the participants of the study before they answered the survey questionnaire. Furthermore, since the data gathering was conducted online, the confidentiality of the information and answers of the participants were strictly observed and secured by the researcher in accordance with the Data Privacy Act of 2012. Furthermore, since the study used scales to measure the anxiety levels of the participants, the researcher provided hotlines that they could call or contact in case they experienced any discomfort while answering the survey form. Moreover, the survey form includes the researcher's contact details, such as a Facebook link, contact number, and email address, for participants who feel any discomfort while answering. This paper was ethically reviewed by the Research Ethics Committee of the Institution.

4. Results

Descriptive statistics summarize sample characteristics and lay the groundwork for analyzing relationships between anxiety, attitudes toward seeking professional psychological help, and psychological well-being among college student-athletes. Table 1a presents the demographic profile of the college student-athletes; this includes their age, psychological well-being level, anxiety level, and attitude towards seeking professional psychological help. While Table 1b shows the year level, university, span of playing the sports, types of sports, and tournaments played in.

Table 1
1a. Mean of Age, Total ATSPPH, Average STAI, Total PW

	Age (Edad)	Psychological Well Being	Anxiety	Attitude Towards Seeking Professional Psychological Help
N	307	307	307	307
Mean	20.5	80.6	47.5	31.8
Median	20.0	79	48	31
Standard deviation	1.47	10.5	8.96	4.92
Minimum	18	49	23	14
Maximum	24	109	77	50

The results are obtained from 307 college student-athletes consisting of 149 males and 158 females. Specifically, there are 118 1st year student-athletes and 189 2nd year student-athletes with a mean age of 20.5 (SD = 1.82). Results of the anxiety level of college student-athletes suggest that they experience moderate to severe

Moderating role of help-seeking behavior between anxiety and psychological well-being among college student

anxiety (M = 47.5, SD = 8.96). It also implies that they have moderate levels of psychological well-being (M = 80.6, SD = 10.5) and their ATTSPH scores indicate that they have positive help-seeking behavior (M=31.8, SD=4.92)

Ib. Frequency table of Sex at birth, Year level, College/University, Years of Playing sports, Tournaments played

Sex at birth *	Counts	% of total	Cumulative %
1 (Male)	149	48.5%	48.5%
2 (Female)	158	51.5%	100.0%
Year Level *			
1 (1 st year)	118	38.4%	38.4%
2(2 nd year)	189	61.6%	100.0%
College/University			
StateU1	64	20.8%	20.8%
StateU 2	67	21.8%	42.7%
StateU 3	51	16.6%	59.3%
StateU 4	33	10.7%	70.0%
StateU 5	30	9.8%	79.8%
StateU 6	33	10.7%	90.6%
StateU 7	29	9.4%	100.0%
Years playing sports			
1 (1-5 years)	193	62.9%	62.9%
2 (6-10 years)	80	26.1%	88.9%
3 (11-15 years)	18	5.9%	94.8%
4 (16 years or more)	16	5.2%	100.0%
Types of Sports *			
1 (Traditional Sports)	208	67.8%	67.8%
2 (Esports)	99	32.2%	100.0%
Tournaments Played in			
1 (Alliance Games)	94	30.6%	30.6%
2 (SCUAA)	213	69.4%	100.0%

Note: *the data was run but shows no significant difference

To evaluate the normality of the data, a Shapiro-Wilk test was performed. This test is commonly used to determine if a sample originates from a normally distributed population. The results showed a W-statistic of 0.020 and a p-value of 0.02. Since the p-value is below the standard significance level of 0.05, we reject the null hypothesis that the data follows a normal distribution. This suggests that the data significantly deviates from normality.

Table 2 outlines the associations between variables, including the psychological well-being of college student-athletes, their anxiety levels, and their attitude toward seeking professional psychological help. Bivariate Correlation Analysis was used to investigate the relationship between the variable's anxiety, psychological well-being, and attitude towards seeking professional psychological help.

Table 2
Bivariate Covariation

	Psychological Well Being	Anxiety	Help-Seeking Attitude
Psychological Well Being			
Anxiety	-0.523***		
Help-Seeking Attitude	0.260***	-.0132	

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

The result indicated that Anxiety negatively predicts psychological well-being of college student-athletes (r = -0.523; p < .001), anxiety has a negative relationship to attitude towards seeking professional help (r = -0.132; p < .05), attitude towards seeking professional help predicts psychological well-being (r = -0.260; p < .001). The results also indicated that the anxiety scores (M = 47.5, SD = 8.96) of the college student-athletes scores decreased as their psychological well-being (M = 80.6, SD = 10.5) increased. The initial investigative query of this study seeks to ascertain the existence of a substantial correlation between anxiety and the psychological well-being of collegiate athletes. To address this primary research question, a statistical method, linear regression, was employed. This technique was utilized to determine the predictive capacity of anxiety in relation to psychological well-being.

In addition, Table 3.1 presents the measures of model fit, offering an accurate evaluation of the regression model's goodness of fit. It illustrates the efficacy of the model, with its parameters recalibrated, in fitting the data.

Table 3
Linear regression of Anxiety and Psychological Well-Being

95% Confidence Interval						
Predictor	Estimate	SE	t	p	Lower	Upper
Intercept	109.796	2.7735	39.6	<.001		
Anxiety	-0.614	0.0574	-10.7	<.001	-0.619	-0.426

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

Table 3.1
Model Fit Measures

Model	r	r ²	Adjusted R ²
1	0.523	0.273	0.271

The results revealed that anxiety has a negative predictive effect on psychological well-being ($\beta = -0.614$, $p < .001$). Furthermore, with these results the researcher rejects the null hypothesis. To put it differently, increased anxiety levels among college student-athletes correlate with a greater likelihood of negative impacts on their psychological well-being. The results also show that there is a significant relationship between the anxiety levels of college student-athletes and their psychological well-being, with an adjusted R² value of 0.271. Which indicates that approximately 27% of the variance in psychological well-being can be attributed to anxiety.

The primary research issue in this study involves determining whether the help-seeking behavior of college student-athletes moderates the relationship between anxiety and their psychological well-being. Consequently, a moderation analysis was conducted. This analysis enables the researchers to scrutinize the impact of help-seeking behavior on anxiety and psychological well-being. Rather than investigating a direct causal link, it explores the circumstances under which the effect transpires. The moderating variable, help-seeking behavior has the potential to amplify, diminish, or even invert the nature of the relationship. Table 4 delineates the manner in which help-seeking behavior serves as a moderator between anxiety and the psychological well-being of college student-athletes.

Table 4
Moderation analysis of Attitude Towards Seeking Professional Psychological Help in the relationship of Anxiety and Psychological Well Being.

95 % Confidence Interval						
	Estimate	SE	Lower	Upper	z	p
Anxiety	-0.6185***	0.0592	-0.73459	-0.5024	-10.44	<.001
ATSPPH	0.4488***	0.1011	0.25060	0.6470	4.44	<.001
Anxiety* ATTSPPH	0.0158	0.009	-0.00171	0.0332	1.77	0.077

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

The regression analysis reveals a weak relationship between the independent and dependent variables, with an R² value of 0.0257 and an Adjusted R² of 0.0193, indicating that only a small portion of the variance is explained by the model. The RMSE of 0.791 suggests a moderate average prediction error, and the F-statistic of 4.00, with a p-value of 0.019, shows that the overall model is statistically significant, indicating that at least one predictor is meaningfully related to the dependent variable. However, the model's poor explanatory power and weak fit suggest it may not be highly effective in predicting the dependent variable.

To address our second research question, moderation analysis was performed to assess the moderating role of help-seeking behavior on the relationship between anxiety and psychological well-being. The results indicated that anxiety ($\beta = -0.6185$, $p < .001$) had a significant negative effect on psychological well-being and attitude towards seeking professional psychological help ($\beta = 0.4488$, $p < .001$) had a significant positive effect on psychological well-being. It was also revealed that there is no significant interaction between anxiety and attitude towards seeking professional psychological help ($\beta = 0.0158$, $p = 0.077$). Thus, the results failed to reject the null hypothesis. Thus, this suggests that a help-seeking attitude does not play a role in how anxiety affects psychological well-being of

college student-athletes.

The third objective of this study is to devise a psychological intervention tailored to the needs of collegiate athletes. However, the study discovered that the relationship between anxiety and psychological well-being is not influenced by help-seeking behavior. Thus, the researcher specifically investigated the direct impact of help-seeking behavior on anxiety and psychological well-being in college student-athletes. With the aim to develop an intervention program that enhances the psychological well-being of these student-athletes. To further support the intervention program of the study. The researcher utilized descriptive statistics to examine the mean and standard deviation of the participants' responses to the Attitude Towards Seeking Professional Psychological Help scale. The mean and standard deviation of the responses, as presented in Table 5, served as the foundational data for the development of this study's intervention program.

Table 5

Mean and Standard Deviations of participants' responses in the Attitude Towards Seeking Professional Psychological Help

Item Question	Mean	SD	Interpretation	Rank
6. I might want to have psychological counseling in the future.	3.60	1.21	Agree	1
5. I would want to get psychological help if I were worried or upset for a long period of time.	3.52	1.19	Agree	2
3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in counseling	3.45	1.13	Agree	3
2. The idea of talking about problems with a counselor strikes me as a poor way to get rid of emotional conflicts.	3.32	1.11	Agree	4
7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.	3.28	1.15	Agree	5
9. A person should work out his or her own problems; getting psychological counseling would be a last resort.	3.10	1.22	Agree	6
10. Personal and emotional troubles, like many things, tend to work themselves out by themselves.	3.09	1.18	Agree	7
8. Considering the time and expense involved in counseling, it would have doubtful value for a person like me	2.99	1.11	Neutral	8
1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.	2.92	1.14	Neutral	9
4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without re-sorting to professional help	2.52	1.14	Neutral	10

NOTE: The mean scores were ranked 1-10, 1 being the highest and 10 being the lowest

In addressing the third research question, the researcher ranked the mean scores of the raw score of the participants' attitudes toward seeking professional psychological help and picked the top 3 highest mean scores and top 3 lowest means scores as a basis for a program. The top 3 highest mean values represent areas where participants expressed positive attitudes towards help-seeking while the bottom 3 mean values highlighted areas where help-seeking attitudes of student-athletes need improvement as they had shown less favorable attitudes. The researcher selected the top 3 highest and lowest mean values based on quartile ranking items #1, #4, and #8 belongs to the 25th quartile which means they are the lowest scores and items #3, #5, #6 belongs to the 75th quartile. Specifically, college student-athletes demonstrated a neutral attitude toward seeking professional psychological help for items #1 (M = 2.92, SD= 1.14), #4 (M=2.45, SD=1.14) and #8 (M= 2.99, SD= 1.11). However, they expressed agreement regarding the importance of seeking professional psychological help for items #3 (M = 3.45, SD = 1.13), #5 (M = 3.52, SD = 1.19), and #6 (M = 3.60, SD = 1.21). Although, the research revealed that help-seeking does not moderates the relationship of the anxiety and psychological well-being of student-athletes there

is still a need to develop a program to be a preventive action for state universities to improve the mental well-being of their student-athletes. In response to the concerns of student-athletes, the researcher developed a prevention/intervention program called “DINAGIISA” (*discussed further in the discussion*).

5. Discussion

Previous research investigated the connection between athlete's mental toughness and their psychological well-being and willingness to seek help. However, limited data exists on how an athlete's help-seeking attitude impacts the anxiety levels of student-athletes in relation to their psychological well-being. Thus, the study aimed to examine the relationship of anxiety to the psychological well-being of student-athletes. The study revealed that the participants reported moderate to severe anxiety levels. Furthermore, this study aimed to test if help-seeking attitude moderates the relationship of anxiety and psychological well-being. Results of each research problem are discussed.

The first aim of this study is to investigate the influence of anxiety on the psychological well-being of college student-athletes. The finding highlighted the significant negative impact of anxiety on their mental health. Notably, this negative effect manifests that when a student-athlete level of anxiety is higher it will lower their psychological well-being. The relationship between anxiety and reduced psychological well-being in student-athletes has been corroborated by several prior studies (Egan, 2019; Horikawa & Yagi, 2012; Weber et al., 2023). These studies collectively underscore the reality that student-athletes who suffer from severe anxiety are likely to experience a diminished state of mental health, which in turn hinders their capacity to reach their full potential. Also, the findings of the study that the moderate to severe level of anxiety of student-athletes suggest that there is a particular need to target to improve the psychological well-being of college-student-athletes. Since collegiate student-athletes, who face additional stressors such as academic pressures, long athletic seasons, and the pressure to perform both in sports and the classroom, are more susceptible to anxiety. These mental health issues can intensify during periods of stress (Economou et al., 2021). That is why the psychological well-being of athletes needs to be taken care of since it could help them cope with the stress brought by their sports competition and training as well as fruitfully perform well in their academic standings (Nwankwo, 2015).

Student athletes face sports competition and rigorous training which can lead to high levels of stress and anxiety. Thus, when athletes' psychological well-being is prioritized, they develop effective coping mechanisms to manage their stress and anxiety. Moreover, balancing sports commitments with academic responsibilities is challenging (Li et al., 2017). Athletes must be mentally well, so they can focus better, manage time efficiently, and perform well academically (M. Sullivan et al., 2020). Addressing the influence of anxiety on the psychological well-being of student-athletes ensures holistic development. Athletes who feel supported emotionally are more likely to thrive both on and off the field (L. Sullivan et al., 2022). Their psychological well-being influences their personal growth, relationships, and overall life satisfaction.

The second aim of the study was to explore the role of help-seeking behavior as a potential moderating factor in the relationship between anxiety and psychological well-being among student-athletes. The hypothesis was that help-seeking behavior might influence how anxiety affects psychological well-being, potentially mitigating its negative effects. Upon analysis, the study found a significant correlation between help-seeking behavior, anxiety, and psychological well-being. This suggests that those who are more inclined to seek help may experience different levels of anxiety or psychological well-being compared to those who do not. However, contrary to the initial hypothesis, help-seeking behavior did not moderate the relationship between anxiety and psychological well-being. This unexpected result indicates that regardless of whether student-athletes sought help or not, the impact of anxiety on their psychological well-being remained consistent.

There are different factors that could explain why help-seeking behavior did not emerge as a moderator. One possibility is that student-athletes encounter various barriers that prevent them from accessing mental health services effectively. Sander (2019) stated that these barriers can include logistical challenges, such as time

constraints and a lack of available services specifically to cater to their specific needs. Gulliver et. al (2012) identified additional obstacles to seeking help, such as limited awareness about mental health issues and symptoms, uncertainty about when it is appropriate to seek professional assistance, and concerns about stigma or negative judgments from others. These factors can create an idea in the minds of student-athletes, which makes them hesitant to reach out for support even when they recognize the need.

Additionally, Watson (2005) further notes that student-athletes may harbor less favorable attitudes and expectations towards counseling and mental health services. This misbelief could be a result of a culture within sports that values toughness, self-reliance, and tough mental fortitude, potentially discouraging athletes from admitting vulnerabilities or seeking external support. The stigma associated with mental health issues remains a significant concern (Bird et al., 2018b, 2020; Wahto et al., 2016). The fear of being perceived as weak for seeking professional help can be particularly called out in the competitive world of sports, where mental toughness is often celebrated. Consequently, many student-athletes do not mind the severity of their mental health challenges or deny the importance of professional intervention. Gulliver et al. (2012a) suggest that this reluctance to acknowledge the need for help can lead to underutilization of available mental health resources.

In conclusion, while help-seeking behavior is related to both anxiety and psychological well-being, it does not appear to alter the relationship between these two variables in the context of this study. In this study, one of the possible reasons why help-seeking behavior does not moderate the relationship between anxiety and the psychological well-being of student athletes is that their psychological well-being is high, and they have a positive attitude towards seeking professional psychological help. This reflects on the obtained results of skewness ($Sk = -0.504$) and kurtosis ($\kappa = 0.963$) with the following values. This means that there are other possible moderator or mediator variables that affect the relationship of anxiety and psychological well-being that need to be explored.

Lastly, this study aims to propose a psychoeducational intervention program that can be offered to student-athletes at state universities. Although the research revealed that help-seeking does not moderate the relationship of the anxiety and psychological well-being of student-athletes there is still a need to develop a program to be a preventive action for state universities to improve the mental well-being of their student-athletes. Unlike private universities, which have access to seeking help from mental health professionals, athletes do not receive those kinds of opportunities. In fact, to support students as they transition into adulthood, there is a proposal to create Mental Health Offices (MHOs) in state universities and colleges (SUCs). These offices would address mental health concerns, including depression, anxiety, and behavioral disorders, which are prevalent among students. The goal is to ensure that students have easy access to mental health care, promoting their overall well-being (Abasola, 2023).

To begin with, there should be a program where student-athletes will become more engaged in seeking professional psychological help and which aims to reduce negative stereotypes and stigmas related to seeking services through education and promote positive communication about mental health issues. This would improve the experience for student athletes who are considering seeking help (Bird et al., 2018a, 2020; Corrigan, 2004; López & Levy, 2013; Machida et al., 2012). Furthermore, to better enhance the help-seeking behavior of student-athletes, services should be offered in a setting that ensures the privacy and confidentiality of student athletes, safeguarding them from other athletes and staff. It's crucial to create an environment where student athletes feel comfortable seeking help without fear of judgment or exposure (Bird et al., 2020; López & Levy, 2013). Moreover, counseling center staff should build connections with student athletes, athletic trainers, coaches, and athletic advisers. Their goal is to educate student athletes, reduce the stigma around counseling, highlight the benefits of using services, and demonstrate their understanding of the challenges, demands, and needs faced by student athletes (Kern et al., 2017; López & Levy, 2013; Sander, 2019). This will allow student-athletes to better understand their needs when competing, during training, and pre-season. Thus, in this study, the researcher proposed a program entitled "DINAGIISA: Pagpapaunlad ng Emosyonal at Mental na Kakayahan para sa mga Iskolar-Athleta.

The proposed program was derived from the result of the attitude towards seeking professional psychological help of college student-athletes. From the 10 questions, the researcher ranked the mean scores of the help-seeking attitude of college student-athletes to determine the top 3 highest score and top 3 lowest score. The top 3 lowest score are items #1 *“If I believed I was having a mental breakdown, my first inclination would be to get professional attention”*, item #4 *“There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help”* and item # 8 *“Considering the time and expense involved in counseling, it would have doubtful value for a person like me”*, are the basis of the activities which involves strengthening the help-seeking attitude of college-student athletes through raising their awareness on the benefits of seeking help from professionals. That is supported by the study of Gulliver, Griffiths, and Christensen (2012) and Watson (2005) which states that the primary barriers to seeking help include limited awareness of mental health conditions and their symptoms, uncertainty about when to seek assistance, and concerns about how others perceive seeking help. Additionally, student-athletes tend to hold less favorable attitudes and expectations regarding counseling and mental health professionals.

While question #3 *“If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in counseling,”* #5 *“I would want to get psychological help if I were worried or upset for a long period of time”*, #6 *“I might want to have psychological counseling in the future.”*, are the top 3 highest mean scores and these items show how important it is for student-athletes to have easy access to seek for mental health professionals and to develop furthermore the mental health services that can be offered to student-athletes (Gabriel, 2023; Machida et al., 2012).

DINAGIISA Program is a psychoeducational intervention focused on improving the mental health and overall well-being of college student-athletes. By encouraging a proactive approach to seeking help and addressing anxiety levels, this innovative program acknowledges the unique struggles faced by student-athletes. Balancing rigorous academics with competitive sports can be challenging, but Di-Nagiisa aims to create a supportive environment where mental health is prioritized alongside athletic pursuits. Moreover, According to Hardy et al. (2017), incorporating mental health support within athletic programs not only improves performance but also contributes to long-term well-being. This ensures that student-athletes can flourish both in their sports endeavors and in their personal lives. Different studies show that having such programs in the realm of sports psychology is important (Bird et al., 2018a; Drew & Matthews, 2019; Egan, 2019; Machida et al., 2012). Furthermore, Gulliver, Griffiths, and Christensen (2012) found that student-athletes often face elevated stress and anxiety levels compared to non-athletes. This underscores the necessity for targeted interventions. Although the research revealed that help-seeking does not moderate the relationship of the anxiety and psychological well-being of student-athletes there is still a need to develop a program to be an intervention action for state universities to improve the mental well-being of their student-athletes. Furthermore, the psychoeducational intervention aims to help Filipino college student-athletes to overcome the challenges they face as an athlete since in the Philippine Culture and fans of the sports see seeking professional help as a weakness of an athlete (Gonzales & Matias, 2021). Also, this psychoeducational intervention aims to help student-athletes to manage their anxiety before, during, and after tournaments that they will participate in.

The said program will be executed by counselors and mental health experts at state universities. Their specialized training in mental health issues equips them to provide structural support for the well-being of student-athletes. These professionals play a crucial role in implementing the program. Counselors aim to create an open dialogue and offer customized assistance to address the distinct stressors and anxieties experienced by student-athletes. Approaches may include individual counseling sessions, group workshops, and educational resources. Furthermore, Di-Nagiisa has a total of four (4) activities that focus on the mental well-being of student-athletes throughout their stay at the university. The first activity is *“Mind in Motion: Empowering Student-Athletes Knowledge in Different Counseling Services,”* which focuses on promoting the importance of actively seeking and engaging with psychological services that their university offers. The main purpose of this activity is to enhance student-athletes' awareness of the available psychological services as well as to improve their ability to recognize when they need assistance from professionals.

The second activity of the program is “Buddy System.” This activity is focused on fostering a supportive environment that enhances their psychological well-being and helps to lessen the anxiety that they feel. Furthermore, this activity is focused on normalizing and encouraging seeking help within their community. It is also expected that student-athletes will be equipped with coping strategies and techniques from their peers to manage their anxiety. The third activity is “Building the minds of Student-Athletes”, it is an activity created for student-athletes to improve their ability to manage nerves and anxiety before tournament. Lastly, the fourth activity “Post-Tournament Recovery”, focuses on helping student-athletes decompress and manage their anxiety based on the results of their tournaments This study underscores the significance of state university guidance counselors focusing on mental health services for student-athletes. By doing so, they can assist student-athletes in overcoming the anxiety associated with their dual roles as students and athletes.

In summary of the activities, “Mind in Motion: Empowering Student-Athletes Knowledge in Different Counseling Services,” and “Building the minds of Student-Athletes” are activities that are focused on strengthening their weaknesses since these activities are tailored in supporting and encouraging student-athletes to utilize mental health services that their university offers. These activities are from the items #1 “*If I believed I was having a mental breakdown, my first inclination would be to get professional attention*” , item #4 “*There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help*“ and item # 8 “*Considering the time and expense involved in counseling, it would have doubtful value for a person like me.* These items shows there is a need to develop a program focused on encouraging student-athletes to utilize mental health services

Items #3 “*If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in counseling,*” #5 “*I would want to get psychological help if I were worried or upset for a long period of time*”, #6 “*I might want to have psychological counseling in the future.*”, These items are focused on mental health services that can be offered to student-athletes that’s why it is the basis of the activities “Buddy System” and “Post-Tournament Recovery”, which aims is to improve student- athletes their help-seeking attitude through different activities such as counseling and focused on strengthening their help-seeking attitude by providing more mental health services that they used. The findings of the study that the moderate to severe level of anxiety of student- athletes suggest that there is a particular need to target to improve the psychological well-being of college-student-athletes. Although the research revealed that help-seeking does not moderates the relationship of the anxiety and psychological well-being of student-athletes there is still a need to develop a program to be a preventive action for state universities to improve the mental well-being of their student-athletes. Furthermore, this study highlighted the importance of exploring about other possible reasons and causes why student-athletes do not seek professional help, such as stigma, lack of knowledge about mental illnesses, and lack of access (Bird et al., 2018a; Gulliver et al., 2012; Sander, 2019; Wahto et al., 2016).

6. Conclusion

This research underscores the significant negative impact of anxiety on the psychological well-being of student-athletes. Notably, this negative effect manifests that when a student-athlete level of anxiety is higher it will lower their psychological well-being. The findings of the study that the moderate to severe level of anxiety of student-athletes suggest that there is a particular need to target to improve the psychological well-being of college-student-athletes. Since collegiate student-athletes, who face additional stressors such as academic pressures, long athletic seasons, and the pressure to perform both in sports and the classroom, are more susceptible to anxiety. These mental health issues can intensify during periods of stress. That is why the psychological well-being of athletes needs to be taken care of since it could help them cope with the stress brought by their sports competition and training as well as fruitfully perform well in their academic standings. Furthermore, the recent study found that help-seeking behavior does not significantly moderate the relationship between anxiety and psychological well-being. One potential explanation for this lack of significance in help-seeking behavior is that student- athletes encounter barriers and have limited access to seek professional mental health help. In conclusion, help seeking attitude does not appear to alter the relationship between these two variables in the context of this study. In this

study, one of the possible reasons why help-seeking behavior does not moderate the relationship between anxiety and the psychological well-being of student athletes is that their psychological well-being is high, and they have a positive attitude towards seeking professional psychological help. This means that there are other possible moderator or mediator variables that affect the relationship of anxiety and psychological well-being that need to be explored.

The information in this study may contribute to psychoeducational intervention that can be offered at state universities to better understand the needs and situations of student-athletes. Such as the proposed program in this study, "DINAGIISA," whose main purpose is to focus on improving the mental health and overall well-being of college student-athletes and aims to create a supportive environment where mental health is prioritized alongside athletic pursuits. This program offers activities to elevate their help seeking attitude, lessen their anxiety and to extend support and resources for the athletic community.

***Acknowledgments** - To my adviser, Dr. Adonis P. David, thank you for mentoring me in writing this paper. Thank you for giving your valuable insights for the betterment of this paper. As well as making time for us for consultation. I cannot finish this paper without your guidance. To my panelists, Dr. Armina B. Mangaol, Dr. Darwin C. Rungduin, Dr. Merimee Tampus-Siena, and Dr. Gilbert S. Arrieta, thank you for the valuable comments and suggestions that you gave. This paper will not be accomplished without your guidance. To my friends, who are always there when I need someone to talk with, thank you so much for not letting me fight this battle alone. To my family, who always support me and allow me to focus on my paper, thank you. Especially to my mother, who always cheers me on and backs me up when I feel I am against a wall. Having your support is indeed one of the motivations that I always have while I am writing this paper. I love you, Ma. Thank you for everything. To my beloved partner, your unwavering support during both highs and lows has been my anchor. Thank you for encouraging me throughout the paper-writing process and for always reminding me of my capabilities. I love you to the moon and back. To the Heavenly Father, I express gratitude for granting me the strength and wisdom to complete this paper.*

7. References

- Abasola, L. (2023, January 9). Mental health office proposed for all SUCs [News]. GOV PH. <https://www.pna.gov.ph/articles/1192294>
- Adewuya, A. O., Ola, B. A., & Afolabi, O. O. (2006). Validity of the patient health questionnaire (PHQ-9) as a screening tool for depression amongst Nigerian university students. *Journal of Affective Disorders*, 96(1–2), 89–93. <https://doi.org/10.1016/j.jad.2006.05.021>
- Alasinrin, S., & Ajeigbe, I. Y. (2021). Sports participation and its implication on the academic performance of students in tertiary institutions in Nigeria: A literature review. *Edu Sportivo: Indonesian Journal of Physical Education*, 2(3), 180–189. [https://doi.org/10.25299/es:ijope.2021.vol2\(3\).7929](https://doi.org/10.25299/es:ijope.2021.vol2(3).7929)
- Alberto, N. R. I., Eala, M. A. B., Constantino-Hernandez, A. B. D., Manlongat, K. D., & Ly-Uson, J. T. (2021). Mental health care for athletes in the Philippines. *The Lancet Psychiatry*, 8(12), 1034. [https://doi.org/10.1016/S2215-0366\(21\)00432-6](https://doi.org/10.1016/S2215-0366(21)00432-6)
- Almagro, B. J., Sáenz-López, P., Fierro-Suero, S., & Conde, C. (2020). Perceived Performance, Intrinsic Motivation and Adherence in Athletes. *International Journal of Environmental Research and Public Health*, 17(24), 9441. <https://doi.org/10.3390/ijerph17249441>
- Baniasadi, T., & Salehian, M. H. (2021). The Effect of Psychological Well-being on Athletic Performance of Professional Athletes. *Pakistan Journal of Medical and Health Sciences*, 15(5), 1680–1682. <https://doi.org/10.53350/pjmhs211551680>
- Barnard, J. D. (2016). Student-athletes' perceptions of mental illness and attitudes toward help-seeking. *Journal of College Student Psychotherapy*, 30(3), 161–175. <https://doi.org/10.1080/87568225.2016.1177421>
- Bird, M. D., Chow, G. M., & Cooper, B. T. (2020). Student-Athletes' Mental Health Help-Seeking Experiences: A Mixed Methodological Approach. *Journal of College Student Psychotherapy*, 34(1), 59–77. <https://doi.org/10.1080/87568225.2018.1523699>
- Bird, M. D., Chow, G. M., Meir, G., & Freeman, J. (2018a). Student-Athlete and Student Non-Athletes' Stigma and Attitudes Toward Seeking Online and Face-to-Face Counseling. *Journal of Clinical Sport Psychology*, 12(3), 347–364. <https://doi.org/10.1123/jcsp.2017-0010>
- Bird, M. D., Chow, G. M., Meir, G., & Freeman, J. (2018b). Student-Athlete and Student Non-Athletes' Stigma

- and Attitudes Toward Seeking Online and Face-to-Face Counseling. *Journal of Clinical Sport Psychology*, 12(3), 347–364. <https://doi.org/10.1123/jcsp.2017-0010>
- Blue and gray: Mental health in Ateneo sports. The GUIDON. (2021, December 11). *The Guidon*. <https://theguidon.com/2021/12/blue-and-gray-mental-health-in-ateneo-sports/>
- Brown, K. R., Quinton, M. L., Tidmarsh, G., & Cumming, J. (2023). Athletes' access to, attitudes towards and experiences of help-seeking for mental health: A scoping review protocol. *BMJ Open*, 13(4), e062279. <https://doi.org/10.1136/bmjopen-2022-062279>
- Chapin. (n.d.). An Examination into the Factors of Stigma Toward Help Seeking Attitudes in College Student Athletes.
- Chapin, A., & McClure, Kelly. (2020). An Examination into the Factors of Stigma Toward Help Seeking Attitudes in College Student Athletes. La Salle University Digital Commons.
- Chen, S., Miller, A., & Tsung-chin, C. (2018). Perceived Athletic and Academic Stressors and Time Management of Student-Athletes. *ASAHPERD*, 37(3), 11–20.
- Cimini, M. D., & Rivero, E. M. (Eds.). (2018). *Promoting behavioral health and reducing risk among college students: A comprehensive approach*. Routledge.
- Corrigan, P. (2004). How stigma interferes with mental health care. *APA Psychnet*, 59(7), 614–625.
- Davoren, A. K., & Hwang, S. (2014, October 8). Mind, Body and Sport: Depression and anxiety prevalence in student-athletes [Sports Website]. NCAA. <https://www.ncaa.org/sports/2014/10/8/mind-body-and-sport-depression-and-anxiety-prevalence-in-student-athletes.aspx>
- Drew, B., & Matthews, J. (2019). The Prevalence of Depressive and Anxiety Symptoms in Student-Athletes and the Relationship With Resilience and Help-Seeking Behavior. *Journal of Clinical Sport Psychology*, 13(3), 421–439. <https://doi.org/10.1123/jcsp.2017-0043>
- Economou, P., Glascock, V., Louie, M., Poliakova, P., & Zuckerber, W. (2021). COVID-19 and its impact on student-athlete depression and anxiety: The return to campus. *The Sport Journal*. <https://thesportjournal.org/article/covid-19-and-its-impact-on-student-athlete-depression-and-anxiety-the-return-to-campus>
- Edwards, D. J., Edwards, S. D., & Basson, C. J. (2004). Psychological well-being and physical self-esteem in sport and exercise. *International Journal of Mental Health Promotion*, 6(1), 25–32. <https://doi.org/10.1080/14623730.2004.9721921>
- Egan, K. P. (2019). Supporting Mental Health and Well-being Among Student-Athletes. *Clinics in Sports Medicine*, 38(4), 537–544. <https://doi.org/10.1016/j.csm.2019.05.003>
- Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental Health in American Colleges and Universities: Variation Across Student Subgroups and Across Campuses. *Journal of Nervous & Mental Disease*, 201(1), 60–67. <https://doi.org/10.1097/NMD.0b013e31827ab077>
- Gabriel. (2023). Mental Health Matters: The importance of seeking professional help. *Peace of Mind*. <https://peaceofmind4wellness.com/mental-health-matters-the-importance-of-seeking-professional-help/>
- Gao, J., & McLellan, R. (2018). Using Ryff's scales of psychological well-being in adolescents in mainland China. *BMC Psychology*, 6(1), 17. <https://doi.org/10.1186/s40359-018-0231-6>
- Gonzales, J., & Matias, K. (2021, December 11). Blue and gray: Mental health in Ateneo sports [School Website]. *The Guidon*. <https://theguidon.com/2021/12/blue-and-gray-mental-health-in-ateneo-sports/>
- Greene, J., Cohen, D., Siskowski, C., & Toyinbo, P. (2017). The Relationship Between Family Caregiving and the Mental Health of Emerging Young Adult Caregivers. *The Journal of Behavioral Health Services & Research*, 44(4), 551–563. <https://doi.org/10.1007/s11414-016-9526-7>
- Gül, Ö., Çağlayan, H. S., & Akandere, M. (2017a). The Effect of Sports on the Psychological Well-being Levels of High School Students. *Journal of Education and Training Studies*, 5(5), 72. <https://doi.org/10.11114/jets.v5i5.2270>
- Gül, Ö., Çağlayan, H. S., & Akandere, M. (2017b). The Effect of Sports on the Psychological Well-being Levels of High School Students. *Journal of Education and Training Studies*, 5(5), 72. <https://doi.org/10.11114/jets.v5i5.2270>
- Gulliver, A., Griffiths, K., & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for

- young elite athletes: A qualitative study. *BMC Psychiatry*, 12(157). <https://doi.org/10.1186/1471-244X-12-157>
- Gulliver, A., Griffiths, K. M., Mackinnon, A., Batterham, P. J., & Stanimirovic, R. (2015). The mental health of Australian elite athletes. *Journal of Science and Medicine in Sport*, 18(3), 255–261. <https://doi.org/10.1016/j.jsams.2014.04.006>
- Hardy, L., Barlow, M., Evans, L., Rees, T., Woodman, T., & Warr, C. (2017). Great British medalists. In *Progress in Brain Research* (Vol. 232, pp. 1–119). Elsevier. <https://doi.org/10.1016/bs.pbr.2017.03.004>
- Heerde, J. A., & Hemphill, S. A. (2018). Examination of associations between informal help-seeking behavior, social support, and adolescent psychosocial outcomes: A meta-analysis. *Developmental Review*, 47, 44–62. <https://doi.org/10.1016/j.dr.2017.10.001>
- Henriksen, K., Schinke, R., Moesch, K., McCann, S., Parham, W. D., Larsen, C. H., & Terry, P. (2020). Consensus statement on improving the mental health of high performance athletes. *International Journal of Sport and Exercise Psychology*, 18(5), 553–560. <https://doi.org/10.1080/1612197X.2019.1570473>
- Hicks, Karis. (2018). The positive and negative impacts of sports on collegiate student athletes. Liberty University. <https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1137>
- Horikawa, M., & Yagi, A. (2012). The Relationships among Trait Anxiety, State Anxiety and the Goal Performance of Penalty Shoot-Out by University Soccer Players. *PLoS ONE*, 7(4), e35727. <https://doi.org/10.1371/journal.pone.0035727>
- Houltberg, B. J., Wang, K. T., Qi, W., & Nelson, C. S. (2018). Self-Narrative Profiles of Elite Athletes and Comparisons on Psychological Well-Being. *Research Quarterly for Exercise and Sport*, 89(3), 354–360. <https://doi.org/10.1080/02701367.2018.1481919>
- Ines, J. (2021). Stress and Coping Strategies of College Student-Athletes. DLSU Research Congress. <https://www.dlsu.edu.ph/wp-content/uploads/pdf/conferences/research-congress-proceedings/2021/LLI-12.pdf>
- Ip, H., Suen, Y. N., Hui, C. L. M., Wong, S. M. Y., Chan, S. K. W., Lee, E. H. M., Wong, M. T. H., & Chen, E. Y. H. (2022). Assessing anxiety among adolescents in Hong Kong: Psychometric properties and validity of the Generalized Anxiety Disorder-7 (GAD-7) in an epidemiological community sample. *BMC Psychiatry*, 22(1), 703. <https://doi.org/10.1186/s12888-022-04329-9>
- Johnson, B. (2001). Toward a New Classification of Nonexperimental Quantitative Research. *Educational Researcher*, 30(2), 3–13. <https://doi.org/10.3102/0013189X030002003>
- Johnson, S. U., Ulvenes, P. G., Øktedalen, T., & Hoffart, A. (2019). Psychometric Properties of the General Anxiety Disorder 7-Item (GAD-7) Scale in a Heterogeneous Psychiatric Sample. *Frontiers in Psychology*, 10, 1713. <https://doi.org/10.3389/fpsyg.2019.01713>
- Kane, D., & Spradley, B. (2017). Recognizing Esports as a Sport. *The Sport Journal*. <https://thesportjournal.org/article/recognizing-esports-as-a-sport/>
- Karabenick, S., & Berger, J.-L. (2013). Help seeking as a self-regulated learning strategy. *APA Psynet*, 237–261.
- Kern, L., Mathur, S. R., Albrecht, S. F., Poland, S., Rozalski, M., & Skiba, R. J. (2017). The Need for School-Based Mental Health Services and Recommendations for Implementation. *School Mental Health*, 9(3), 205–217. <https://doi.org/10.1007/s12310-017-9216-5>
- Kim, M., Kim, Y. D., & Lee, H.-W. (2020). It is time to consider athletes' well-being and performance satisfaction: The roles of authentic leadership and psychological capital. *Sport Management Review*, 23(5), 964–977. <https://doi.org/10.1016/j.smr.2019.12.008>
- Kim, Y. E., & Lee, B. (2019). The Psychometric Properties of the Patient Health Questionnaire-9 in a Sample of Korean University Students. *Psychiatry Investigation*, 16(12), 904–910. <https://doi.org/10.30773/pi.2019.0226>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
-

- Kumari, L., Sharma, U., & Singh, S. (2022). E-Sports, Anxiety, Aggression and Psychological Well-being: A Cross-sectional Study. *Journal of Clinical and Diagnostic Research*.
<https://doi.org/10.7860/JCDR/2022/55801.16883>
- Lally, J., Tully, J., & Samaniego, R. (2019). Mental health services in the Philippines. *BJPsych International*, 16(3), 62–64. <https://doi.org/10.1192/bji.2018.34>
- Li, H., Moreland, J. J., Peek-Asa, C., & Yang, J. (2017). Preseason Anxiety and Depressive Symptoms and Prospective Injury Risk in Collegiate Athletes. *The American Journal of Sports Medicine*, 45(9), 2148–2155. <https://doi.org/10.1177/0363546517702847>
- Liu, S.-I., Yeh, Z.-T., Huang, H.-C., Sun, F.-J., Tjung, J.-J., Hwang, L.-C., Shih, Y.-H., & Yeh, A. W.-C. (2011). Validation of Patient Health Questionnaire for depression screening among primary care patients in Taiwan. *Comprehensive Psychiatry*, 52(1), 96–101. <https://doi.org/10.1016/j.comppsy.2010.04.013>
- López, R. L., & Levy, J. J. (2013). Student Athletes' Perceived Barriers to and Preferences for Seeking Counseling. *Journal of College Counseling*, 16(1), 19–31. <https://doi.org/10.1002/j.2161-1882.2013.00024.x>
- Machida, M., Marie Ward, R., & Vealey, R. S. (2012). Predictors of sources of self-confidence in collegiate athletes. *International Journal of Sport and Exercise Psychology*, 10(3), 172–185.
<https://doi.org/10.1080/1612197X.2012.672013>
- Martignetti, A., Arthur-Cameselle, J., Keeler, L., & Chalmers, G. (2020). The relationship between burnout and depression in intercollegiate athletes: An examination of gender and sport-type. *Journal for the Study of Sports and Athletes in Education*, 14(2), 100–122. <https://doi.org/10.1080/19357397.2020.1768036>
- Matta Mello Portugal, E., Cevada, T., Sobral Monteiro-Junior, R., Teixeira Guimarães, T., Da Cruz Rubini, E., Lattari, E., Blois, C., & Camaz Deslandes, A. (2013). Neuroscience of Exercise: From Neurobiology Mechanisms to Mental Health. *Neuropsychobiology*, 68(1), 1–14. <https://doi.org/10.1159/000350946>
- Memon, M. A., Cheah, J.-H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation Analysis: Issues and Guidelines. *Journal of Applied Structural Equation Modeling*, 3(1), i–xi.
[https://doi.org/10.47263/JASEM.3\(1\)01](https://doi.org/10.47263/JASEM.3(1)01)
- Mental health by the numbers. (2023, April). [Infographic]. NAMI. <https://www.nami.org/about-mental-illness/mental-health-by-the-numbers/>
- Mentink, J. W. (2002). Major depression in collegiate student-athletes: Case study research. *Dissertation Abstracts International*, 62 (8a),2697. <https://www.proquest.com/open-view/c792d69ca2873cd0d26c7b101653e1bf>
- Morris, L., & Twilley, D. (n.d.). Student-Athletes: An exploration of subjective wellbeing. *The Sport Journal*. Retrieved July 10, 2024, from <https://thesportjournal.org/article/student-athletes-an-exploration-of-subjective-wellbeing/>
- Nuetzel, B. (2023). Coping strategies for handling stress and providing mental health in elite athletes: A systematic review. *Frontiers in Sports and Active Living*, 5, 1265783.
<https://doi.org/10.3389/fspor.2023.1265783>
- Nwankwo, A. (2015). Students' Learning Experiences and Perceptions of Online Course Content and Interactions. *Walden dissertations and doctoral studies*, 188.
- Pinkerton, R. S., Hinz, L. D., & Barrow, J. C. (1989). The College Student-Athlete: Psychological Considerations and Interventions. *Journal of American College Health*, 37(5), 218–226.
<https://doi.org/10.1080/07448481.1989.9939063>
- Pizzo, A., Jones, G., & Funk, D. (2019). Navigating the iron cage: An institutional creation perspective of collegiate esports. *International Journal of Sport Management*, 20, 171–197.
- Purcell, R., Gwyther, K., & Rice, S. M. (2019). Mental Health In Elite Athletes: Increased Awareness Requires An Early Intervention Framework to Respond to Athlete Needs. *Sports Medicine - Open*, 5(1), 46.
<https://doi.org/10.1186/s40798-019-0220-1>
- Putukian, M. (2016). The psychological response to injury in student athletes: A narrative review with a focus on mental health. *British Journal of Sports Medicine*, 50(3), 145–148. <https://doi.org/10.1136/bjsports-2015-095586>

- Railsback, D., & Caporusso, N. (2019). Investigating the Human Factors in eSports Performance. In T. Z. Ahram (Ed.), *Advances in Human Factors in Wearable Technologies and Game Design* (Vol. 795, pp. 325–334). Springer. https://doi.org/10.1007/978-3-319-94619-1_32
- Rao, A. L., & Hong, E. S. (2016). Understanding depression and suicide in college athletes: Emerging concepts and future directions. *British Journal of Sports Medicine, 50*(3), 136–137. <https://doi.org/10.1136/bjsports-2015-095658>
- Reardon, C. L. (2021). The Mental Health of Athletes: Recreational to Elite. *Current Sports Medicine Reports, 20*(12), 631–637. <https://doi.org/10.1249/JSR.0000000000000916>
- Rossi, L., Behme, N., & Breuer, C. (2021). Physical Activity of Children and Adolescents during the COVID-19 Pandemic—A Scoping Review. *International Journal of Environmental Research and Public Health, 18*(21), 11440. <https://doi.org/10.3390/ijerph182111440>
- Ryan, A. M., & Shim, S. S. (2012). Changes in help seeking from peers during early adolescence: Associations with changes in achievement and perceptions of teachers. *Journal of Educational Psychology, 104*(4), 1122–1134. <https://doi.org/10.1037/a0027696>
- Ryan, R. M., & Deci, E. L. (2008). A self-determination theory approach to psychotherapy: The motivational basis for effective change. *Canadian Psychology / Psychologie Canadienne, 49*(3), 186–193. <https://doi.org/10.1037/a0012753>
- Sakk, M. (2013). Coping at School—Academic Success or/and Sustainable Coping in Future? *Journal of Teacher Education for Sustainability, 15*(1), 84–106. <https://doi.org/10.2478/jtes-2013-0006>
- Salehian, M. H., & Qadiri, S. (2019). Anticipation of Emotion Regulation and Psychological Well-being on Athletic Performance of Professional and Semi-professional Athletes. *Sports Psychology Studies*. <https://doi.org/10.22089/spsyj.2019.7244.1770>
- Sander, L. (2019). Understanding the help-seeking behaviors of student-athletes: Effect of a multidisciplinary healthcare team and the perception of barriers and facilitators for seeking help. James Madison University. <https://commons.lib.jmu.edu/master201019/595>
- Šimonek, J., Horička, P., & Hianik, J. (2017). The differences in acceleration, maximal speed and agility between soccer, basketball, volleyball and handball players. *Journal of Human Sport and Exercise, 12*(1). <https://doi.org/10.14198/jhse.2017.121.06>
- Sotardi, V. A., Watson, P., Swit, C., Roy, D., & Bajaj, M. (2021). Adolescent stress, help-seeking intentions, subjective achievement and life satisfaction in New Zealand: Tests of mediation, moderated mediation and moderation. *Stress and Health, 37*(4), 650–668. <https://doi.org/10.1002/smi.3021>
- Stress, Depression, Social Support, and Help-Seeking in College Student-Athletes. (n.d.). Loma Linda University Electronic Theses, Dissertations, & Projects. Retrieved May 14, 2024, from <https://scholarsrepository.llu.edu/cgi/viewcontent.cgi?article=1431&context=etd>
- Sullivan, L., Ding, K., Tattersall, H., Brown, S., & Yang, J. (2022). Social Support and Post-Injury Depressive and Anxiety Symptoms among College-Student Athletes. *International Journal of Environmental Research and Public Health, 19*(11), 6458. <https://doi.org/10.3390/ijerph19116458>
- Sullivan, M., Moore, M., Blom, L. C., & Slater, G. (2020). Relationship between social support and depressive symptoms in collegiate student athletes. *Journal for the Study of Sports and Athletes in Education, 14*(3), 192–209. <https://doi.org/10.1080/19357397.2020.1768034>
- Tamaki, M., & Sasaki, Y. (2022). Sleep-Dependent Facilitation of Visual Perceptual Learning Is Consistent with a Learning-Dependent Model. *The Journal of Neuroscience, 42*(9), 1777–1790. <https://doi.org/10.1523/JNEUROSCI.0982-21.2021>
- Tang, Y.-Y., Tang, R., & Gross, J. J. (2019). Promoting Psychological Well-Being Through an Evidence-Based Mindfulness Training Program. *Frontiers in Human Neuroscience, 13*, 237. <https://doi.org/10.3389/fnhum.2019.00237>
- Understanding the help-seeking behaviors of student-athletes: Effect of a multidisciplinary healthcare team and the perception of barriers and facilitators for seeking help. (2019). *JMU Scholarly Commons*. <https://commons.lib.jmu.edu/cgi/view-content.cgi?article=1650&context=master201019>
- Verner-Filion, J., Vallerand, R. J., Amiot, C. E., & Mocanu, I. (2017). The two roads from passion to sport
-

- performance and psychological well-being: The mediating role of need satisfaction, deliberate practice, and achievement goals. *Psychology of Sport and Exercise*, 30, 19–29.
<https://doi.org/10.1016/j.psychsport.2017.01.009>
- Wahto, R. S., Swift, J. K., & Whipple, J. L. (2016). The Role of Stigma and Referral Source in Predicting College Student-Athletes' Attitudes Toward Psychological Help-Seeking. *Journal of Clinical Sport Psychology*, 10(2), 85–98. <https://doi.org/10.1123/JCSP.2015-0025>
- Watson, J. C. (2005). College Student-Athletes' Attitudes Toward Help-Seeking Behavior and Expectations of Counseling Services. *Journal of College Student Development*, 46(4), 442–449.
<https://doi.org/10.1353/csd.2005.0044>
- Weber, S. R., Winkelmann, Z. K., Monsma, E. V., Arent, S. M., & Torres-McGehee, T. M. (2023). An Examination of Depression, Anxiety, and Self-Esteem in Collegiate Student-Athletes. *International Journal of Environmental Research and Public Health*, 20(2), 1211.
<https://doi.org/10.3390/ijerph20021211>
- Wolanin, A., Gross, M., & Hong, E. (2015). Depression in Athletes: Prevalence and Risk Factors. *Current Sports Medicine Reports*, 14(1), 56–60. <https://doi.org/10.1249/JSR.0000000000000123>
- Yang, J., Peek-Asa, C., Corlette, J. D., Cheng, G., Foster, D. T., & Albright, J. (2007). Prevalence of and Risk Factors Associated With Symptoms of Depression in Competitive Collegiate Student Athletes. *Clinical Journal of Sport Medicine*, 17(6), 481–487. <https://doi.org/10.1097/JSM.0b013e31815aed6b>
- Yu, X., Tam, W. W. S., Wong, P. T. K., Lam, T. H., & Stewart, S. M. (2012). The Patient Health Questionnaire-9 for measuring depressive symptoms among the general population in Hong Kong. *Comprehensive Psychiatry*, 53(1), 95–102. <https://doi.org/10.1016/j.comppsy.2010.11.002>

