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**Effectiveness of Mental Health Resources for Student Athletes:  
Survey of NCAA Division I Teams**

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We have no known conflict of interest to disclose.

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## **Abstract**

College athletes are in a unique position; they are required to devote time and effort to the success of their academics while competing at an elite level in their sport. In the United States young adults aged eighteen to twenty-five experience the highest prevalence of mental illnesses (NIMH, 2020). It is important that health care providers have an appropriate understanding of the perceptions of mental health resources for college athletes, because they are less likely to report mental health issues, (De Souza *et al.* 2019). The purpose of this study is to gain a better understanding of student athletes' knowledge and use of mental health resources, as well as perceptions of stigma about accessing resources. This study focuses on three National Collegiate Athletic Association (NCAA) Division I teams, and the athletes' personal experiences with mental healthcare. Each athlete completed a survey that centered around their physical health, mental health, and their experience with accessing mental health resources. Results suggest that student athletes experience added stress due to their status as student athletes, and believe that mental health resources offered through the university's athletic department would be beneficial. We conclude that student athletes would benefit from mental health resources that are accessible through their athletic department.

## **Introduction**

Recently, three top-performing student athletes have taken their own lives, (NBC News, 2022). Katie Meyer was a goalkeeper for the Stanford women's soccer team, Sarah Schulze was a member of the University of Wisconsin-Madison track and cross country teams, and Lauren Bennett was a softball player for the James Madison University softball team. The National Collegiate Athletic Association (NCAA) conducted a longitudinal study in order to determine the rates of suicide among student athletes. This study showed that suicide represented 7.3% of all cause mortality in athletes, and NCAA male athletes had a higher rate of suicide than female athletes, (Rao *et al.* 2015).

The mental health of athletes has been gaining increased attention in the media. Athletes such as professional basketball player Kevin Love have been speaking out about their experiences with mental health issues, (Kole, 2021). There has also been extensive news coverage of the deaths of the three female athletes mentioned above, due to the nature and circumstance surrounding their deaths. The American College of Sports Medicine released a statement that approximately 30% of female student athletes and 25% of male student athletes reported having anxiety, but only 10% of college athletes with mental health issues reach out for professional help, (2021). Why is there such a large gap between athletes who experience mental health issues, and athletes who seek help for these issues?

Sports psychologists and healthcare providers for athletes across the nation have been researching why athletes do not access mental health resources. It is common knowledge that in the world of sports, athletes are required to maintain discipline and strength while competing. Even though depression and anxiety are not as tangible as most sports injuries, they can be equally harmful for student athletes if not properly cared for, (Cleveland Clinic, 2021). This study looks into the use of mental health resources by athletes on NCAA Division I teams, the perceived stigma surrounding mental health, and potential solutions to the gap between prevalence and care. Are student athletes accessing mental healthcare? Do student athletes perceive a stigma around mental health issues? Does stigma affect whether these resources are accessed or not? The survey conducted by student athletes for this study allows a better understanding of the perception of mental health and mental healthcare amongst the student athlete population at Oklahoma State University.

## **Materials and Methods**

### **Study Design**

The design of this study was a cross-sectional survey design. Data was collected from student athletes at one point in the semester.

### **Setting**

Participants were student athletes at a mid-america land grant university. Due to the quantitative nature of the study, data was collected in a virtual setting. Participants used self-report methods in an online descriptive survey. The student athletes were able to conduct the survey on their own and were not required to attend an in-person meeting of any kind.

## **Positionality**

As a college student who competed in sports for a large amount of time, research about the mental health of student athletes has always been interesting to the primary researcher. As a health education and promotion student, they wanted to conduct research not only about the use of mental health resources among student athletes, but also what can be done to improve the healthcare provided for these individuals. The research advisor serves as a professor in the Oklahoma State University School of Community Health Sciences, Counseling, and Counseling Psychology and teaches students about mental health problems in their courses. It is important as a faculty member and student to gain a better understanding of the perception of mental health resources available on campus.

## **Participants, Recruitment, and Privacy Protections**

Participants included all student athletes on three National Collegiate Athletic Association (NCAA) Division I teams at a mid-western land grant university. The student athletes on each team, which included the softball, baseball, and football teams, were asked to participate in research by filling out a survey that could help future student athletes receive better mental healthcare. The participants were informed of their rights through a consent form and three questions that had to be answered before beginning the survey. These questions required that the participants read the consent and were eighteen years old or older. All of the data collected was anonymous and non-identifiable, and after the survey was completed the data was sent to a password protected account on Qualtrics. Only the primary researcher and research advisor were able to access the data collected.

## **Data Sources and Measurement**

The primary researcher compiled a survey about mental health resources that was distributed to the all student athletes on three teams at Oklahoma State University. The survey consisted of thirty questions, which included questions about their current physical/mental health and the athletes' knowledge of mental health resources available to them. The survey also asked questions about the stigma surrounding mental health issues, and whether or not being a student athlete led to increased stress in their lives. The primary researcher was required to distribute the survey through email lists and correspondence with members of the teams and their athletic trainers.

The survey was designed and distributed through Qualtrics online software, which allowed for the results of the survey to be non-identifiable and collected directly through the Qualtrics software.

## **Statistical Analysis**

In the analysis of the data collected, the research advisor compiled a set of tables and calculations based on Fisher's Exact Test and the Chi-Square Test of Independence. Fisher's Exact Test is used to determine whether or not there is a significant association between two categorical variables. It is typically used as an alternative to the Chi-Square Test of Independence when one or more of the cell counts in a two-by-two table is less than 5.

The data from the study was analyzed using these tests, and the researchers analyzed the specific relationship between those who believe there is a stigma surrounding mental health and those who do not. This analysis showed that there is a significant relationship between those who

perceive a stigma around mental health and those who do not in terms of knowledge about mental health resources [ $p = 0.038$ ]. It can be seen that athletes who believe there is a stigma for mental health problems also believe that specific mental health resources for athletes would be beneficial [87.5% out of  $n = 16$ ].

## **Results**

In total, approximately 190 athletes received the survey, and 48 completed responses were received for a response rate of 25.2%. The participants were not categorized into male and female, due to the anonymity of the results. The mean age of respondents was twenty years, and approximately 72% of participants were White. Based on the data obtained from the survey results, it can be determined that most respondents were in good to excellent overall health (84.3%). The results obtained from participants state that 80% of them believe being a student athlete is stressful, and over 65% of participants believe student athletes are more likely to experience mental health problems. Table one shows that student athletes would also be more inclined to access mental health resources if they were offered directly through the athletic department.

[INSERT TABLE 1 ABOUT HERE]

Even though 80% of the participants are aware of the mental health resources provided by the university, only 14.2% of respondents had previously accessed these resources. The perceived stigma surrounding mental health issues was also measured. Out of the respondents, only 16 out of the 48 student athletes perceived a stigma around mental health issues. There was a significant relationship between those who perceived a stigma and those who did not when it comes to knowledge of resources. Student athletes who did not perceive a stigma associated with mental health issues had a higher rate of knowledge about mental health resources provided by the university. An interesting finding was that an equal rate of the participants stated that they would access mental health resources when comparing those who perceive a stigma and those who do not.

[INSERT TABLE 2 ABOUT HERE]

## **Discussion**

The results of the survey show that student athletes at Oklahoma State University on the softball, baseball, and football team have knowledge of the mental health resources provided by the university. This, however, does not mean that they are utilizing the resources available to them. Even though over eighty percent of the participants were aware of mental health resources, only fourteen percent of participants had actually accessed these resources. It seems as though student athletes who do not perceive a stigma around mental health issues are more likely to be aware of the resources available to students. The data also showed that these student athletes surveyed believe that specific mental health resources for athletes would be beneficial, and approximately fifty percent of the participants would be more inclined to access mental health resources if provided through the athletic department.

A limitation of the study is the small sample size. This population surveyed only represents a fraction of the student athlete population at Oklahoma State, and this population does not reflect the beliefs of all student athletes at the university. This is also a specific population at a Division I university, so the results cannot be generalized for student athletes of smaller universities. This research shows that within the sample population, over eighty percent

of participants believe that being a student athlete leads to stress, and this can differentiate between each university, athletic department, and sports team.

Further research is needed to determine the rates at which mental health issues occur within other sports, and at other universities. It can be determined, however, that steps towards providing specific mental health resources for student athletes at Oklahoma State University would be beneficial for future athletes. Due to the continued presence of stigma associated with mental health issues, health education programs for student athletes about the importance of mental healthcare could also be developed and implemented by healthcare providers in the future.

### **Conclusion**

Based on the results obtained from the survey, it can be determined that student athletes believe being a student athlete is stressful, and they would be more likely to access mental health resources for athletes. Even though the athletes are aware of mental health resources provided by the university, they are not likely to access these resources and only a very small percentage of the survey population has accessed university-provided mental health resources. Stigma did not seem to affect whether or not student athletes would access mental health resources, however it was more likely for a student athlete to know about resources if they did not perceive a stigma associated with mental health issues.

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**Table 1.** *Sample characteristics of student athletes, 2022 (n =48)*

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<u>Characteristic</u>	<u>%(n) or mean (sd)</u>
Age	20 (0.38)
Race/ethnicity*	
American Indian or Native American	8.3% (4)
Black	10.4% (5)
Latino/Hispanic	6.25% (3)
White	72.9% (35)
Prefer not to answer/ Missing	4.1% (2)
Standing	
1 <sup>st</sup> year undergraduate	28.2% (13)
2 <sup>nd</sup> year undergraduate	21.7% (10)
3 <sup>rd</sup> year undergraduate	23.9% (11)
4 <sup>th</sup> year undergraduate	15.2% (7)
5 <sup>th</sup> year undergraduate or more	4.35% (2)
Graduate or professional	6.25% (3)
Prefer not to answer/ Missing	4.1% (2)
Self-reported health	
Excellent	17.7% (8)
Very good	66.6% (30)
Good	13.3% (6)
Fair	2.3% (1)
Poor	0
Prefer not to answer/ Missing	6.2%(3)

Days of poor mental health in the past 30 days	
0-5	47.9% (23)
6-10	25.0% (12)
11-15	10.4 % (5)
16-20	4.1% (2)
21-25	4.1% (2)
Prefer not to answer/ Missing	8.3% (4)
Mental health diagnosis (yes)	4.17% (2)
Mental health stigma (probably yes, definitely yes)	33.3% (16)
Would reach out for mental health help (yes)	33.3% (16)
Is aware of university-provided mental health resources at university	80.9% (34)
Accessed university-provided mental health care (yes)	14.2% (6)
Specific mental health resources for athletes would be beneficial (probably yes, definitely yes)	72.9% (35)
Would be more inclined to access mental health resources through athletic department (yes)	50.0% (24)
Being a student athlete is stressful (yes)	81.2% (39)
Student athletes are more likely to experience mental health issues (probably yes, definitely yes)	66.6% (32)

*Note.* Percentages based on non-missing responses. \*Respondents could select more than one option. Percentages will not sum to 100%.

**Table 2.** Association between belief in mental health stigma and help seeking behaviors and awareness of resources in student athletes, 2022 (n=48)

<u>Help seeking behavior and awareness by stigma, % (n)<sup>1</sup></u>			
<u>Behavior and awareness</u>	<u>Stigma</u> (n=16)	<u>No Stigma</u> (n=32)	<u>p</u> <u>value<sup>2</sup></u>
Would reach out for mental health help	31.2% (5)	34.3% (11)	0.804

Is aware of university-provided mental health resources at university	62.6% (10)	92.3% (24)	0.038*
Accessed university-provided mental health care	18.7% (3)	11.5% (3)	0.658
Specific mental health resources for athletes would be beneficial	87.5% (14)	65.6% (21)	0.170
Would be more inclined to access mental health resources through athletic department	56.2% (9)	46.8% (15)	0.540

*Note.* \*p < .05; \*\*p < .01, \*\*\*p<0.001 <sup>1</sup>Percentages based on non-missing responses

<sup>2</sup>Chi2 was used for cell counts of 5 and greater. Fishers' exact was used for cell counts less than 5