

How University Athletics Can Impact Mental Health among Student Athletes at the University of Evansville

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Abstract

In recent years, the NCAA student athlete population in the United States has surpassed 500,000, and is continuing to rise each year [1]. These student athletes work their entire lives academically and athletically to reach the ultimate goal: competing in university athletics. However, when these athletes reach university, they are met with non-stop training, homework, exams, and evolving social lives. We have conducted a study at the University of Evansville evaluating how participation in university athletics may impact mental health status among these student athletes, as well as measuring players' awareness of accessible mental health resources. Over fifty percent of participants reported experiencing at least one mental health condition while competing in their sport; eighty percent reported having knowledge of the mental health resources available to them on campus, however, nearly thirty percent of those knowledgeable reported not knowing how to access these resources. This has indicated a gap in awareness and utilization of mental health resources among student athletes at the University of Evansville.

Keywords

Student Athlete, Mental Health, Mental Health Resources

1. Introduction

The emphasis in the world of sports has always been on physical ability, training plans, and reaching peak performance. However, the mental health of a student athlete is a frequently overlooked part of their well-being. Student athletes in particular endure demanding added stressors that may have detrimental effects on their psychological health. Research in this area is extremely important due to

the growing need for mental health advocacy among student athletes. Research on mental health of student athletes can provide insight on how experiences within college athletics can affect their long-term mental health; additionally, more research in this field would likely lead to improved policies, procedures, and resources in place to support the mental health of student athletes during their college years. This study documents and analyzes any correlations between multiple student athlete lifestyle factors and reported mental health conditions among University of Evansville athletes with an added emphasis on evaluating student athletes' knowledge of available mental health resources. Additionally, correlations between mental health status and a particular sport may be a result of this study.

Mental health is a subject that is constantly being studied across the country. The Healthy Minds Survey is an annual survey conducted by the University of Michigan that examines the mental health of collegiate students. This survey has been conducted at over 530 universities across the country since its establishment in 2007. The most current results, from 2022, were more staggering than ever. Over 60% of respondents indicated some type of mental health crisis [2]. Flannery further analyzed the data and came to the conclusion that, "44% of students reported symptoms of depression; 37% said they experienced anxiety... and 15% said they were considering suicide" [2]. These statistics are concerning since they are the first substantial rise in all categories since a plateau in 2018. Reports of depression increased from a steady 36% - 37% to 44% in 2022. These results are the highest in the history of the survey.

Student athletes are at a greater risk of experiencing heightened levels of various mental health issues, including depression, anxiety, eating disorders, and more, due to the added pressures of academic deadlines, pursuing career development, and athletic competition and commitment. In a cross-sectional research study, using Chi-Square and multinomial regressions, published in the National Library of Medicine (NIH), it was measured that 22.3% of the student athletes were at risk for depression, 12.5% for anxiety, and 8% for low self-esteem [3]. A large number of participants from this study who suffered from depression and anxiety were females. In addition, among college students aged 18 to 25, the frequency of depression was 17.0%, with anxiety disorders being 22.3% [3]. Student athletes are under constant pressure due to the continuous evaluation and scrutiny of coaches, team mates, scouts, and opposing teams [4]. These added stressors can contribute to heightened levels of anxiety, depression, and other mental health conditions both on and off the field.

Currently, there is a lack of awareness for mental health status among student athletes at the collegiate level, which is why we have chosen to study this population. Student athletes are not always aware of a university's mental health resources and other means for combating various mental health conditions. The NCAA conducted a study in 2020 regarding mental health and conducted a follow-up study in 2022 which found that mental health conditions had elevated among student athletes [5]. According to the same study, rates of depression,

anxiety, and mental tiredness have not decreased since the fall of 2020 and are still 1.5 to 2 times greater than those seen before the COVID-19 pandemic [5]. However, student respondents reported a reduced level of pessimism in the fall of 2021 [5]. Another study conducted by the American Psychological Association stated that campuses across the country are rethinking their ways of approaching mental health due to the increase in reported cases among students [6]. Since counseling centers have seen an influx in students reporting conditions such as depression and anxiety, educational institutions are trying to address public perceptions of mental health services by providing more than purely individual therapy-based approaches [6].

The University of Evansville is a small, private university located in Evansville, Indiana. The University consists of 17 Division I athletic programs and 279 student athletes. Student athletes were chosen as the focus for this study because this population has shown to be at a higher risk of experiencing mental health conditions while simultaneously committing to a student athlete lifestyle that possibly limits their ability to access existing resources. A combination of individual performance ranking within a team and stigmas surrounding utilizing mental health resources are often correlated to student athletes experiencing mental health conditions [7]. In a study conducted by Limestone University and The University of South Carolina, the risk of depression ranges from 15.6% to 33.2% within the collegiate student athlete population, with first-year students and females often reporting more symptoms [3]. Our study aims to gain a clearer understanding of mental health experiences among student athletes at the University of Evansville and possibly address any gaps in knowledge or accessibility of mental health resources for student athletes. Strengthening university resources so that athletes feel supported and protected is of the utmost priority and would surely have strong impacts across the entirety of campus beyond the athletic department.

2. Methodology

This cross-sectional study is built on collecting primary data from a survey sent to every student actively competing on a university sponsored athletic roster and currently enrolled at the University of Evansville. The data from this survey was collected through SelectSurvey.net, a secure online provider for surveys. This survey was created in October of 2023 with the finalized link for the survey being sent out on October 27, 2023. An email from the researchers containing the survey link was sent to 279 student athletes, with the aim of a 30% response rate. All 279 potential participants were previously identified as student athletes of the University of Evansville. All participants were made aware that the survey was completely optional and anonymous. Student athletes could choose how many questions they wanted to answer, and could also skip questions or stop taking the survey at any moment. The survey, compiled of 21 total questions, was aimed at evaluating various lifestyle factors that could contribute to mental health out-

comes as well as evaluating the overall knowledge of available mental health resources provided to student athletes by the university.

Tables 1 - 3 reflect the questions that were asked of participants, with **Table 1** reflecting demographic and lifestyle information, **Table 2** for evaluating mental health experiences while competing in athletics at the University of Evansville, and **Table 3** measuring reported knowledge of mental health resources on campus. Each question was optional to answer with additional questions being prompted should the student report “yes” to previous questions. A question prompting the student athlete to answer if they were aware of the process for accessing mental health resources would only appear if the student reported being aware of those resources in the first place. If the student athlete reported they had previously attempted to utilize university provided mental health resources as a means to treat mental health experiences, they would then be prompted to describe the accessibility and ease of use of those resources. Questions for this survey were a mix of categorical, ordinal, or open ended in response type.

Table 1. Student athlete demographics and lifestyle.

Variable	Level of Measurement	Coding/Description
Enrollment and Participation in University Athletics	Categorical	1 = Yes 2 = No
Age	Ordinal	1 = 18 - 19 2 = 20 - 21 3 = 22 - 23 4 = 24+
Gender	Categorical	1 = Male 2 = Female 3 = Other 4 = Prefer not to answer
Race/Ethnicity	Categorical	1 = American Indian or Alaska Native 2 = Asian 3 = Black or African American 4 = Hispanic or Latino 5 = Native Hawaiian or Other Pacific Islander 6 = White 7 = Other
Year of Study	Ordinal	1 = Freshman 2 = Sophomore 3 = Junior 4 = Senior 5 = Graduate
Credit Hours	Ordinal	1 = <12 2 = 12 - 13 3 = 14 - 15 4 = 16 - 17 5 = 18 6 = 19+

Continued

Sport	Categorical	<p>1 = Women’s Basketball 2 = Women’s Cross Country 3 = Women’s Golf 4 = Women’s Soccer 5 = Softball 6 = Women’s Swimming and Diving 7 = Women’s Track and Field 8 = Women’s Volleyball 9 = Men’s Basketball 10 = Men’s Cross Country 11 = Men’s Golf 12 = Baseball 13 = Men’s Soccer 14 = Men’s Swimming and Diving 15 = Men’s Track and Field</p>
Discipline of Study	Categorical	<p>1 = Sciences and Math 2 = Arts 3 = Public Health, Health Sciences, Environmental Studies 4 = Business 5 = Engineering and Technology 6 = Literature, Language, Social Sciences, Liberal Arts 7 = Nursing 8 = Education 9 = Undeclared</p>
Level of Support from Support System	Ordinal	<p>1 = No support system 2 = Poor 3 = Neutral 4 = Good 5 = Very reliable and healthy</p>
Diet While Competing	Ordinal	<p>1 = Very poor 2 = Poor 3 = Neutral 4 = Well-balanced and healthy 5 = Very well-balanced and healthy</p>
Hours of Sleep While in Season	Ordinal	<p>1 = <3 2 = 3 - 4 hours 3 = 5 - 6 hours 4 = 7 - 8 hours 5 = 9 - 10 hours 6 = 10+ hours</p>

Table 2. Mental health experiences.

Variable	Level of Measurement	Coding/Description
Mental Health Condition During College Athletics Experience	Categorical	<p>1 = Anxiety Disorders 2 = Bipolar Disorder 3 = Depression 4 = Eating Disorder 5 = Schizophrenia 6 = Post-Traumatic Stress Disorder (PTSD) 7 = None of the above</p>

Continued

Mental Health Condition Directly Related to University Level Sport Participation	Categorical	1 = Yes 2 = No
Athletics' Hindrance on Accessing University Mental Health Services	Categorical	1 = Yes 2 = No 3 = Not Sure
Usage of Alcohol or Drugs to Cope with Mental Health	Categorical	1 = Yes 2 = No

Table 3. Knowledge of mental health resources.

Variable	Level of Measurement	Coding/Description
Knowledge of Resources Provided by University	Categorical	1 = Yes 2 = No
Knowledge of Accessing Resources	Categorical	1 = Yes 2 = No 3 = I do not know
Frequency of Utilizing University Resources	Ordinal	1 = Yes-Daily 2 = Yes-Weekly 3 = Yes-Bi-Weekly 4 = Yes-Monthly 5 = Yes-As Needed Basis 6 = No
Accessibility and Ease of Utilizing University Resources	Ordinal	1 = Very easy 2 = Easy 3 = Neutral 4 = Difficult 5 = Very difficult

The questions selected to ask participants were well researched and then tailored to meet the specific needs of our university. Prior to distributing the survey to participants, a pilot test should be administered to a few student athletes to ensure the questions being asked are clear, comprehensive, and relevant to the target population.

The initial survey was emailed to all 279 student athletes on October 27th, with two follow-up email reminders sent to the same recipients on November 3rd and 10th. After 3 weeks, the survey concluded on November 17th with a total of 70 complete or partially complete surveys. To help mitigate non-response bias, an incentive was offered to those who successfully completed the entire survey. This survey concluded with a 25% response rate. Institutional review board approval was received prior to releasing the survey to student athletes. The survey was available in both English and Spanish to all student athletes.

3. Results

Table 4 contains descriptive analyses. Demographically, a majority of the respondents identified as female (70%), with 77% of respondents reported white as their race, 8.6% Hispanic, 7.1% Black or African American, 1.4% Asian, and

Table 4. Frequency table.

Variable	Variable	Frequency	Proportions (%)
Age	18 - 19	36	51.4
	20 - 21	22	31.4
	22 - 23	10	14.3
	24+	2	2.9
Gender	Male	21	30.0
	Female	49	70.0
	Other	0	0
	Prefer not to answer	0	0
Race/Ethnicity	American Indian or Alaska Native	0	0
	Asian	1	1.4
	Black/African American	5	7.1
	Hispanic or Latino	6	8.6
	Native Hawaiian or Other Pacific Islander	0	0
	White	54	77.1
	Other	4	5.7
Year of Study	Freshman	26	37.1
	Sophomore	6	17.1
	Junior	14	20.0
	Senior	12	17.1
	Graduate	12	8.6
Credit Hours	<12	3	4.3
	12 - 13	12	17.1
	14 - 15	26	37.1
	16 - 17	19	27.1
	18	9	12.9
	19+	1	1.4
Sport	Women's Basketball	6	8.6
	Women's Cross Country	1	1.4
	Women's Golf	4	5.7
	Women's Soccer	6	8.6
	Softball	6	8.6
	Women's Swimming and Diving	11	15.7
	Women's Track and Field	4	5.7
	Women's Volleyball	10	14.3
	Men's Basketball	0	0
	Men's Cross Country	1	1.4
	Men's Golf	1	1.4
	Baseball	3	4.3
	Men's Soccer	4	5.7
	Men's Swimming and Diving	11	15.7
	Men's Track and Field	2	2.9

Continued

	Sciences and Math		
	Arts	11	15.7
	Public Health, Health Sciences, Environmental Studies	1	1.4
	Business	17	24.3
	Engineering and Technology	12	17.1
Discipline of Study	Literature, Language, Social Sciences, Liberal Arts	5	7.1
	Nursing	4	5.7
	Education	3	4.3
	Undeclared	4	5.7
	1 + disciplines of study	13	18.6
	No support system	0	0
Level of Support from Support System	Poor	0	0
	Neutral	6	8.6
	Good	25	35.7
	Very reliable and healthy	39	55.7
	Very poor	1	1.4
Diet While Competing	Poor	8	11.4
	Neutral	29	41.4
	Well-balanced and healthy	24	34.3
	Very well-balanced and healthy	8	11.4
	<3	0	0
	3 - 4	1	1.4
Hours of Sleep While in Season	5 - 6	23	33.4
	7 - 8	45	65.2
	9 - 10	0	0
	10+	0	0
	Anxiety Disorders	8	11.6
	Bipolar Disorder	0	0
	Depression	4	5.8
Mental Health Condition During College Athletics Experience	Eating Disorder	3	4.3
	Schizophrenia	0	0
	Post-Traumatic Stress Disorder (PTSD)	1	1.4
	None of the above	33	47.8
	1 + mental health conditions	20	28.9
Mental Health Condition Directly Related to University Level Sport Participation	Yes	4	5.8
	No	65	94.2
Athletics Hindrance on Accessing University Mental Health Services	Yes	27	39.1
	No	28	40.6
	Not Sure	14	20.3
Usage of Alcohol or Drugs to Cope with Mental Health	Yes	11	15.9
	No	58	84.1
Knowledge of Resources Provided by University	Yes	57	82.6
	No	12	17.4
Knowledge of Accessing Resources	Yes	40	70.2
	No	6	10.5
	I do not know	11	19.3

Continued

	Yes-Daily	0	0
	Yes-Weekly	1	1.4
	Yes-Bi-Weekly	4	5.7
Frequency of Utilizing	Yes-Monthly	0	0
	Yes-As Needed Basis	10	14.3
	No	55	78.6
	Very easy	6	40.0
Accessibility and Ease of Utilizing	Easy	6	40.0
University Resources	Neutral	2	13.3
	Difficult	0	0
	Very difficult	1	6.7

5.7% other. Most respondents reported being classified as Freshman (37%), with nearly equal reporting's for Seniors, Juniors, and Sophomores; a small percent (8.6%) of student athletes reported being graduate students. Students reported their age with options 18 - 19, 20 - 21, 22 - 23, and 24+. They were also able to report their year of study as freshman, sophomore, junior, senior, or graduate. The largest age demographic reported was 18 - 19 years old; this data makes sense as historically, college freshmen are between the ages 18 - 19 and the majority of respondents reported being freshman.

Roughly 60% of participants reported being enrolled in 15 or less credit hours during the Fall 2023 semester, with the remainder of participants enrolled in 16 or more credit hours. Although it was expected to see a correlation between higher credit hours and reported mental health conditions, this data makes sense given most student athletes who completed the survey reported being members of the Women's Volleyball, Men's Swimming and Diving, or Women's Swimming and Diving teams. In the fall semester, the Women's Volleyball and Men and Women's Swimming and Diving are both in season; a likely reason for lower reported credit hours is that most of these student athletes knew they would have tighter time restrictions for the fall semester. The survey results show involvement from every sponsored athletic team, except for Men's Golf and Men's Basketball. Lastly, a majority of student athletes reported their major either within the categories Public Health, Health Sciences, and Environmental Studies, Business, or Sciences and Math.

Most student athletes reported having good or very reliable and healthy support systems (91.4%). No students reported having a poor or no support system. The reported diet for student athletes mostly indicated either neutral or good diets; however, nearly 13% did report having poor or very poor diets while competing. Most students indicated they were receiving plenty of sleep as 65.2% reporting 7 - 8 hours of sleep on average while competing and 33.4% reported receiving 5 - 6 hours of sleep. None of the participants reported 9 or more hours of sleep on average while competing.

Table 4 also depicts data gathered for perceived support system, diet, sleep, mental health conditions, and diagnoses, as well as breaking down data gathered for knowledge and awareness of mental health resources at the University of Evansville.

A significant number of participants indicated at some point during their experience in collegiate athletics for the University of Evansville they had experienced at least one mental health condition. Of the participants, 52.2% indicated experiencing at least one condition, with 40.6% of respondents reporting experiencing anxiety disorders during their athletic experience at the university. Although many reported experiencing one of these mental health conditions at some time during their collegiate athletics experience at the university, only 5.8% indicated having been diagnosed with their mental health condition as a direct result from participation in university athletics. However, nearly 40% of student athletes noted they felt like their participation in their sport has on some level impacted their ability to access and utilize mental health resources provided to them by the university. Lastly, although over 80% of student athletes reported having full knowledge of mental health resources on campus, of those respondents, nearly 30% were not sure how to access those resources.

With the results of the survey, some points of concern were exhibited by the data. Almost 16% of all respondents indicated that they use drugs or alcohol to cope with negative mental health. This trend is concerning as using drugs or alcohol to cope, especially at such young ages, can cause serious health issues. A literature review performed by Schulte and Hser [8], showed multiple studies cite that the prolonged use of illicit materials as coping mechanisms are extremely harmful to multiple organ systems within the body, which cause serious health defects. Additional points of concern were that nearly 40% of all respondents indicated that they believe that their participation in athletics has hindered their ability to access or pursue adequate mental health resources. Specifically, 70% of the women's volleyball players responded in this manner. This is discouraging due to the fact that 80% of the women's volleyball players who participated in the survey indicated that they developed mental health conditions once they reached the collegiate level. Such statistics that point to a specific sport in regards to high rates of mental health condition prevalence and belief that participation in the sport hinders the ability to seek proper help for one's condition is worrisome, which could provide a negative perspective on the program. It would be highly beneficial to reevaluate each athletic program on an individual basis in the future to note any trends or changes depending on the season for that program.

Overall, the survey reflects a mix of outcomes. Much of the data reflected that the student athletes were knowledgeable of the mental health resources that the university provides, yet there is a lack of utilization for those resources. Of the 15 student athletes who reported utilizing these resources either weekly, bi-weekly, or as needed, the majority described the ease of accessing those resources as easy or very easy. The data also reflected healthy nutrition and sleep habits among the student athletes; approximately 87% of all respondents reported a neutral, well-balanced, or very well-balanced diet during competition season. This indicates that the university provides a well-balanced diet through their dining ser-

vices. The majority of participants were underclassmen, which further supports the university likely having well-balanced dietary options as most underclassmen have a university meal plan. Over 65% indicated that they get the recommended 7 - 8 hours of sleep per night during competition season. This may be indicative of good time management on the student athlete's part, but could also be interpreted as these student's only receiving adequate sleep due to intentionally enrolling in smaller credit loads. The data concludes that the University of Evansville has done a successful job at spreading awareness of mental health resources on campus, but could further address why many student athletes are reporting these mental health condition experiences while not utilizing their resources.

Table 5 contains the open-ended responses to the proposed final question: "Has your mental health ever impacted your performance or ability to play your sport? If so, how?". There were 52 responses with a range in depth of explanations for recorded responses. The responses seemed to be a further explanation of the respondent's mental health diagnosis. Many of the responses referenced having some type anxiety-related issue which coincides with the abundance of anxiety diagnoses. There are responses that are disheartening as they speak to some level of regret, sadness, or lack of motivation when it comes to participating in their sport. Another common theme, that is relayed through the open-ended response, is that the athletes feel overwhelmed or the feeling of pressure to perform at a certain level.

4. Discussion

It was hypothesized that student athletes experiencing less than 5 - 6 hours of sleep, no perceived strong and consistent support system, and relatively poor diets will report experiencing at least one mental health condition. No student athletes reported having no support system or a poor support system, which was not supported by our initial theory. Data collected from the average number of hours of sleep per night did not support our theory prior to the survey as nearly 100% of participants reported receiving 5 - 6 or 7 - 8 hours of sleep; this was a very positive, although unexpected, piece of data from the study. Our theory before sending out our survey was that student athletes reporting poor or very poor diets would report experiencing at least one mental health condition; out of the 19 students who reported very poor, poor, or neutral diets, 39 of them also reported at least one mental health condition in their collegiate athletics experience, which supports our hypothesis. It was also hypothesized that student athletes currently enrolled in 15+ credit hours would report experiencing mental health conditions, given that these added time constraints may affect their ability to access and utilize mental health resources; although the data shows most students reported being enrolled in less than 15 credit hours, which is not aligned with our initial theory, this is likely indicative of intentionally signing up for fewer credits to allot for the appropriate amount of time for sports actively in

Table 5. Open-ended responses.

Has your mental health ever impacted your performance or ability to play your sport? If so, how?
It takes a huge toll on your life if you make your sport your everything, which is common for student athletes. If you have a bad week of practice or a bad game or even as little as a bad practice, it could impact your mental health and just make you crawl in a hole and feel as if you are worthless and your life has no meaning. You also have identity problems if you don't succeed which makes everything just worse in your life.
When depressed, I bring negative energy to the team which affects the whole team, as well as my personal performance—copied with mistakes is harder, talking is nonexistent, bounce back is tough.
I have found that anxiety has greatly impacted my ability to play my sport. There is a lot of pressure to perform, and at times this has deteriorated my mental health and negatively impacted my performance in my sport.
Yes, my freshman year at a difficult college. Was ready to leave after the first semester, had no motivation to do things and it felt like I had to survive every day not live every day. I had no passion to play or any motivation to get better and help team.
In running sports, it is very mental. With that said, if you are having a bad day mentally and do not try to cope with it or work towards stopping it before competition, you will most likely struggle to perform well.
Yes, being made to go to practice and athletic events is a burden and overwhelms me.
Being on antidepressants made me feel like I could not compete as well because it blunted my emotions to make me unable to run with emotion.
Yes. I get so stressed and I overthink what I'm doing for the team is right, or if the coaches know that I am capable of playing well. Sports also take the mental health away too for me to help cope with it. Very rarely does my sport give me more anxiety or depression than my day-to-day stuff.
I feel sad to come to practice every day, I just dread waking up and coming to work out.
Yes, I tend to have a lot of anxiety around my sports performance when it should be something enjoyable and an escape from everything else going on.
Yes. I was hospitalized and hence, could not play my sport. I am also not able to focus as well and put as much effort into the sport if my mental health is bad.
Felt like had no energy to practice and had crying spells during practice and games.
Yes, an eating disorder held me out of practice last year. I know now that I have it and can manage it better.
Yes, major anxiety issues while competing.
Yes. Confidence is low. Energy is low. Motivation is low.
The ability to focus has a major impact on my performance. If university is not going well, my performance in sports is not going well.
Yes, when dealing with depression or other problems you don't play as well or come into practice focused or ready to train.
Anxiety about time can make it difficult to get to practice and be motivated.
A few times. I was mentally overwhelmed with homework, and my body was physically tired, so I couldn't perform at practice, and I just decided to stay home to rest.
Yes. Sometimes too anxious—impacts my performance on the field.
Yes, in high school my mindset swayed depending on my athletic performance.
Freshman & sophomore year when I originally participated in cross country --> low motivation & self-esteem during practices and competitions
Algunas veces he tenido un mal día (I have had my bad days.)
Occasionally—Not being able to focus/anti-social.
Performance yes. Not achieving or applying myself in the proper ways.
It is very possible to get down on yourself, and lead you to have a decline in confidence. Also makes it really hard to start the day and get out of bed, even if you have athletic competition that day.
I have just been stressed due to classes that I am taking and the sport that I am playing because it is a lot. Studying and tests are what get me the most stressed.
Pressuring myself too much to perform at the desired level.
Yes. It has caused prolonged tiredness and exhaustion as well as an injury which removed me from practice: a concussion.
I have no mental health issues, but finding motivation and being sad is something that I do notice I struggle with.
Yes, my mental health is very good so it helps me to perform on the pitch and I'm happy.
It is hard to stay motivated at times, but other than that, no.

season for the fall semester. Lastly, the data partially supported our hypothesis that student athletes who participated in the survey would report having little to no knowledge of currently available mental health resources provided to them by the university as most reported having this knowledge but very few reported knowing how to access those resources.

Two-thirds (66.7%) of participants who reported a neutral support system also reported a mental health condition, however, a significant portion of those who reported good or very reliable and healthy support systems also reported experiencing mental health conditions.

Only one student athlete reported averaging less than 5 hours of sleep per night while competing, however, they also did report experiencing an anxiety disorder while competing. Half of student athletes who reported having poor diets also reported experiencing a mental health condition. Only 25% of students who described their diet as very well-balanced and healthy reported experiencing a mental health condition. Just over 30% of student-athletes enrolled in over 15 credits also reported having experienced a mental health condition, however, a significant portion of students enrolled in 15 credit hours or less also reported these experiences, which does not support our hypothesis. The data received from the survey does not support our hypothesis that most student athletes would report not having knowledge of all mental health resources on campus as only just under 20% reported not having knowledge of these resources. However, almost 30% of those who reported that they did have knowledge of what mental resources were available to them, reported they did not know the process for accessing those resources.

The final open-ended question yielded many results that were expectedly consistent with reported mental health conditions, as well as there being some that utilized the question to reaffirm that they had not or are not experiencing mental health conditions during their time competing in university athletics. Several participants that indicated they believe their mental health had impacted their performance of their sport, also stated in the open-ended response which condition they had been diagnosed with. An interesting note is that many of the respondents indicated some level of performance anxiety or performance related stress outside of the expected time, practice, or social anxiety. The question was intended to illuminate specific details or feelings of the respondents to provide a better picture of how participation in their sport at the University of Evansville is impacting their mental health. When arriving to college level sports, student athletes may or may not be prepared for the impact participation in their sport at a highly competitive level can have on their mental health; it is clear by most of the responses from the survey's open-ended question that many are not.

Several key elements were learned throughout the survey's development, implementation, and analysis. First, mental health looks very different for every individual, regardless of them having a university or an athletic program in common. Diverse cultural experiences can also have an impact on how participants view mental health, which can influence how they may respond to a question.

Although most student athletes reported having knowledge of mental health resources on campus, it is interesting that such a small percentage of respondents reported having actually utilized the resources they reported to know about. It is possible that the mental health status among student athletes at the University of Evansville is relatively healthy thus resulting in minimal utilization of mental health resources, however, it can be concluded from the open-ended response question “Has your mental health ever impacted your performance or ability to play your sport? If so, how?”, this is not the case. Of the open-ended response answers, some were of particular interest. One student reported “It takes a huge toll on your life if you make your sport your everything, which is common for student athletes. If you have a bad week of practice or a bad game or even as little as a bad practice, it could impact your mental health and just make you crawl in a hole and feel as if you are worthless and your life has no meaning. You also have identity problems if you do not succeed which makes everything just worse in your life.” The emotion this statement and others hold is enough to question whether some student athletes feel healthy in their athletic space, and for those who do not, why may they not be seeking mental health help through the resources provided to them on campus?

Although there are many accessible studies on student athletes within the NCAA, there are a lack of studies on a university-by-university basis on their unique mental health status among student athletes accessible to researchers. This would have a considerable impact on many components to college athletics. It may allow for students or coaches to better select universities that may have environments tailored to their mental health needs; this may also encourage university administrations across the country to learn and adjust their resources provided to students by evaluating similar universities.

Albeit minimal, there were limitations to this study; the total length of time available for a student athlete to complete the study was only 3 weeks. Given more time, it is possible we could have garnered more participation. A component to our study was evaluating possible time constraints from a combination of large credit hour loads, practice, and competition requirements. An optional survey may not be a priority to student athletes, especially when approaching the end of the semester with conference or national competitions and finals week; this limitation could be addressed by having periodic surveys throughout the year to measure any seasonal trends. A potential limitation regarding the response rate, which could impact the representativeness of the sample, is certain sports were in season at the time the survey was distributed. The student athletes, whose sports were in season, might not have had the availability to complete the survey, which could result in a demographic being excluded from the results. This in turn could create potential inherent bias. Lastly, it may be beneficial to study the same athletes with repeated longitudinal studies as to see how they progress or regress in mental health status throughout the entirety of their college athletics experience, in and out of competition season.

While the survey was available in both English and Spanish, it is important to

note not all questions may translate verbatim, which could impact the responses collected. Additionally, there could be cultural barriers that influence responses. However, participants were shown the questions and responses both in the English and Spanish versions simultaneously, allowing participants the ability to translate a question or response independently if there was confusion.

5. Conclusion

In order to offer greater resources and assistance for student athletes facing mental health issues within collegiate sports programs, it is essential that these results be addressed and further studies take place. This study showed that the University of Evansville has done a satisfactory job of making sure students are aware of the services provided within the university for mental health disorders. However, there is still room for improvement on the university's behalf to ensure that the student athletes that do need help, receive the adequate care and resources they need in order to manage their mental health conditions. There is also a need to address concerns for why so little student athletes are utilizing mental health resources on campus. A survey should be conducted per semester to maintain good communication between the athletic department and athletes on needs for mental health resources or questions about available resources. Mental health should constantly be analyzed as it is an ever-changing discussion that continues to shape research throughout public health.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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