

Overwhelmed by the Stress and Frustration to Perform to Expectations: Exploring this
Phenomena within Student-Athletes

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Abstract

This mixed methods study examines current issues related to mental health, performance anxiety, and stigma among collegiate student-athletes. A targeted review of the literature examines studies on how stigma around mental health prevents collegiate student-athletes from seeking treatment, how demands from sports and academics affect mental health, how performance anxiety and related cognitive factors are involved, and how the new name, image, and likeness (NIL) era may affect the experience of student-athletes. An ecological cognitive-behavioral paradigm is put forth as a lens through which to view and manage mental health issues in the complex environment of collegiate athletics. The summary of a hypothetical Q-technique study is also given, which may be used to systematically sample student-athletes' subjective opinions regarding NIL, mental health, and performance pressure. By integrating quantitative factor analysis with qualitative insights from participant responses, the study identifies the diverse perspectives of student-athletes regarding mental health and performance, revealing the complexity of their experiences and the necessity for targeted support systems within collegiate athletics. Through the research, readers may not only confirm issues of agreement and controversy, but also use this secure data to establish the right policies, a first-rate education, and adequate support for this population as college sports continue to transform. A multi-dimensional approach, including individual, interpersonal, institutional, and socio-cultural actions, will be necessary to learn about the mental health of student-athletes and enhance their quality of life.

Keywords: name, image, and likeness (NIL), student-athletics, mental health, depression, college, athletics

Dedication/Acknowledgements

This dissertation is dedicated to my amazing family, especially my mom and dad (Joyce & Joseph Latessa), my sister (Lora Latessa), and my niece (Karie Seacrist). Your encouragement along this journey allowed me to persevere through numerous obstacles to completion. I would also like to thank my cousin (Dr. Phil Latessa) and my colleague (Dr. Greg Boerio) for your insight and advice. I would not be here without you!

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To my former teammates and to all the student-athletes who strive for excellence both on the field and in the classroom: your resilience, dedication, and courage in facing

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Chapter I

Introduction

The purpose of this investigation is to examine the psychological well-being and challenges faced by student-athletes in college, exploring factors such as stress, anxiety, depression, burnout, and the impact of athletic performance on mental health. By analyzing various theoretical frameworks, empirical studies, and best practices, this mixed methods investigation sheds light on the importance of addressing mental health concerns within the context of college athletics.

In March of 2022 the suicide of Katie Meyer, a goalkeeper who led Stanford to a national championship in soccer, made national news. At least four more National Collegiate Athletic Association (NCAA) athletes have died by suicide since Meyer's death, three of them young women. College student-athletes fear that they are in a current mental health crisis due to many factors—the pandemic, social media, the rising pressures on young people, the impact of name, image, and likeness (NIL) on athletics, and the pressure to win (Hensley-Clancy, 2022). According to Hensley-Clancy, "The deaths of Meyer and the other athletes have shaken the close-knit community of elite college sports, sparking fear and anxiety, according to athletes and others working in college sports" (para. 7). Mental health stigma as it relates to student-athletes also plays a role in perception and potential utilization of services amongst student-athletes. If services are being provided, then what signs of mental health struggles are being missed?

Student-athletes endure a rigorous schedule. They carry a full course load. They practice after classes. Perhaps they take an early morning workout session with a strength coach. Add on travel for games, and a student-athlete is faced with a pretty hectic

schedule. The intense demands of balancing full-time academics with heavy athletic training and competition schedules are a distinctive challenge confronting collegiate student-athletes. While the NCAA limits countable athletic-related activities to 20 hours per week in-season, with additional time expected for conditioning, injury treatment, film study, and other obligations, research suggests the genuine hourly commitment is far greater (Bissett & Tamminen, 2022). The results from a survey conducted by Kaishian and Kaishian (2021) found that athletes describe lacking any true offseason, with year-round training and conditioning expected. The extensive athletic time requirements leave little time for academics, socializing, basic health needs like sleep and nutrition, or any free leisure. Additionally, college athletes are considered representatives of their respective college athletic programs; therefore, the demand of athletic success can be an added pressure. Athletic administrators, counselors, and coaches must balance winning, branding, and financial success with student-athlete well-being. That balance and the pressures to succeed can present an ethical dilemma; however, athletic administrators must take into consideration and provide solutions for both university athletic program success and student-athlete success (Bird et al., 2020).

Overall, this study explores the wider context of college athletics, along with the unique demands and pressures faced by student-athletes and the potential consequences of neglecting mental health in this population. The prevalence of mental health issues in student-athletes is discussed in order to highlight the potential risk factors specific to their experiences, such as academic expectations, time constraints, physical demands, and the influence of coaches, teammates, NIL, and social dynamics. An introduction to relevant psychological theories, such as the stress and coping model, provides insights into the

interplay between psychological factors, individual characteristics, and environmental influences on mental health in college athletics. Results from this investigation provides the implications for both research and practical interventions to support the mental well-being of student-athletes.

Statement of the Problem

The alarming rise in suicides among college student-athletes, exemplified by the tragic death of Stanford soccer goalkeeper Katie Meyer in March 2022 and subsequent cases, has brought to light a potential mental health crisis within this population. Factors such as the impact of the pandemic, social media, elevated societal pressures on young individuals, NIL dynamics, and the intense pressure to succeed in athletics contribute to the perceived crisis (Moreland et al., 2018; Sasso et al., 2022). The existing mental health stigma among student-athletes further complicates the situation, potentially leading to overlooked signs and hindering the effective utilization of mental health services (Moreland et al., 2018).

Balancing academic and athletic workloads on campus adds unique pressures to student-athletes. Due to the structure of college athletics within universities, athletic departments tend to operate in isolation from the rest of the university. This isolation creates a subculture present in a college athletic program with values derived heavily from external influences such as governing bodies, the media, athletic boosters, alumni, and fans. This subculture can differ from the broader mission of the university. For example, with so many external parties present in this subculture, conflicting values and expectations from the university may lead to student-athletes being caught in the middle

of balancing expectations, which contributes to ongoing stress and undermines their academic and social roles on campus (Caulfield et al., 2022).

Additionally, the potential financial impact of college athletics often leads to a focus on winning no matter what is at stake, leading athletic administrators to focus on generating revenue for the universities and the athletic program as a main priority. This focus increases the potential for ethically flawed decision-making within the intercollegiate athletics system. Student-athletes are “treated as a means to an end for the university programs to generate revenues through increased commercialization of the sport to retain position, salary level, and power of dominant actors within the intercollegiate system” (Caulfield et al., 2022, p. 3). This structure presents an ethical dilemma within intercollegiate athletics when winning at all costs is chosen without proper consideration of student-athlete well-being. These choices can be extremely impactful given the developmental stage of student-athletes. For example, “when athletes are immersed in a toxic subculture driven by an economistic model prioritizing winning at all costs, their moral development can be stunted” (Caulfield et al., 2022, p. 3).

The role of athletics on the campus of universities serves many purposes. First, athletics are used for public support for a university. Research showed that teams that have success in athletics tend to see an increase in applicants following the season. Examples included an increase of three percent when a team made it into the National Collegiate Athletic Association “Sweet 16” in basketball, seven to eight percent if a team won the basketball championship, as well as seven to eight percent when a team won the national football title (Anderson, 2017; Martin & Christy, 2010). Demonstrated success in athletics has an influence on academics at universities as well, causing an increase in both

the support and the scrutiny of the sporting world on campus. Research on how aforementioned factors influence the mental health challenges of student-athletes, from student-athletes' perspectives, will allow those in support positions to look to eliminate any unfortunate scenarios caused by the scrutiny of university athletic programs and other involved constituents.

For example, qualitative accounts from student-athletes reveal feelings of constant time scarcity (Bissett & Tamminen, 2022). Participants report frequently having to miss classes for travel, receiving little sympathy from professors for athletic absences, skipping meals or eating hastily between responsibilities, and chronic sleep deprivation from trying to maintain schedules. Such role strain and pressure exact tolls on mental health. In addition to highlighting the challenges faced by student-athletes, these qualitative accounts serve as invaluable resources for support personnel seeking to address student needs effectively. By gaining insights into the specific stressors and strains experienced by student-athletes, support personnel can tailor their assistance and interventions to provide targeted support. Research focused on further understanding the nuances of time scarcity, academic pressures, and the toll on mental health allows support personnel to implement strategies that promote holistic well-being and academic success among student-athletes.

Purpose of the Study

The purpose of this investigation was to comprehensively examine the psychological well-being of college student-athletes and the challenges they face. The study explores key factors, including stress, anxiety, depression, burnout, and the impact of athletic performance on mental health (Sasso et al., 2022). Employing a mixed

methods approach and drawing from various theoretical frameworks, empirical studies, and best practices, this research sheds light on the significance of addressing mental health concerns specific to college athletics. By delving into the unique demands and pressures faced by student-athletes, the study identifies potential risk factors, such as academic expectations, time constraints, physical demands, and the influence of coaches, teammates, NIL, and social dynamics. Ultimately, the research provides insights into practical interventions and recommendations for supporting the mental well-being of student-athletes, considering the ethical dilemma faced by athletic administrators in balancing program success and individual student-athlete success.

Research Questions

This study investigates the state of mental health among college student-athletes and examines stressors and anxiety related to their role on college campuses. To achieve this goal, three research questions were identified:

1. What is the prevalence of mental health disorders among college student-athletes?
 - a. What specific mental health disorders are most prevalent among college student-athletes ?
2. How does the name, image, and likeness (NIL) emergence on campus affect the mental health of college student-athletes ?
 - a. How do colleges student-athletes perceive the commercialization of their NIL rights?
 - b. What are the stressors associated with managing NIL deals alongside academic and athletic commitments?

- c. Are there differences in the mental health outcomes of college student-athletes based on the success or failure of their NIL ventures?
- 3. How does the balance between academics and athletics influence the mental health of college student-athletes ?
 - a. What strategies do college student-athletes employ to manage the demands of academics and athletics, and how do these strategies impact their mental well-being?
 - b. Are there differences in mental health outcomes among college student-athletes based on the level of academic and athletic success or performance pressure they experience?

Research Methodology

A Q-methodological approach is a distinctive research methodology that integrates qualitative and quantitative components to explore subjectivity and viewpoints on a specific subject (Stephenson, 1953). As such, Q-methodology is designed to be a true mixed methods approach (Brown, 1993; Stephenson, 1953). Utilizing a Q-method approach in the current study allowed for a nuanced comprehension of how various student-athletes perceive and encounter stress and performance expectations. The objective was to reveal distinct perspectives within the participant cohort, offering valuable insights for designing interventions and support initiatives for student-athletes. In the current investigation participants consisted of 16 collegiate student-athletes from Youngstown State University. The selection of this participant range aligns with Stephenson's recommendation of 20-60 participants as suitable for Q-methodology investigations when the phenomenon under study is relatively focused or clearly defined.

The target population included full-time student-athletes from various teams at the university. The study was carried out during the spring season in order to allow participants time to establish relationships with teammates and coaching staff. By this juncture in the academic year students had experienced at least one full academic year and numerous team events; therefore, enabling them to form opinions and preferences regarding significant issues like modifications to the NIL policy, stigma surrounding mental health in athletics, performance expectations, and other relevant troubles. Purposive sampling was employed to select participants who were most likely to provide valuable insights into the study topic. Participants were purposefully selected and contacted through university channels. Demographic data was collected to ensure diversity among the participants. Given the nature of Q-methodology, which emphasizes a limited number of distinct viewpoints on a given topic, the sample size was kept relatively small.

The development of the concourse is a critical step in Q-methodology. The concourse represents the ‘universe of statements’ relevant to the issue under exploration (Gao & Soranzo, 2020). In order to develop the concourse an extensive list of opinion was first gathered from sources including existing literature on relevant topics like NIL policy, mental health stigma, and student athlete campus life. Input from a pilot study, including current student-athletes and athletic and psychology experts, ensured an exhaustive gathering of diverse views for the final concourse. Statements captured the breadth of attitudes, beliefs, and subjective opinions on the critical issues impacting student-athletes today.

Significance of the Study

This study holds significant implications for understanding and addressing the mental health challenges faced by collegiate student-athletes, a population that is often overlooked. By employing a Q-methodological approach, this research sought to illuminate the diverse perspectives and experiences of student-athletes regarding stress and performance expectations. The findings of this study are anticipated to benefit several key stakeholders, including the academic community, collegiate athletic departments and coaches, mental health professionals, and student-athletes.

Furthermore, this research looks to contribute to the interdisciplinary discourse on mental health in sports by bridging qualitative and quantitative methodologies. A major focus is to enhance understanding of the subjective experiences of student-athletes while providing a basis for further research in this area. Insights from this study can assist the development of targeted interventions and support programs tailored to the specific needs and perceptions of student-athletes. Additionally, the understanding gained from this study can inform the practices of mental health professionals working with student-athletes. By shedding light on the varied ways in which stress and performance expectations are perceived and navigated, this study can validate the experiences of student-athletes and foster a sense of solidarity within the athletic community. Through the voices of student-athletes, this research strives to contribute to the creation of a more inclusive, supportive, and resilient athletic community.

Role of the Researcher

The researcher in this study has experience as both a student-athlete as well as a coach of student-athletes. An estimate reveals that the researcher has interacted with well over 500 student-athletes as either their teammate or coach. As a student-athlete, the

researcher faced the demands that other student-athletes face to some extent, realizing that there were moments where additional support was needed. As a researcher, considerable care and effort must be incorporated to not impose any bias on the current study. Overall, the researcher in a Q-method approach plays a central role in designing, conducting, and analyzing the study, with a focus on understanding and representing the diverse perspectives of participants on the research topic (Brown, 1993; Rieber, 2020; Stephenson, 1953).

Research Assumptions

This study assumed that utilizing the Q-method approach would allow for the identification and exploration of diverse subjective perspectives held by student-athletes regarding their psychological well-being and challenges. It was presumed that this methodological approach would capture the nuanced ways in which student-athletes perceive and experience stress, anxiety, depression, burnout, and the impact of athletic performance on their mental health. By acknowledging and valuing their subjective viewpoints, this study sought to uncover hidden insights and provide a richer understanding of the complexities inherent in the mental health experiences of student-athletes.

Additionally, this study operated under the assumption that mental health is a crucial aspect of overall well-being, particularly for college student-athletes. It is presumed that factors such as stress, anxiety, depression, and burnout can significantly impact the psychological well-being of student-athletes and may affect their athletic performance, academic success, and overall quality of life. There is an assumption that despite the growing recognition of mental health issues in athletics, student-athletes

remain an understudied population in this context. It is presumed that there is a gap in understanding the unique challenges and stressors faced by student-athletes, as well as the impact of these factors on their mental health.

Additionally, this investigation assumed that the relationship between athletic performance and mental health is complex and multifaceted. It is presumed that various individual, social, and environmental factors contribute to the psychological well-being of student-athletes, and that these factors interact in dynamic ways. Further, shedding light on the importance of addressing mental health concerns within the context of college athletics has practical significance for various stakeholders, including athletes, coaches, administrators, and mental health professionals. It is presumed that the findings of the study will inform evidence-based interventions and support initiatives aimed at promoting the mental health and well-being of student-athletes.

Definition of Terms

Academic expectations - the standards or requirements placed on student-athletes regarding their academic performance, such as maintaining a certain GPA or completing coursework (Bird et al., 2020).

Anxiety - a feeling of worry, nervousness, or unease, typically about an imminent event or something with an uncertain outcome (American Psychiatric Association, 2022).

Athlete success - achievements or accomplishments attained by student-athletes in their athletic endeavors, such as winning competitions or achieving personal bests (Anderson, 2017).

Athletic administrators - individuals responsible for overseeing and managing various aspects of college athletics, including compliance, operations, and finances (Barnhill & Kavussanu, 2021).

Athletic performance - the level of achievement or effectiveness exhibited by student-athletes in their respective sports, often measured by factors like speed, strength, skill, and endurance (Grasdalsmoen et al., 2022).

Athlete well-being - the overall health and welfare of student-athletes, encompassing physical, mental, and emotional aspects (Bird et al., 2020).

Balance - the state of equilibrium or stability achieved when student-athletes effectively manage the demands of both academics and athletics, as well as other aspects of their lives (Crocker & Duncan, 2020).

Burnout - a state of physical, emotional, and mental exhaustion caused by prolonged stress or overwork, often resulting in decreased motivation and performance (Daniel, 2018).

Coaches - individuals responsible for training, instructing, and guiding student-athletes in their respective sports, providing technical expertise, strategic direction, and emotional support (Barnhill & Kavussanu, 2021).

Commercialization - the process of exploiting or profiting from college athletics, often through marketing, sponsorship deals, and media rights agreements (Lanter & Hawkins, 2013).

College athletics - organized competitive sports programs conducted within institutions of higher education, involving student-athletes representing their

schools in various sports competitions (National Collegiate Athletic Association, n.d.-b).

College student-athletes - individuals enrolled in college or university who participate in organized sports programs sanctioned by their academic institution (National Collegiate Athletic Association, n.d.-b).

Depression - a mood disorder characterized by persistent feelings of sadness, hopelessness, and loss of interest or pleasure in activities, often accompanied by physical symptoms such as fatigue and changes in appetite or sleep (American Psychiatric Association, 2022).

Mental health - the state of psychological well-being, encompassing emotional resilience, cognitive functioning, and the ability to cope with stress and adversity (Hilliard et al., 2022; Purcell et al., 2019; Purcell et al., 2022).

Mental health stigma - negative attitudes, beliefs, or stereotypes surrounding mental illness or seeking help for mental health issues, which can lead to discrimination and reluctance to seek support (Hilliard et al., 2022).

Name, image, and likeness (NIL) - grants student-athletes the right to profit from their personal publicity, such as endorsements, sponsorships, and appearances, separate from their collegiate athletic endeavors (National Collegiate Athletic Association, n.d.-a).

Pressure - the psychological force or stress experienced by student-athletes due to expectations, responsibilities, or performance demands, often from themselves or others (Santos et al., 2020).

Psychological well-being - the state of optimal mental health and functioning, characterized by positive emotions, resilience, and effective coping strategies (Purcell et al., 2019; Purcell et al., 2022).

Q-methodological approach - research methodology that combines qualitative and quantitative techniques to explore subjective viewpoints and perspectives on a particular topic or phenomenon (Stephenson, 1953).

Social dynamics - the interactions, relationships, and patterns of behavior within groups or communities, including how they influence individual attitudes, beliefs, and actions (Merriam-Webster, n.d.-a).

Stress - physiological and psychological response to environmental demands or pressures, often characterized by feelings of tension, agitation, or overload (Merriam-Webster, n.d.-b).

Student-athlete challenges - difficulties, obstacles, or hardships faced by individuals balancing academic and athletic responsibilities while participating in college sports programs (Daniel, 2018).

Subculture - a smaller, distinct cultural group within a larger society or organization, often characterized by shared values, norms, and practices that differentiate it from the mainstream culture (Merriam-Webster, n.d.-c).

Support services - resources, programs, or interventions designed to assist student-athletes in addressing their physical, mental, and emotional needs, often provided by colleges or athletic departments (Harris & Maher, 2023; Hebard et al., 2021).

Summary

The current investigation is organized to provide an overview of the psychological well-being and challenges faced by college student-athletes, particularly in light of recent suicides among athletes and the perceived mental health crisis within this population. The study explores factors such as stress, anxiety, depression, and burnout, as well as the impact of athletic performance on mental health. A literature review discusses the unique pressures student-athletes face, including academic expectations, time constraints, and the influence of external stakeholders like coaches and administrators. The study also delves into the ethical dilemmas surrounding the commercialization of college athletics and the potential impact on student-athlete well-being.

Research questions focus on the prevalence of mental health disorders among student-athletes, the effects of name, NIL dynamics, and the balance between academics and athletics. The methodology involves a Q-methodological approach to capture diverse subjective perspectives with implications for supporting the mental health of student-athletes and informing interventions in college athletics. Overall, the study aims to contribute to a better understanding of the mental health challenges faced by student-athletes and to advocate for their well-being within collegiate sports programs.

Chapter II

Review of Literature

Student involvement in sports for campuses can result in numerous tricky challenges and even psychological problems, such as overwhelming pressures and requirements that can badly affect participants' mental health, mood, and emotions (Santos et al., 2020). For student-athletes to work through the load of the 20 weekly hours of athletic practice and the game they need to consider regular academic activities. Student-athletes face the mental challenges of performing at a high level, including potential abuse of coaches, fans, and press officials. The disparity between student-athletes and non-student-athletes predisposes them to the development of anxiety disorders, stress, eating disorders, substance addiction, and other mental health disorders (Santos et al., 2020). In the tough clash for college athletes' position in the competitive ambiance of the university sports teams, the stigma around mental health still prevails even when the signs of mental distress are already identified.

The recent authorization of NIL rights, which permits student-athletes to earn money from endorsement deals, has complicated discussions about mental health. NIL may be empowering, but detractors contend it also increases student-athletes pressure to uphold their "personal brands," providing monetary rewards for excellence on the field (Jessop et al., 2023). Understanding how shifts like NIL impact the student-athlete experience will be critical. An ecological framework incorporating multiple interacting factors derived from various levels of the athletic environment and empirically supported approaches such as cognitive behavior therapy (CBT) can help design this mental support mechanism amidst constant changes in the world (Podlog et al., 2020).

This literature review will provide an overview of the issues of mental health-related stigma and stress, in addition to performance anxiety, that are so characteristic of college athletes. Under this premise, the discussion will revolve around the case of NIL rights being introduced, which also requires attention to study this decision's possible mental health outcomes. The model to be proposed is ecological cognitive behavior therapy, serving as the guiding framework for understanding and tackling mental health in student-athletes. Exploration of these themes is essential for developing relevant strategies, education, and services to ensure student-athletes' health as they cope with new challenges in transforming the college sports environment.

The State of Mental Health

Mental health is a significant concern in contemporary society. This is primarily the case due to a high rise in mental health issues. With this knowledge, scholars have established a significant number of mental health cases among college students, more specifically among athletes in colleges. Therefore, significant research has been conducted to understand the issue of mental health among the target population. The focus of this literature review explores the contributions of various scholars on the subject matter. The articles and papers referred to in this section are authored by scholars and authorities in the field of mental health and college athletics. Recent literature has included data on the effects of the COVID-19 pandemic, which will be explored in the next section.

COVID-19 Implications

The most recent data on mental health issues as they relate to high school students was centered around the effects of the COVID-19 pandemic. Although relevant at

present, it will not be the focus of this paper. The spread of COVID-19 displaced millions of students from their traditional learning environments. As a result, students faced new challenges accessing school-based mental health support and academic resources (Meyers, 2020). These challenges led to an increase in student demand for support, as the pandemic has had a negative impact on students' mental health and well-being (Sheasley, 2021). In a survey of K-12 students in the fall of 2020, 46% reported feelings of depression and anxiety along with increased stress as it related to the current learning environment (Singh et al., 2020). Student-athletes were no different. Additional stressors were added as practices and competitions were canceled or limited, physical activity decreased, and the social connectivity of team sports declined. Shepherd et al. (2021) noted that physical activity and social connection are important determinants in mental health. Team sport athletes self-reported more anxious and depressive symptoms during the onset of COVID than before (Shepherd et al., 2021).

As the academic world shifted back to pre-COVID means of instruction, support and extracurricular offerings, it brought an onset of new challenges in addressing the mental health of students. Schools played an important role in the mental health of students as they served young people for most of the day. The concern for students' social and emotional growth continued to concern both mental health professionals and schools as they realized the impact the academic setting has on social and cognitive development. Graupensperger et al. (2020) noted that multiple studies showed strong associations between group involvement, school achievement, and markers of mental health. In one of these studies, Holt-Lunstad et al. (2015) conducted a meta-analysis that showed that maintaining group memberships has positive effects on indices of mental health, such as

depression, and that maintaining mental health during periods of adversity often requires people to draw support from their groups. Brewer et al. (2010) found that student-athletes who reported higher levels of athletic identity were more likely to report positive outcomes, such as higher self-esteem, academic performance, and greater satisfaction with life. Additionally, Brewer et al. found that student-athletes who reported higher levels of athletic identity were more likely to report that their team was a source of social support.

Participation in extracurricular activities such as athletics increased both the time spent on campus along with the potential impact on mental health. Even during the COVID-19 pandemic, studies showed that the social interaction between student-athletes and the team network established had positive impacts on student mental health (Graupensperger et al., 2020; Shepherd et al., 2021). Graupensperger et al. further discussed the impact that the social network of an athletic team had on student-athletes. Two groups were studied. The group led by athletic administrators who were able to keep the team dynamic in place (i.e., group meetings and interactions, physical activity requirements and monitoring, academic supports, social interactions) via virtual components saw better academic performance, more maintained athletic conditioning, as well as higher self-reported feelings on mental health versus traditional, non-athlete students (Graupensperger et al., 2020). These findings showed potential positive benefits of athletic participation while in school, even outside of the COVID-19 pandemic. According to the Graupensperger et al. study, student-athletes who received more social support and reported more connectedness with teammates reported less dissolution of their athletic identity and reported better mental health and well-being. The study also

found that student-athletes who reported more connectedness with teammates and felt socially supported by teammates would report increased well-being and lower depression (Graupensperger et al., 2020).

Intersectionality and Mental Health in College Athletics – Post COVID

Intersectionality in athletics is an equally critical concern. In this regard, it is worth noting that various aspects of societal stratification play a critical role in shaping athletics not only at state levels but in the world in general. It is equally important to note that the recent pandemic, COVID-19, adversely affected the sporting world. The pandemic also highlighted various intersectionality concerns that were previously negligible. Some scholars can also justifiably argue that the issues raised as a result of the pandemic were known issues only that stakeholders chose to ignore them. Regardless of the schools of thought, it is evident that the pandemic played a critical role in highlighting these issues.

According to a study by Jabbari et al. (2022), race and gender play a vital role in understanding mental health issues among college athletes. In this regard, the scholars established that the onset of the COVID-19 pandemic exposed the prevalence of mental health issues to more people of color compared to their white counterparts (Jabbari et al., 2022). Therefore, college athletes of color often have to prove their worth more than their white counterparts. This pressure, coupled with the pressures associated with the nature of the sports that they play as well as academic expectations, private issues, and the fact that they are still young and discovering themselves, becomes overwhelming and can cause mental health issues such as anxiety and depression (Jabbari et al., 2022).

In a different article, Antoniak et al. (2022) explored athletes' identity and its relation to mental health. The scholars narrowed the scope of their study to encompass athletes aged between 11 to 25 years old. From this study, the scholars established that female athletes are more prone to mental health issues than their male counterparts (Antoniak et al., 2022). For example, female college athletes recorded higher rates of depression and anxiety compared to male college athletes (Antoniak et al., 2022). Moreover, the scholars also established a correlation between age and mental health issues. Antoniak et al. noted that younger athletes depicted fewer anxiety symptoms compared to older ones. On a similar note, younger athletes recorded more depression symptoms than older ones. Furthermore, the notion of athletic identity affects mental health among college athletes. As Antoniak et al. noted, students within the high athletic identity groups reported higher cases of depression and anxiety, while those in lower identity groups reported lesser cases. On a similar note, female college athletes had higher athletic identity than their male counterparts, which could explain the high number of female athletes with higher mental health issues.

Support

Coaches, athletic administrators, and counselors play an important role in student-athlete mental health, productivity, and success. The coach-athlete dynamic mediates the connection among sport participation and student-athlete character, fitness and wellbeing outcomes (Bird et al., 2020; Gayles & Baker, 2015). High school and college athletic administrators have offered vital leadership, mentorship and a course of action for coaches to optimize student-athlete overall performance, social and emotional learning, as well as maturation and self-confidence. According to Barnhill and Kavussanu (2021),

athletic administrators (AAs) are responsible for understanding the specific social, emotional, and climate-related challenges that exist within their respective programs. As leaders and mentors, AAs facilitate experiences for coaches and student-athletes that promote positive youth development. They also act as the athletics program's liaison to school leadership and aim to align this leadership and their policies (e.g., coach job descriptions and expectations, and definition of success in sports) with the new developmental objectives of their athletics program. Therefore, AAs provide mentorship and direction to coaches by promoting socially and emotionally competent behaviors across the ecosystem and aligning policies with the new developmental objectives of the athletics program (Barnhill & Kavussanu, 2021). Additionally, counselors play an important role in athletic transitions, whether they be from high school to college or from competition to post-competition. Stahlke and Cranmore (2021) state the key roles of school counselors are to assist student-athletes in establishing personal goals and developing future plans and to provide guidance and best practices to support them in meeting eligibility requirements for college athletics. Additionally, Stahlke and Cranmore mention that school counselors can be a powerful resource for student-athletes in developing a balanced identity that fosters personal, academic, and athletic success.

Student-athletes represent a unique population, having experienced challenges like non-athletes as well as having faced challenges balancing participation in athletics with academic responsibilities and social life (Bird et al., 2020; Gayles & Baker, 2015; Hebard et al., 2021). There were even examples of specific approaches developed to assist with these situations. One example, Cooper's (2016) "Excellence Beyond Athletics" approach addressed academic success and transitional periods as it relates to

black male student-athletes. The Excellence Beyond Athletics approach promoted student athlete identity beyond athletics and is designed to strengthen student-athletes' non-athletic identities by enhancing academic and social integration (Cooper, 2016). Support put in place to assist student-athletes during all phases of their academic and athletic careers have been crucial to their mental health, productivity, and success.

Mental health stigma as it relates to student-athletes also played a role in perception and potential utilization of services amongst student-athletes. A recent study by Kaier et al. (2015) indicated that student-athletes reported significantly higher levels of stigma as compared to non-athlete peers. As a result, student-athletes tended to under-utilize mental health services as compared to their peers. Because athletes may have had a celebrity-like status at times on campus they tended to experience less privacy, which led to fears of mental illness stigma; therefore, less utilization of related services (Kaier et al., 2015).

Mental Health – An Overview of Prevalence and Diagnosis

The state of mental health among college athletes is a pressing issue that warrants careful attention. Research has shed light on concerning statistics that highlight the prevalence of mental health disorders, such as depression, anxiety, and eating disorders, within this population. Ryan et al. (2018) conducted a study revealing that a bigger percentage of college athletes experience symptoms of depression. This finding emphasizes the urgent need to address mental health issues among this demographic. Additionally, suicide rates among college athletes are disturbingly high, which calls for immediate action from researchers and practitioners alike (Eisenberg, 2019). The high frequency of mental health challenges amid college athletes underscores the significance

of effectively understanding and addressing these issues. It is crucial to recognize that athletes face unique stressors and demands that can contribute to their mental health struggles (Eisenberg, 2019; Ryan et al., 2018).

Various studies have outlined statistics on the prevalence of mental health issues among college students. For example, according to a survey conducted by the National College Health Assessment (2014), a significant number of college athletes reported depression and anxiety symptoms between the academic years 2008 and 2012 (American College Health Association, 2014, as cited in Moreland et al., 2018, p. 58). In this regard, the survey established that about 31% of males and 48% of females had anxiety and depression symptoms (Moreland et al., 2018, p. 58). Similarly, a different article by Sasso et al. (2022) offers insightful information regarding the subject matter. According to Sasso et al., college student-athletes are prone to mental health problems due to various issues. For example, scholars note that this unique population has to juggle academic work and the challenges associated with academics, sports, and the demands associated with the various sports that they play, as well as their private issues (Sasso et al., 2022). Therefore, balancing academics, sports, and private life often overwhelms college athletes leading to mental health issues.

In their research, Sasso et al. (2022) employed qualitative methodology to establish the prevalence of college athletes seeking professional help for mental health issues. The study discovered that college athletes rarely seek professional help. On the contrary, they opt for informal support due to various reasons. To start with, they cite the fear of stigma as a primary reason for avoiding formal support. In this regard, college athletes are likely to be stigmatized if they seek mental health support, mainly due to

ignorance and the general public's lack of adequate knowledge of mental health.

Furthermore, college athletes often avoid seeking professional help due to fear of being vulnerable. Moreover, they avoid seeking mental health support formally due to the fear of being conceived as "weak" (Sasso et al., 2022). Furthermore, according to Purcell et al. (2022), although mental health issues are alarmingly prevalent among college athlete students, they tend not to seek help due to fear of stigmatization. Furthermore, these unique groups also stipulate the likelihood of being considered weak and therefore losing equal and fair chances as the "healthy" teammates as part of the reasons why they fail to seek help (Purcell et al., 2022).

Additionally, college athletes are prone to various mental health issues as far as diagnoses are concerned. Some of the most significant concerns include clinical or subclinical eating disorders, substance abuse, gambling addictions, sleep disturbances, mood disorders, and even suicide (Moreland et al., 2018). For example, college athletes are more prone to clinical and subclinical eating disorders as they try to maintain their athletic bodies, as that is a significant aspect of sports membership. Additionally, they are more prone to drugs and substance abuse compared to their non-athlete counterparts. The rationale for this premise is that athlete college students often have more money generated from sports. Therefore, they are more likely to engage in drug and substance abuse as they firstly have the money, and secondly, drug and substance abuse is often romanticized and viewed as a cool trend. Furthermore, student-athletes are likely to engage in gambling to supplement their high-end lifestyles and generate more money. However, this often leads to gambling addiction, which is a very concerning mental

health issue. Moreover, mood disorders are typical and common among college athletes (Moreland et al., 2018).

Additionally, the student-athlete population has reported a significant number of suicidal ideations and suicide in worst-case scenarios. The subject of suicides and suicidal ideations has been explored by various scholars. For example, Sun et al. (2020) note that suicide and suicidal ideations are prevalent among college athletes. Scholars attribute these alarming trends to hopelessness and depression often associated with disillusionment (Sun et al., 2020). Furthermore, the scholars also establish that death by suicide and suicidal ideations are a reflection of psychological strain.

Sun et al. (2020) further examined the topic of suicide and suicidal ideations among college athletes. Using a sample population of 774 Chinese athletes, the scholars established a positive correlation among hopelessness, psychological strain, suicidal ideations, and suicide establishing a clear sequence among the above-mentioned variables (Sun et al., 2020). First, college athletes experience psychological strain in the forms of value strain, aspiration strain, deprivation strain, and coping strain. These strains, in turn, lead to hopelessness which later leads to depression. As a result, and if not treated, depression leads to various mental health issues such as anxiety, drug and substance abuse, and eventually suicidal ideations and suicide (Sun et al., 2020).

As Chang et al. (2019) contributed, the diagnostic aspect of mental health issues is critical and entails the intervention of qualified personnel and psychologists. Chang et al. note that psychologists mainly focus on personality issues, cultural and sexual identities, as well as responses to illness and injuries. The aforementioned aspects, if not

adequately addressed, are likely to lead to mental health issues such as depression and anxiety (Chang et al., 2019).

Moreover, with the knowledge that mental health issues significantly affect the well-being of college athletes various stakeholders have employed strategies to ensure that the issues are adequately catered to, and that the athletes' positive mental health is promoted. For example, college administrations employ and seek the services of qualified sports psychologists; therefore, leaving the question and concern of the willingness of college athletes to seek mental health support. It is vital to explore the tendency of college students to seek professional help in case of mental health issues.

Moreland et al. (2018) explored the subject matter to establish the prevalence of college athletes utilizing mental health services. The scholars also explored some of the facilitators and barriers hindering college athletes from seeking and utilizing mental health facilities. Using a socio-ecological framework, the scholars reviewed a sample of 21 articles published between 2005 to 2016 and established a range of factors, such as fear of stigmatization and the need to maintain a certain persona, as some of the hindrances to seeking professional help. Similarly, Glover (2022) established that college students underutilize mental health resources. As part of the scholar's thesis, Glover established the need for college athletes to understand the symptoms of mental health and consequently seek professional help. Additionally, the scholar also notes the need for contemporary society to form a more accommodating and positive-orientated culture that encourages victims of mental health issues to seek help. Glover implies that student-athletes fail to seek professional help due to the negative association between mental

health and persona in society. In this regard, they fail to seek professional help aiming to 'protect' their persona and avoid stigma.

Basically, the scholars were more concerned with the conceptualization and operationalization of mental health services utilization. From the study, Moreland et al. (2018) established that there were significant variations in the conceptualization and operationalization of mental health services utilization among college athletes. Furthermore, the study also established that college athletes were willing to utilize mental health services. In this regard, it is worth considering the fact that college athletes are mainly young adults. Therefore, they are more prone to peer pressure and are easily influenced by their peers.

Moreover, as Moreland et al. (2018) note, the necessary stakeholders, including researchers, university officials, athletics programs, and policymakers, are actively playing their role in ensuring a safer mental health space for athletes. For example, they are dedicating more time and resources to addressing the prevalence and care of collegiate athletes' mental health concerns (Moreland et al., 2018). This includes hiring readily accessible and available sports psychologists to cater to the wholesome development of college athletes (Moreland et al., 2018).

Mental Health Stigma in Collegiate Student-athletes

College student-athletes continue to face a great deal of stigma around mental health, which makes it difficult for them to seek treatment or access psychiatric care. Quantitative research frequently demonstrates a significant disparity between the percentage of athletes reporting mental health problems and the percentage of athletes seeking therapy and other forms of support (Young et al., 2023). Thirty percent of

student-athletes from 15 institutions who participated in a study with over 600 participants indicated clinically meaningful levels of psychological discomfort and mental health symptoms. Yet only 10 percent had sought therapy in the year prior (Chow et al., 2020).

Kaishian and Kaishian (2021) stated that stigma is also caused by beliefs that getting mental health treatment goes against the standards of toughness and perseverance that are associated with athletics. Athletes are raised in a high-stress atmosphere that values playing through discomfort, stifling vulnerability, and putting the team before oneself. This is comparable to a study by Young et al. (2023) that found acknowledging difficulties could be interpreted as a betrayal of colleagues. Through the testimonies of impacted athletes, a qualitative study by Santos et al. (2020) demonstrated how these interactions foster stigma. When athletes viewed as ‘head cases’ are shunned or given less playing time, coaches may unintentionally contribute to stigma. Internalized stigma also manifests through athletes’ concerns about negative perceptions by coaches and peers. A qualitative study by Crocker and Duncan (2020) found that student-athletes recognized a stigma surrounding mental health support, agreed they would feel inadequate if they went to a therapist for help, and agreed their teammates would see them as weak if they sought help (p. 34). These negative self-judgements deter openness about struggles. Stigma is extreme surrounding mental illnesses like depression that are seen as antithetical to athletic success. In a vignette study, college athletes expressed more excellent social distancing intentions toward peers with depression compared to physical injuries (Crocker & Duncan, 2020). Reducing stigma requires reframing help-seeking as a strength rather than a weakness.

Limited time and accessibility of services also hamper access to counseling for student-athletes. With 20+ hours per week spent on athletic activities during the season, finding time to attend appointments can be very challenging (Harris & Maher, 2023). Campus counseling centers may have restricted hours, mismatching athletes' demanding schedules. Services integrated directly within athletic facilities rather than student health improve proximity and comfort, seeking support in a familiar environment. According to the results conducted by Harris and Maher (2023), easy walk-in access and flexible staffing accommodating late evenings and weekends ensure services are reachable. Streamlining referral systems through athletic trainers and designated liaisons who understand team schedules also enhances access. While athletic personnel interact with students daily, many lack training in adequately identifying and handling mental health issues. In a survey, 46% of athletic trainers acknowledged wanting more education and preparation for identifying and referring student-athletes exhibiting psychological concerns (Bamford, 2020). Coaches have misconceptions about viewing mental illness only through a performance lens rather than as part of holistic well-being. Bamford argued that transforming support roles like athletic trainers and coaches into competent gatekeepers for mental health requires expanded training and capacity building around psychology tailored to the athletic context.

Multifaceted approaches are necessary to address layered stigma and access barriers student-athletes encounter. Young et al. (2023) stated that integrating mental health screening and services directly within athletics rather than siloed health centers reduces logistical impediments. Outreach from athletic department leadership emphasizing mental well-being as integral to performance helps shift culture. High-

profile athlete testimonials and peer advocates talking openly about struggles promote help-seeking norms. Evidence-based mental health literacy programs for staff and athletes build empathy and skills for appropriately responding to concerns. Ongoing research, especially qualitatively exploring athletes' lived experiences, guides the tailoring of destigmatization efforts and clinical best practices for this population (Harris & Maher, 2023). With coordinated initiatives reducing stigma, improving competence, and increasing access, gaps in the utilization of mental health services among student-athletes can be overcome.

Availability and Usage of Services

Many college campuses struggle to provide comprehensive mental health services, particularly specialized support tailored to the unique needs of athletes. These individuals often require specialized interventions due to the pressures and demands associated with their athletic commitments. Moreland et al. (2018) also established various facilitators and barriers hindering athletes from seeking mental health services; the target population's facilitators and hindrances to mental health facilities and services are linked to various sociological aspects. First, the athletes' personal characteristics, attitudes, and opinions towards mental health services utilization either round up as facilitators or barriers to seeking the services (Moreland et al., 2018). For example, male college athletes are less likely to seek mental health services as compared to female athletes (Moreland et al., 2018). Additionally, athletes' previous experiences with mental health services greatly impacted their decision to either seek or not seek mental health services—those with positive experiences are more open to utilizing mental health services, while those with negative experiences are more reluctant to utilize the services.

Prior experiences significantly impact a student-athlete's decision as far as seeking mental health services is concerned. Furthermore, the external environment significantly facilitates or hinders college athletes' willingness or unwillingness to seek mental health services (Moreland et al., 2018). Some of the key players as far as the external environment include athletes' parents, coaches, trainers, teammates, and peers. Hence, seeking professional help depends on a range of factors, as discussed by Moreland et al., as the researchers explored some of the facilitators and barriers for college athletes to seek and utilize mental health services.

College athletes may not be adequately informed about the resources available to them or may underestimate the potential positive impact of seeking help. This lack of awareness can stem from insufficient promotion of mental health services, insufficient education on mental health topics, or a general lack of prioritization of mental well-being in the athletic culture and more so in the past COVID-19 pandemic period (Mukhtar, 2020). Additionally, universities should strive to improve the accessibility and availability of mental health services predominantly custom-made to the needs of college athletes (Hilliard et al., 2022).

Athletics on Campus

Campus life is always challenging for any given student. First, college students are typically young adults. Therefore, they face challenges associated with this age group. Additionally, student-athletes must balance their academics, the sports that they play, and their social life (Moreland et al., 2018). Academic obligations can be quite challenging for any student (Sasso et al., 2022). Therefore, it is justifiable to note that college athletes face more challenges compared to other college students. Furthermore, like their non-athlete counterparts, this unique population of young adults also faces the academic

challenges associated with college life (Moreland et al., 2018). There is an additional workload to this unique population as they also have to maintain a physical fitness level and other responsibilities associated with sports memberships (Moreland et al., 2018).

Impact of Athletics

The role of athletics on the campus of universities served many purposes. Athletics were used for public support for a university. Research showed that teams that have success in athletics tended to see an increase in applicants following the season. Examples included an increase of three percent when a team made it into the NCAA “Sweet 16” in basketball, seven to eight percent if they won the basketball championship, as well as seven to eight percent when they won the national football title (Anderson, 2017; Martin & Christy, 2010). This demonstrated success in athletics had a positive influence on academics at universities as well, causing an increase in both the support and the scrutiny of the sporting world on campus.

For example, athletics benefited students and the university, but there were negative side effects as well. Athletics helped universities build brand equity, raise funds, sign endorsement deals with athletic apparel companies, and assist with external relations. In essence athletics on campus led to a commercialization of the university and its athletic teams. This commercialization led to some negative side effects. One of these focused on the perception that there were low academic standards for student-athletes. Student-athletes just had to meet minimum requirements to remain eligible. Another negative side effect focused on the belief that colleges and universities placed an over-emphasis on winning, and therefore sacrificing individual student-athlete academic and personal well-being (Anderson, 2017; Martin & Christy, 2010).

In recent years, a new dynamic was added to the life of college and university student-athletes. According to the NCAA (n.d.-a), student-athletes were able to take advantage of earning compensation for the usage of their NIL through endorsements and related endeavors. Research was limited at the time of this review, as this development was still in its infancy stage. However, the impact of NIL pursuits and how it relates to student-athletes' balance between their social, academic, and athletic roles will play an important role in further discussions on the impact of athletics on campus.

Overall, it is difficult to argue that college athletics are not an important asset to the students as well as the university. Therefore, university administration and athletic support personnel are constantly looking for ways to make the experience for all sides involved as beneficial as it could be. Creating an environment that properly balances the academic and athletic lives of student-athletes is a tremendous challenge for these student affairs leaders. Support services focuses primarily on scheduling, tutoring, and time management. The ideal goal of these services is to assist student-athletes with the achievement of academic, athletic, and personal growth and success (Comeaux, 2012; Cremin & Anderson, 2019).

Another major issue faced by colleges and universities focused on student-athlete admission. The argument was made that student-athletes were admitted based on athletic potential and not academic potential yet were expected to perform as both students and athletes (Anderson, 2017). When weighing all of these factors, it often placed a significant challenge to the everyday life of a student-athlete.

Student-Athlete Experience

Life on campus for student-athletes has not been easy. Student-athletes often faced adverse conditions like burnout, responsibility-related stress, lack of sleep, and heavy demands of sport participation, often more so than their non-athlete peers. Athletes were required to balance high training demands, relationships with coaches and teammates, as well as balancing athletics and academics (Galli & Reel, 2012; Santos et al., 2020). The rigorous demands of athletic participation in college has been shown to take its toll on the students' academic lives. Therefore, the combination of these factors can create a high-pressure atmosphere, often leading to elevated stress levels and psychological distress among athletes. Balancing rigorous academic coursework with the demands of training and competition can be overwhelming, resulting in increased vulnerability to mental health issues (Harris & Maher, 2023).

Literature on the impact of athletic participation on a student-athletes' academic lives has increased significantly recently. The daily lives of student-athletes have been analyzed. Typically, student-athletes have spent over 20 hours per week practicing or playing a sport, with some football players reporting over 40 hours of participation (Santos et al., 2020). Student-athletes faced fatigue and bodily injury, missed classroom instruction due to the rigors of competition and travel, and were expected to maintain a certain level of academic performance to stay eligible. Young men and women were expected to perform as both athletes and students. They had to continuously deal with the demands of practice and competition (Gayles & Hu, 2009; Martin & Christy, 2010; Santos et al., 2020).

Name, Image, and Likeness (NIL)

The introduction of NIL rights has added a new layer of intricacy to the college sport landscape. The NIL policy change permits college athletes to profit from their individual brand, endorsements, and appearances, providing potential financial opportunities (Kunkel et al., 2021). While this change brings forth economic benefits, it also amplifies external pressures and expectations on college athletes. Student-athletes may feel compelled to manage their social media presence, negotiate endorsement deals, and handle the additional responsibilities that come with monetizing their NIL rights. The convergence of college life, athletic demands, and the NIL effect has substantial implications for the mental well-being of college athletes. The stressors allied with the athletic environment and the newfound responsibilities and expectations stemming from NIL can lead to psychological distress. Consequently, it is vital to understand the interplay between these factors to develop operative policies for supporting the mental health of college athletes (Kunkel et al., 2021).

The Student-Athlete Experience in the NIL Era. The recent introduction of NIL policies allowing NCAA athletes to monetize their personal brands and marketability represents a significant shift with widespread repercussions. Under prior National NCAA rules, profiting from endorsements or autographs was strictly prohibited as contrary to ‘amateur’ status (Kirsch, 2022). However, as public and legal pressure mounted, the NCAA adopted interim NIL rules in 2021, permitting athletes to earn compensation for using NIL by third parties. This paved the way for sponsorship deals, autograph events, advertisements, social media monetization, and more ways athletes can capitalize on commercial value. Proponents argue that NIL rights empower athletes to financially benefit from their contributions to lucrative college sports enterprises, such as being able

to sell jerseys with their names on them (Ehrlich & Ternes, 2021). NIL proponents also contend that this policy brings the regulation of college athletics more in line with Olympic models, allowing endorsements and norms in the general student body, where peers can earn income from endeavors unrelated to academics (Winkler, 2021). However, the rapid implementation of NIL and a lack of guardrails raise concerns among some scholars and athletic administrators about potential unintended effects on student-athletes' experiences and well-being.

According to Palmieri (2021), NIL income could confer athletes financial and mental health benefits. Supplemental earnings help offset the costs of attending college, support families, and provide resources needed for essential well-being that may alleviate stress and anxiety. NIL might also benefit athlete identity development and self-esteem by allowing profit from hard work. As observed qualitatively, some athletes feel empowered by NIL deals representing the fruits of their labor finally being recognized. However, critics raise important cautions about NIL exacerbating other risks to student welfare (Winkler, 2021). Prioritizing brand-building and monetizable activities may also detract focus from academics. There are concerns around equity, as NIL empowers star athletes from prominent sports and schools disproportionately more than those from lower-profile programs (Palmieri, 2021). Athletes may feel increased pressure to train and compete year-round in their sport to maximize earning potential at health costs or face trolling if performances suffer.

Baker and Burke (2023) argue that NIL does not fundamentally shift the power imbalance, allowing NCAA institutions to profit massively from athletes' unpaid labor. Under NIL, colleges still avoid paying salaries or providing extended healthcare and

protections afforded employees despite benefiting from athletes' brand value and physical sacrifice. Similarly, Procaccini (2024) stated that resources to help athletes manage NIL or prepare for transitions after sports remain lacking at many schools. Current evidence highlights necessary tradeoffs associated with allowing athletes to monetize NIL that warrant careful consideration (Baker & Burke, 2023). Potential mental health benefits like financial security and autonomy must be balanced with risks of new burdens, inequalities, physical demands, and identity threats in an already highly pressurized context. Supporting athletes requires updated counseling services addressing unique NIL-related stresses, financial education, branding guidance, and help managing new time demands (Kirsch, 2022). With proactive coordination and continued research on athlete perspectives, NIL can be harnessed toward empowerment and well-being. However, reforms should go further in providing athletes with their full due voice, rights, and protections as the engine drives a multi-billion-dollar commercialized enterprise.

Performance Anxiety and Stress

One potential significance of the NIL effect is the escalation of performance anxiety. College athletes may experience heightened pressure to perform exceptionally well in their sport to interest sponsors or secure endorsement deals. This added scrutiny and expectation could lead to augmented anxiety levels, undesirably impacting their overall well-being. Additionally, the constant need to advance their individual brand and social media presence may contribute to a sense of constant surveillance and self-comparison, further aggravating stress and mental health concerns (Kunkel et al., 2021). Furthermore, the NIL effect may also influence the sense of identity among college athletes. Prior to NIL, the NCAA's amateurism rules restricted athletes from profiting off

their name, image, and likeness. As a result, their athletic identity often overshadowed other aspects of their identity. With the advent of NIL, athletes now have the opportunity to explore and establish their personal brand beyond their athletic achievements (Kunkel et al., 2021). However, this newfound freedom can also bring identity-related challenges as athletes navigate the complexities of managing their public image while balancing academic and athletic obligations.

Brosh (2020) stated that performance anxiety and related psychosocial stressors are salient concerns impacting mental health for many collegiate student-athletes. Performance anxiety is excessive worry or apprehension about athletic competition, evaluation, and goal setting. Symptoms may include cognitive rumination over perceived expectations, bodily tension and discomfort, and avoidance of competitive situations, provoking anxiety. Tabet et al. (2021) agreed with Brosh (2020) that performance anxiety tends to be comorbid with, but distinct from, generalized anxiety in athletes. Qualitative studies reveal performance anxiety often stems from the intense pressure student-athletes feel to fulfill high expectations from coaches, family, media, and other stakeholders who scrutinize their athletic outcomes. At the same time, Baker and Burke (2023) stressed that cognitive models elucidate how thought patterns like perfectionism and the need for control exacerbate performance anxiety, which then impairs athletic achievement. All sports-related mental and bodily performance anxiety is more common among collegiate athletes who have perfectionistic ideals, fear of being judged negatively, and catastrophize over failing. In competitive contexts, feelings of threat are heightened by these maladaptive mental processes. Negative perfectionism is linked to increased levels

of somatic and cognitive anxiety in a study involving more than 200 student-athletes, and it lowers confidence (Brosh, 2020).

These effects illustrate a subtle downward spiral in which performance, the very thing needed in abundance, gets pulled down by anxiety, which then weakens one's focus, coordination, and stamina, thus leading to reinforcing anxiety and self-doubts. The research team from Brown et al. (2020) suggested that both emotional tensions before or during a competition and the anxiety of muscular exertion usually affect the athletes' performance. The report signifies those techniques directed at eliminating self-destructive patterns of thinking, regulating emotions, and strengthening coping abilities can indeed break the cycle of anxiety and its negative impact on athletes that can be alleviated (Tran, 2022). Likewise, research by Hatteberg (2020), advocated that college athletes who took part in CBT (cognitive-behavioral therapy) and mindfulness training reduced their performance anxiety compared to those on the waitlist regime. The ability to regulate emotions leading to these improvements could be facilitated. Similarly, Jessop et al. (2023) found acceptance-focused behavioral therapy with mindfulness for experienced avoidance to be highly effective in athletes – reducing anxiety and enhancing coping were the benefits.

In addition, periodized mental skills training that combines physical exercise during the preseason, competitive, and offseason with psychological and emotional regulation techniques has been suggested by Hilliard et al. (2022) to show particular promise for long-term anxiety reduction and performance enhancement. At the macro level, leadership styles and staff abilities that facilitate candid conversations about mental health issues are critical for anxiety treatment and prevention (Brown et al., 2020). When

it comes to creating a supportive or hostile environment on their teams, coaches are crucial. Student-athletes often experience performance, and social anxiety can be mitigated by supportive coaching that cultivates trust, belongingness, and growth mindsets (Hatteberg, 2020). When mental health is a priority for athletic departments through wide-access counseling services, destigmatizing messaging, and having staff-trained sportspersons made aware of the illness with the norm of seeking help to address performance anxiety before it may lead to problems. A facilitated mixture of comprehensive individual, squad, and organizational activities reinforcing psychological constructs and prompt mindful insights would be the most effective approach to sustaining well-being (Hatteberg, 2020).

Demands

Along with the demands of the everyday schedule, student-athletes often had to deal with other issues that a non-athlete student did not have to. According to Cremin and Anderson (2019), some faculty members held more prejudicial attitudes toward student-athletes than non-athletes, showing evidence of obstacles in the establishment of a successful relationship between student-athletes and faculty. This hindered the quality of the athletes' academic experience. The study proposed the need for more innovative approaches to foster better relationships between student-athletes and educators (Comeaux, 2011; Cremin & Anderson, 2019). Issues like this led universities to enhance support services for student-athletes.

Quantitative comparisons between student-athletes and their non-athlete peers consistently reveal a heightened risk for clinical issues. A robust study of over 600 student-athletes across multiple sports and institutions found significantly higher rates

compared to non-athlete controls of depression, anxiety, disordered eating, substance use, and other mental health concerns (Bird et al., 2021). Those participating in the highest-profile Division sports faced the most significant risk. A meta-analysis by (Harris & Maher, 2023) further confirmed that student-athletes face more frequent and intense stressors related to athletic and life demands than regular students. The heightened risk for distress reflects chronic stress from extreme athletic expectations coupled with typical academic pressures. A study of first-year student-athletes found those perceiving more outstanding athletic time commitments reported higher depressive symptoms, highlighting this linkage. Athletes frequently describe feelings of burnout marked by emotional exhaustion, depersonalization, and reduced accomplishment (Bird et al., 2021). Bird et al. noted that student-athletes are also at elevated risk for overtraining syndrome involving performance decline and mood disturbances from chronic overload without adequate recovery. Supportive leadership and systems to teach stress and time management skills, self-care, cognitive restructuring, and mindfulness are needed to help athletes adaptively cope. Ultimately, the intense dual role demands fundamentally distinguish the student-athlete experience, underscoring the need for tailored mental health promotion and accessible services.

Since the demands of athletic participation were high and the corresponding academic concern seemed to be low, it brought out questions on whether or not athletes' academic counseling was better than services provided to non-athletes. Conversely, if the argument that student-athletes simply cared more about athletics than academics was made (Lanter & Hawkins, 2013; Yukhymenko-Lescroart, 2021). Determining just how

student-athletes viewed their lives on campus had been the focus of some of these studies. Further research should note the impact of life on campus.

A potential opportunity for further research was discovered when reviewing the literature on student-athletes' own perspective and opinions on their experiences as both students and athletes on campus. Research tended to reference the Potuto and O'Hanlon (2007) study from 2005 when referencing student-athlete perceptions. In 2005, a survey involving 18 NCAA Division I universities resulted in 921 responses of student-athletes regarding their experiences as college students. Overall, the students had quite positive responses on this survey regarding their college experience. Over 90% responded "yes" when asked if their college experience was well-rounded. They also answered positively regarding athletic participation and its influence on their college experience, educational development, leadership skills, decision-making, and time management skills. When asked if the university they attended provided enough support necessary to succeed academically, over 72% responded with either "quite a bit" or "very much" – the two highest rankings (Potuto & O'Hanlon, 2007, pp. 953-963). The study also showed that many student-athletes believe that they are treated differently, either positively or negatively, because they are a student-athlete. The findings of this survey showed that the experiences of student-athletes can be positive and benefit them. It countered the argument that student-athletes may be receiving an inferior educational experience (Potuto & O'Hanlon, 2007). This survey focused on student-athletes own responses on how they viewed their lives on campus; it did address support services but did not focus on how student-athletes define productivity and whether or not they were achieving at a level suitable to their own goals. This gap will be explored with the further discussion in

this paper. Future research should look to update this data and seek out the perceptions and opinions of current student-athletes.

Pressure to Win and Maintain Persona. The presence of fans adds another layer of pressure on college athletes. Fans have high expectations and invest emotionally in their teams' success. Athletes are cognizant of this support and feel the weight of responsibility to perform well in front of their fans. The fear of criticism or of disappointing those who support them can contribute to the mental strain experienced by athletes. A study steered by Cutler and Dwyer (2020) accentuates the impact of perceived pressure from coaches and teammates on the emotional well-being of college athletes. The study found a noteworthy association between this perceived pressure and symptoms of anxiety among athletes. This research highlights the implication of discursing the fundamental social and psychological dynamics that led to mental health challenges in college athletics.

Perceptions of Persona. Grasdalsmoen et al. (2022) explored mental health problems among college athletes who identify themselves as elite athletes. In their study, the scholars used questionnaires to establish some of the prevalent mental health issues among elite college athletes. The study first established that 1.3% of the sample population of 50,000 college athletes identified as elite athletes. The study further established that out of the 1.3%, both male and female populations recorded better health. In this regard, they recorded fewer mental health problems; they were less lonely, they were also more satisfied with life, and they had fewer alcohol problems (Grasdalsmoen et al., 2022, results, p. 4).

Furthermore, an equally important aspect that Grasdalsmoen et al. (2022) contributed to the subject matter is the sharp distinction between athletes in team sports and those in individual sports. The scholars note that athletes in team sports had better mental health as compared to those in individual sports. Furthermore, the hours of exercise for athletes' respective sports also significantly affect the mental health of the athletes. The scholars established that athletes that spend more time exercising have better mental health than those that spend less time exercising (Grasdalsmoen et al., 2022). However, an equally important aspect worth considering from Grasdalsmoen et al. study is extreme exercise leads to poor mental health among female college elite athletes.

Findings imply that although increased exercise hours are productive among male elite college athletes, the situation is contrastingly different among female athletes as it leads to poor mental health. With this knowledge, the findings from the study by Grasdalsmoen et al. (2022) reveal that elite college athletes are healthier than non-elite college athletes. Therefore, borrowing from this research, one can justifiably infer that elite college athletes record better mental health as a result of having positive engagements such as weekly exercises.

Moreover, Daniel (2018) explored the prevalence of mental health issues among college athletes as part of the scholar's thesis. In this study, the scholar established that college athletes recorded lower chances of depression as compared to other college students. On the other hand, this population recorded a higher number of suicidal ideations (Daniel, 2018). While the trends regarding suicide are alarming, Daniel also discovered that college athletes were less likely to seek professional help as compared to their non-athlete counterparts.

Technology and Social Media Impact

The contemporary society is characterized by a heavy presence of social media and technology. With this knowledge, it is worth noting that social media has the potential to affect mental health either positively or negatively. Athletics is not immune to these current trends. Therefore, various scholars narrow the scope of their studies to the influence of social media and technology on college student-athletes. Brougham (2021) notes that although social media in general does not have a direct impact on mental health it leads to secondary correlations based on specific social media platforms; therefore, impacting the mental health of college students. For example, out of a sample population of 94 college athletes, the scholar established that specific social media platforms had varying impacts on the mental health of college athletes. For example, the use of TikTok had a positive correlation with self-esteem, thus leading to better mental health. On the other hand, Facebook usage among college athletes is associated with low self-esteem and, consequently, poor mental health (Brougham, 2021).

Furthermore, borrowing Brougham's (2021) study, social media and technology has both positive and negative effects on college athletes' mental health. The study established communication as one of the primary positive effects of technology and social media on the mental health of college athletes. In this regard, social media bridges the geographical and social gap between its users. Therefore, college athletes, in this case, can communicate with other social media users in the industry and, therefore, network (Brougham, 2021). Additionally, the sample population in Brougham's study noted that social media is an avenue that they use to relieve stress; college athletes use social media to distract themselves and take their minds off stressors. Moreover, there is also another

category of college athletes that use social media as a source of motivation (Brougham, 2021). Overall, there are numerous motivation stories and journeys of successful athletes from which college athletes can learn if well utilized.

However, besides the positive effects, social media and technology, in general, have their fair share of negative and often adverse effects on college athletes' mental health and well-being. Brougham (2021) notes that social media negatively affects student-athletes, as it is a platform leading to vulnerability. In this case, the vulnerability is perceived on a negative note. For example, as one of the sample population notes, social media platforms make users vulnerable and are therefore subject to easy and often untrue and unfair judgments by fellow college athletes and the general college population (Brougham, 2021). Furthermore, another participant also noted that social media drains college athletes mentally as the platforms and their related online community members place strenuous and often unrealistic expectations on college athletes (Brougham, 2021). Student-athletes are often pressured to perform exemplary since their performance is always judged by social media users (Brougham, 2021).

Additionally, college athletes are often pressured on various social media platforms regarding body issues which negatively affects their mental health by causing either stigma or esteem issues or both in some cases. Social media affects the mental health of college students through its impact on sleep quality, quantity, and patterns (Brougham, 2021). For example, the sample population recorded that most college athletes had disrupted sleep patterns due to social media use; they would spend more hours on social media and stay awake for longer hours, thereby disrupting their sleep patterns. As a result, this leads to poor sleep quality and significantly less quantity of

sleep (Brougham, 2021). With this knowledge, Brougham significantly contributes to the body of knowledge as far as social media and technology use in relation to college athletes' mental health and well-being are concerned. The scholar's study outlines that social media and technology usage can impact the mental health of college athletes either positively or negatively, as discussed in this subsection.

Protective Factors and Benefits of Being a Student-Athlete

Despite the significant challenges, being a student-athlete comes with several protective factors that can enhance mental well-being. Scholarships provide financial stability, reducing the stress associated with tuition fees and other expenses. This financial support can alleviate some of the mental health pressures experienced by student-athletes, allowing them to focus more on their academic and athletic pursuits (Comeaux & Harrison, 2011). Collegiate athletes often have access to extensive resources, including academic support, medical care, and mental health services. These resources can play a critical role in maintaining the overall well-being of student-athletes, providing them with the necessary tools to manage stress, recover from injuries, and balance their responsibilities (Navarro, 2015). The team environment fosters a sense of camaraderie and belonging, which can be incredibly supportive during times of injury and recovery. The social support from teammates, coaches, and the athletic community can buffer against the negative mental health impacts of injuries, promoting resilience and a positive outlook (Rees et al., 2010).

Evaluation of Productivity

Before defining how athletic participation has impacted student-athlete productivity, a discussion on how productivity has been defined in the past is necessary. Grade-point average (GPA) was often chosen as an important measure when analyzing

student productivity because it had traditionally been used to evaluate many decisions in regard to higher education. GPA is the primary component used to determine the NCAA's Academic Progress Rate (APR), which is used to evaluate academic performance of universities' athletic programs (Beron & Piquero, 2016; Johnson et al., 2010). Numerous studies have been done on the effects of athletic participation and GPA. One such study initiated by Johnson et al., and later reported by Beron and Piquero, was implemented to see how aspects of the college experience and high school preparation affected student-athletes' GPA. The variables of the study included traditional ones like high school GPA and standardized test scores, race, gender, as well as specific athletic ones (e.g., type of sport played, amount of playing time, coaching changes, and team winning percentage). It was determined that the traditional variables played a significant role in GPA variances in college. Two athletic variables, participation in a high-revenue sport (basketball, football) and receiving low playing time, negatively affected GPA (Beron & Piquero, 2016; Johnson et al., 2010). Studies like these provided useful information regarding GPA and how it can be used to define productivity, but they seldom focused on the student-athletes' opinions and experiences regarding these measures.

GPA has been a major determinant of academic success in college athletics. It inspired the NCAA to implement the APR to encourage institutions to keep athletes in good academic standing. However, more information was determined to be needed to study the overall student-athlete experience as it relates to academic achievement and personal development (Gayles & Baker, 2015; Gayles & Hu, 2009). This gap was

explored by others and led to proposed research on other measures used to evaluate student-athlete productivity.

One of these measures is the Basic Academic Skills Study (BASS). The BASS was designed for use by the NCAA to measure student-athletes' academic and social successes and failures, personal goals, attitudes towards college, along with current levels of reading, writing, mathematics and factual knowledge. A study involving over 400 student-athletes showed college athletes can benefit from increased college engagement (student-faculty contact, active learning, and diverse collaboration amongst students) similar to the general student population (Gayles & Baker, 2015; Gayles & Hu, 2009). The study also noted improved student-athlete to faculty relationships, which could impact negative perceptions of athletes on campus as reported previously in this review. As with GPA, this measure took a statistical approach, with limited focus on student-athlete perceptions.

Another mechanism used to judge student-athlete productivity is graduation rate. Federal law mandated that universities reported graduation rates to show progress (or lack of progress) of the education of students and student-athletes. However, one should be careful when utilizing statistics such as graduation rates for student-athletes. They only included scholarship athletes, not those who walk-on and play a sport without receiving assistance. These statistics are also retroactive and usually report on freshman that entered college seven to eight years ago and have not provided real time data (Ferris et al., 2004; Kulics et al., 2015).

Other researchers have noted some interesting facts to point out about graduation rates. The data was spread out over numerous time frames, with some statistics needing

updated. The NCAA (n.d.-b, para. 1) reported that roughly 91% of student-athletes graduated. Also, a 10-year study (ending in 2002), as reported by Ferris et al. (2004, pp. 561-562), showed that the universities with the highest graduation rate tended to be the same universities with the highest student-athlete graduation rates. Athletes' rates at these universities were slightly lower than non-athletes' rates. This survey has been replicated twice since then, but the data for these more recent studies have not been released (Beron & Piquero, 2016; Ferris et al., 2004). Miller and Buttell (2018, p. 52) reported that 86% of student-athletes graduated from a college or university, with additional statistics noting that only 2% went on to become a professional athlete. Studies like these, focusing on graduation rates, provided useful knowledge regarding the success of student-athletes. However, the path necessary to achieve this measure needs to be explored in more detail. These statistics tended to be outdated, vague, or lacked focus on the perceptions of and impact on the individual student-athlete.

As noted, there were several quantitative and statistical measures utilized to determine productivity. These measures have been utilized to determine productivity in-season versus out-of-season as well. Studies have been done to determine how GPA might differ in these two periods of time. Credits earned is another measure that has been used to test productivity in this manner. One of these studies shows slight differences have been noted in academic performance (defined as credits earned and GPA) in-season vs. out-of-season, with slightly more favorable results out of season (Scott et al., 2008; Yukhymenko-Lescroart, 2021). Once again statistics are utilized to define productivity and compare student athlete results. There also was a heavy utilization on statistics from

several years ago. These studies often provided useful insights but fail to capture the student-athletes' own perspective or provide more time-relevant data.

Transitions and Mental Well-Being

A loss of structure can lead to an emotional state of confusion, lack of purpose, and a sense of emptiness. For example, a study by Stokowski et al. (2019) found that athletes who reported difficulties in establishing a new routine experienced higher levels of distress during the transition period. Furthermore, a study steered and conducted by Bjornsen and Dinkel (2017) highlighted the importance of establishing a new identity and purpose beyond athletics for a successful transition. In addition to the change in routine, the loss of identity tied to their athletic role can pointedly impact athletes' well-being. Many athletes have acknowledged themselves principally as athletes throughout their college careers, and their self-worth and sense of identity have become tangled with their sport. Once they are no longer aggressively taking part in their sport, they may scuffle to redefine themselves and find a novel intellect of purpose. This loss of identity can lead to an emotional state of confusion, insecurity (self-doubt), and a decreased sense of self-esteem.

Furthermore, the absence of structured support systems that were readily available during their college years can exacerbate the challenges faced by athletes. While in college, athletes often have access to numerous support services, such as academic advising, sports mindset (psychology), and athletic trainers. Nevertheless, once they graduate, these resources may no longer be straightforwardly reachable. This absence of support can leave athletes feeling out-of-the-way (isolated) and unsupported, snowballing their vulnerability to mental health matters. The need for continued support and transition

programs tailored specifically for college athletes after their eligibility ends is growing (Cosh et al., 2021).

Impact of Injuries on Mental Well-Being. Short-term injuries often lead to a cascade of psychological challenges for student-athletes. The sudden inability to participate in their sport can result in feelings of frustration, anger, loss, grief, and sadness. Studies have shown that injured athletes may experience elevated levels of anxiety and depression during their recovery period (Protivnak et al., 2023; Yang et al., 2014). The loss of identity and the disruption of daily routines can further exacerbate these feelings, creating a significant mental health burden.

Career-Ending Injury Ramifications. The mental health implications of career-ending injuries are profound and long-lasting. Career-ending injuries not only strip athletes of their ability to compete but also force them to confront the loss of a central part of their identity and future aspirations. Research indicates that athletes who suffer career-ending injuries are at a higher risk of experiencing severe depression, anxiety, and even post-traumatic stress disorder (PTSD) (Wiese-Bjornstal, 2010). The transition out of sports can be particularly challenging, leading to feelings of isolation and a loss of purpose

Brain Injuries and Mental Health Implications. Brain injuries, such as concussions, present unique and severe mental health risks for student-athletes. The long-term consequences of concussions and repeated head trauma include cognitive deficits, emotional instability, and an increased risk of developing chronic traumatic encephalopathy (CTE) (McKee et al., 2013). Symptoms such as memory loss, irritability, and depression can persist long after the initial injury, significantly impairing the quality

of life for affected athletes. The stigma associated with brain injuries and the pressure to return to play can further complicate the mental health outcomes for these individuals (Guskiewicz et al., 2005).

The Transfer Portal and Its Impact on Mental Health. The transfer portal, which allows student-athletes to transfer between schools with greater ease, has significant implications for mental health. On one hand, the transfer portal can provide opportunities for athletes to find better fit programs, potentially enhancing their athletic and academic experiences. On the other hand, the uncertainty and instability associated with transferring can lead to increased stress and anxiety (NCAA, 2020). The process of acclimating to a new team, new coaches, and a different academic environment can be challenging and may impact the mental well-being of student-athletes.

The Role of Coaching & Leadership

Wayment and Huffman (2020) depicted that athletes who perceive their trainers as supportive and understanding experience lower levels of anxiety and despair. This emphasized the importance of creating a positive and nurturing coaching environment. On the other hand, coaches who adopt harsh disciplinary methods or place excessive pressure on athletes can contribute to heightened stress levels and negative mental health outcomes. Wayment and Huffman (2020) stipulated athletes who categorized their coaches as overly demanding conveyed higher heights of psychological distress. This accentuates the necessity for coaches to strike a balance amid pushing athletes to perform at their best and certifying their well-being. When leaders prioritize mental health and generate an open dialogue, it opens up a positive tone for the whole team. For illustration, the study by Wayment and Huffman (2020) concluded that teams with captains who

enthusiastically promoted mental health and heartened help-seeking actions had lesser levels of psychological distress among their members. To empower athletes to become mental health advocates within their teams, it is essential to include mental health components in leadership development programs.

Mental Health Literacy and Training for Athletic Staff

With the knowledge that mental health is an alarming concern among college athletes, various scholars have ventured into research to establish the state of mental health literacy for supporting personnel. For example, it is vital to consider that athletics involve a collaboration of athletes and various stakeholders. These include coaches, trainers, the college administration, peers, and society at large. It is equally worth considering the importance of mental health literacy among these stakeholders. With this knowledge, Moore et al. (2022) conducted a study on literacy awareness among coaches in Australia. The scholars note in their article that sports in the Australian context is an important aspect of their culture (Moore et al., 2022). This premise sets the pace for understanding the importance of mental health literacy among the supporting personnel. In this context, the premise implies that if sports are an integral part of the authors' culture, most youths participate in various sporting activities. This, in turn, implies that the supporting personnel ought to be adequately informed to cater to mental health issues among athletes as they form a considerable percentage of the Australian population in general.

Additionally, the scholars also established that there are various factors affecting mental health literacy among supporting personnel. In this regard, the coach's personal experience with mental health issues significantly impacts their literacy on the same

(Moore et al., 2022). The study found a positive correlation between mental health experience and literacy. In other words, the coaches who had a personal experience with mental health issues were more literate than those without any experience. Similarly vital to note from the study is that coaches' literacy in mental health either positively or negatively impacts the athletes' mental health directly (Moore et al., 2022). For example, mental health literate coaches are more likely to impact positivity and better mental health among the athletes that they coach. On the other hand, coaches with little or no mental health literacy are likely to coach athletes exhibiting various mental health conditions (Moore et al., 2022).

Moreover, to achieve mental health among college elite athletes, Purcell et al. (2019) suggest the importance of mental health literacy. To start with, the scholars note that mental health awareness among the supporting personnel is critical in curbing mental health issues among the target population. Furthermore, Purcell et al. also contrast findings by Grasdalsmoen et al. (2022), who note that mental health issues are not prevalent among elite athletes in colleges. One of the most logical explanations for this contrasting viewpoint among scholars is the fact that Grasdalsmoen et al. heavily relied on self-reported data from the sample population. The data is most likely to be subject to manipulation by the sample population, either deliberately or otherwise.

Theoretical Frameworks (Biopsychosocial, Ecological, Cognitive Behavioral, Etc.)

There are various theoretical frameworks from which scholars and authorities in athletics and sports can understand the various notions of mental health. One of the most significant ones is ecological theory. It is worth noting that various literature authored by scholars explored in this section have employed this theory. For example, Moore et al.

(2022) base their study on ecological theory. They explain that coaches are responsible for forming a healthy environment for athletes. Similarly, in their exploration of the facilitators and inhibitors of college athletes' willingness or unwillingness thereof of seeking professional mental health support, Moreland et al. (2018) stipulate the role of ecological theory. The ecological theory is significant in that it concerns the role of the external environment in understanding the subject. Hence, for scholars to understand the facilitators and hindrances to seeking mental health support, the external environment consisting of peers, coaches, trainers, parents, or guardians comes into play.

Additionally, scholars can understand the prevalence of mental health issues using behavioral theory, meaning mental health issues result in a change in behavior. Therefore, these behavioral changes depict the prevalence of mental health issues, offering a framework from which scholars can study and understand the connection between athletics and mental health on account of studying behavior. Moreover, the subject matter can be understood from the cognitive theory perspective, where mental health issues significantly affect college athletes' cognitive systems and therefore impact their rational, creative, and critical thinking. As a result, they make irrational decisions and record significantly low academic results. Moreover, biopsychosocial theory offers an insightful viewpoint for interpreting the subject matter. In this regard, due to mental health issues and their effects thereof, student-athletes often record biopsychosocial issues such as physical illnesses and a lack of social support through the illnesses. For instance, an athlete who undergoes drug and substance addiction and abuse without a proper and solid support system.

Furthermore, Breslin et al. (2019) note that in order to understand mental health among college athletes, scholars need to incorporate psychological theory. The theory, in this case, will offer a framework for understanding mental health issues as scholars explore the competitive nature of the sporting world. On a similar note, Breslin et al. studied the subject matter using the Theory of Reasoned Action to establish the demographic and psychological factors impacting college athletes' mental health. Moreover, Durkheim's Theory of Suicidality and the Social Stigma Theory can fundamentally be employed to understand mental health issues and effects among college athletes (Martins, 2018).

Applying an Ecological CBT Approach

An ecological-cognitive-behavioral paradigm is a multi-dimensional strategy that gives insightful analysis of mental health problems observed among student-athletes. Kilcullen et al. (2022) noted these factors and their impact, which involve not only individual and interpersonal factors but also institutional and socio-cultural factors, on the well-being and alteration of emotional outcomes in an athletic environment. The ecological viewpoint holds that athletes are students nestled within an array of closely situated impacts that are both distal and proximal. Along with this, cognitive-behavioral theory assesses the interactions among thought patterns, feelings, and behaviors from the individual level that change response to stress in other things (Kilcullen et al., 2022). Merging with ecological and cognitive-behavioral insights, mental health interventions devised for athletes should aim at reducing risk and protective factors operating at different levels of analysis.

Similarly, cognitive-behavioral treatment (CBT) has been shown to help student-athletes reframe inaccurate thought patterns that intensify suffering, such as inflexible perfectionism or catastrophic thinking (Podlog et al., 2020). Additionally, CBT gives athletes practical techniques for managing their emotions, including goal-setting, imagery training, and diaphragmatic breathing, which helps them control their fear and anger (De Souza et al., 2021). Case studies show that by changing automatic negative thinking and teaching adaptive coping mechanisms, CBT reduces competitive anxiety and enhances performance in collegiate athletes. Building strong but adaptable relationships between coaches and athletes can improve psychological health and motivation on an interpersonal level (Podlog et al., 2020). Coaches can promote positive intrapersonal and team dynamics by encouraging autonomy, offering constructive criticism, and exhibiting genuine concern and acceptance.

Institutionally, athletic departments shape mental health through priorities, policies, and social norms. Eliciting mental health services by combining them with athletics relative to locating them in the students' health center is most suitable (De Souza et al., 2021). The mental health messaging that conveys that seeking psychological aid is a matter of 'mental fitness' rather than weakness bothers a few of them. Multilevel interventions involving significant players across the athletic system should be deployed to make the culture last. Those stakeholders play a pivotal role in the transformation of the culture. For example, the NCAA's Mental Health Best Practices Intervention organized the youths, coaches, university administrators, and counselors from 15 universities to develop comprehensive resources and enhance the climate around mental health issues. Finally, broader socio-cultural forces like media pressures, fan responses,

and gender norms shape the student-athlete experience. Media literacy programs can help athletes navigate unrealistic societal messaging about their bodies or performances (De Souza et al., 2021). The ecological framework implies the multi-tier aspects of the athletic mental health systems and empirical-based tools for attaining the factors across the levels. It is thus seen as a case of the holistic approach, which is an adhesive for mental health promotion in the unpredictable scenario of college sports.

Summary

The role athletics played on a campus along with the student-athletes' challenges in addressing balance between social, academic, and athletic pursuits were determined to factor into their mental health. Newer opportunities, such as NIL deals will change the landscape of the future. Literature has proposed questions like: What is the proper balance of academics and athletics on campuses? When should practices be held to assist student-athletes in achieving balance between athletics and academics? Should better resources be made available? What further research needs done? These specific questions that are raised imply further research is needed involving the perception of student-athletes (Beron & Piquero, 2016; Lanter & Hawkins, 2013; Santos et al., 2020).

Chapter III

Methodology

This current study investigates the state of mental health among college student-athletes and examines stressors and anxiety related to their role on college campuses. To achieve this goal, three research questions were identified:

1. What is the prevalence of mental health disorders among college student-athletes?
 - a. What specific mental health disorders are most prevalent among college student-athletes?
2. How does the name, image, and likeness (NIL) emergence on campus affect the mental health of college student-athletes?
 - a. How do colleges student-athletes perceive the commercialization of their NIL rights?
 - b. What are the stressors associated with managing NIL deals alongside academic and athletic commitments?
 - c. Are there differences in the mental health outcomes of college student-athletes based on the success or failure of their NIL ventures?
3. How does the balance between academics and athletics influence the mental health of college student-athletes?

- a. What strategies do college student-athletes employ to manage the demands of academics and athletics, and how do these strategies impact their mental well-being?
- b. Are there differences in mental health outcomes among college student-athletes based on the level of academic and athletic success or performance pressure they experience?

Research Method

According to Stephenson (1953), Q-methodology is a research methodology designed to reveal and study subjectivity within a group of people in a systematic way using both quantitative and qualitative data. Q-methodology was designed as an empirical approach to study the subjective experience. As such, Q-methodology was designed to be a true mixed methods approach (Brown, 1993; Stephenson, 1953) and is a unique approach that depends equally on quantitative and qualitative data (Rieber, 2020; Stephenson, 1953). Q-methodology is specifically designed to understand the diversity of a group of people's opinions or views on a topic relevant and important to that group (Brown, 1993; Stephenson, 1953). Additionally, Q-methodology offers designers the means to identify a small number of profiles representing distinct points of view among the intended audience on a given topic. The Q-method can be used to supplement, not supplant, existing survey approaches (Rieber, 2020; Stephenson, 1953).

Overview and Rationale for Q-Methodology

According to Levine et al. (2022), the Q-methodology provides a systematic approach to sampling a population's subjective viewpoints and opinions on a pertinent issue. This strategy is effective in exploratory research for finding consensus and

divergence on challenging or controversial topics. The utilization of the Q-method was beneficial in gaining insight into the perspectives and opinions of collegiate student-athletes on significant issues like modifications to the NIL policy, the stigma surrounding mental health in athletics, performance expectations, and other relevant troubles.

Q-methodology is unique in that study participants are engaged in ranking statements representing a wide range of views around provided topics (Churrua et al., 2021). Through this activity, the researcher can observe how a person prioritizes and makes sense of varying ideas, relying on their perspective. By statistical factors analyzing participants' Q-sorts through Q-methodology, analysts can uncover general recurring standpoints. The topics resulting are the key aspects that are owned and appreciated by subgroups of the sample. The focus is shifted from mere polling accuracy of preferring fixed statements to an insightful understanding of the public nature. Instead of the conventional Q-methodology, it gives a concise way to obtain nuanced opinion polls and the aspects on which people have some consensus or disagreement.

Because of its strengths, the Q-method approach is a good fit for examining collegiate athletes' thoughts on current issues. Sneegas (2020) asserts that the Q-sampling with its purposeful inclusion of opinions or viewpoints tries to reflect the entirety of the controversy surrounding this complicated subject. This allows the researcher to create a more intricate narrative than just positive or negative points. As subjects might perceive what is relevant differently and be under the influence of personal experiences, the process becomes subjective. There is no disclosure of the participant's identity because all viewpoints are seen collectively rather than naming a single individual. In such cases, it can be liberating to approach otherwise sensitive subjects connected to the stigma

around psychological diseases. In research methods such as focus groups or interviews, the ordered Q-sort method is less susceptible to this type of bias and places less emphasis on the interpersonal dynamics of reactions from other group members. Juxtaposed to the simple interpretation of survey data, factor interpretation simultaneously pinpoints places of commonality and contends to opposite views (Churrua et al., 2021). With Q-methodology, marginalized individuals, including student-athletes, not a standard part of the media system, gain a place to share their thoughts about the fresh impactful topics of the neighborhood.

By systematically investigating these issues, the Q-method allows researchers to draw conclusions about the perception of NIL policies, mental health stigma, competitive atmosphere in sports and all other fine details determining the world of college sports. Hence, health care providers will be offered the opportunity of easily and accurately ascertaining the data which subsequently will be used to devise an approach geared towards ensuring wellbeing of the women (Levine et al., 2022). The breadth of the perspective that has been revealed may provide an unparalleled means of expanding our understanding to include all facets and the effects of the modifications and assistance that collegiate student-athletes require.

Participants

A Q-method approach is a unique research methodology that combines qualitative and quantitative elements to study subjectivity and perspectives on a particular topic (Stephenson, 1953). Further, a Q-method approach can provide a nuanced understanding of how different student-athletes perceive and experience stress and performance expectations. The goal is to uncover distinct perspectives within the participant group,

which can be valuable for informing interventions and support programs for student-athletes. The participants in this study included 16 college student-athletes from Youngstown State University in Northeast Ohio. The participant number was chosen based on Rieber (2020), who stated that Q-methodology studies can be conducted with relatively few participants. Participant selection for Q-methodology studies should be based on the research questions and the population of interest. Additionally, the Q-sample should be carefully constructed to ensure that it represents the diversity of perspectives within the population of interest (Rieber, 2020; Stephenson, 1953). Stephenson recommended that the number of participants should be roughly equal to the number of Q-sorts, making 16 an adequate sample for this study.

Current Youngstown State University student-athletes were invited to participate in the research study through purposive sampling using targeted electronic e-mail communication. E-mail communications to university head coaches and athletic academic advisors was utilized to seek team leaders to distribute the electronic invitation to participate. This allowed interested participants to choose to participate in the study without any pressure to participate. The e-mail included a general description of the study and an individual link to the *QMethod Software* program. This process ensured anonymity, as each participant was assigned a unique four letter/number identification number. Participants' names were not entered in the *QMethod Software* program at any point. Additionally, informed consent was provided when the participants entered the *QMethod Software* program. The participants could discontinue participation in the study by leaving the Q-sort program.

To ensure diversity of participants, the researcher collected demographic information from participants. Demographic information collected included race/ethnicity, gender identification, sport played, and years of participation. This section also included questions related to transfer portal usage and if the participant has a NIL deal.

Instrumentation

Q-sorting is a crucial step in Q-methodology. During this step, participants are presented with the Q-set, which consists of a set of statements or items that reflect different viewpoints on the topic of interest. In Q-methodology a concourse refers to the set of statements or items that make up the Q-set, which participants will sort and rank. The concourse is a crucial part of the research design as it defines the range of perspectives or viewpoints that will be explored. A well-constructed concourse should be diverse and comprehensive, encompassing various opinions and attitudes related to the research topic (Brown, 1993; Rieber, 2020; Stephenson, 1953).

Developing the Concourse

A wide range of statements was sampled to capture the diverse possible viewpoints on issues facing student-athletes. Below is an initial sample of concourse statements for this study:

1. Stress and frustration are natural parts of being a student-athlete.
2. The pressure to perform well academically adds to the mental health issues for student-athletes.
3. Support from coaches is crucial in helping student-athletes manage mental health.

4. Balancing academic and athletic responsibilities is challenging but achievable.
5. Mental health support should be a standard part of student-athlete programs.
6. Peer support plays a significant role in coping with stress and frustration.
7. Student-athletes should have more flexible academic schedules to reduce stress.
8. High expectations from coaches and teammates lead to increased mental health issues.
9. Setting realistic goals is important in managing performance-related mental health issues.
10. The culture of competitiveness in sports contributes to student-athletes' mental health issues.
11. Athletic scholarships put additional pressure on student-athletes to perform.
12. Inadequate time for rest and recovery contributes to stress and frustration.
13. Mental health concerns can lead to burnout among student-athletes.
14. Some level of stress is necessary for peak athletic performance.
15. Academic demands negatively impact athletic performance for student-athletes.
16. Team dynamics play a significant role in alleviating mental health issues for student-athletes.

17. Time management skills are essential for coping with mental health issues in the dual role of student and athlete.
18. The fear of injury adds a layer of mental health concern to the lives of student-athletes.
19. The influence of family support on handling stress cannot be underestimated for student-athletes.
20. Coaches should be trained in sports psychology to better support their athletes.
21. Peer pressure from teammates contributes to the mental health concerns of student-athletes.
22. The student-athlete experience varies greatly by the sport being played.
23. Mental toughness training is an effective strategy for reducing stress in student-athletes.
24. The emphasis on winning in collegiate sports intensifies stress and frustration.
25. Student-athletes often sacrifice their social lives to meet performance expectations.
26. NIL opportunities excite me because I can finally get paid for all my hard work.
27. Only a small number of athletes benefit from NIL money.
28. NIL helps reduce some financial pressures on my family.
29. I don't know enough about NIL opportunities to benefit from them.
30. My teammates would see me as weak for seeking mental health support.

31. My coaches encourage me to prioritize mental well-being.
32. I wish mental health services were more confidential in athletics.
33. I feel immense pressure from coaches not to lose my starting spot.
34. Pushing through injuries is part of being a strong athlete.
35. My scholarship depends on athletic success more than academics.
36. Athletics teaches the mental toughness needed in life.
37. I'm satisfied with my institution's efforts to support athletes.
38. Athletes need more of a voice in policy decisions.
39. College sports prepare me well for my future career.
40. Stress and frustration as a student-athlete can be motivating.

These statements encompass a broad spectrum of attitudes and beliefs related to stress, frustration, and performance expectations among student-athletes. Once participants completed their Q-sorting, the researcher collected the Q-sort data from all participants. This data collection process involved gathering the ranked statements and the positions where each participant placed them in the Q-sort grid. The result was a dataset that reflects the subjectivity of participants' viewpoints on the topic.

From the extensive concourse, Q-sampling strategically selected approximately 30 statements for the Q-set to be sorted by participants. Q-sampling aims for representative statements covering the full range of subjective viewpoints (Gao & Soranzo, 2020). Key considerations in developing the Q-set included balancing statements expected to distinguish versus group perspectives, capturing polarizing extremes, and leaning toward statements likely to elicit strong reactions given their controversial or complex nature (Gao & Soranzo, 2020). Additional tapped into racial

inequality, safety concerns, academic integrity, and preparation for post-college transitions. Careful piloting with a small student-athlete group refined the Q-set before broader implementation.

Pilot Study. A pilot study is a technique often used in Q-methodology to assist in constructing the concourse. The main objectives of the piloting process include: (a) preventing redundancy in statements; (b) ensuring clear expression, typically in everyday language rather than technical jargon; (c) ensuring statements convey a single proposition to avoid sorting and interpretation challenges; (d) maintaining a proper balance in the Q-set, particularly in politically charged or contentious research; and, the most crucial objective, (e) guaranteeing that the Q-set comprehensively covers relevant issues, making it broadly representative of the pertinent opinion domain (Brown, 1993; Rieber, 2020; Stephenson, 1953).

The researcher decided to do a pilot study with four individuals and use those results to help construct the concourse. Participants who represent the target population, in this case, student-athletes with relevant insights into the topic of stress, frustration, and performance expectations were selected. The initial set of concourse statements were presented to the participants to collect their thoughts, experiences, and opinions on each statement. Feedback received from the pilot study participants was analyzed to determine statements that were well-received and resonated with the participants, statements that were confusing or deemed irrelevant, suggestions for new statements, and emerging themes or patterns in the participants' feedback.

Based on the insights and feedback gathered from the pilot study, the researcher removed concourse statements considering the following results: retain statements that

received positive feedback and were seen as relevant, remove or revise statements that were confusing or not well-received, and incorporate any new statements suggested by the pilot study participants. This process aimed to create a comprehensive concourse.

After reviewing the answers of the four respondents of the pilot study, 35 of the 40 statements had a variety of responses. The goal was to have a concourse that represented a variety of responses related to student-athlete mental health. Based on results, the following five statements were removed from the concourse:

1. Balancing academic and athletic responsibilities is challenging but achievable.
2. The influence of family support on handling stress cannot be underestimated for student-athletes.
3. Coaches should be trained in sports psychology to better support their athletes.
4. Athletics teaches the mental toughness needed in life.
5. College sports prepare me well for my future career.

This resulted in a total of 35 statements for the final concourse:

1. Stress and frustration are natural parts of being a student-athlete.
2. The pressure to perform well academically adds to the mental health issues for student-athletes.
3. Support from coaches is crucial in helping student-athletes manage mental health.
4. Mental health support should be a standard part of student-athlete programs.

5. Peer support plays a significant role in coping with stress and frustration.
6. Student-athletes should have more flexible academic schedules to reduce stress.
7. High expectations from coaches and teammates lead to increased mental health issues.
8. Setting realistic goals is important in managing performance-related mental health issues.
9. The culture of competitiveness in sports contributes to student-athletes' mental health issues.
10. Athletic scholarships put additional pressure on student-athletes to perform.
11. Inadequate time for rest and recovery contributes to stress and frustration.
12. Mental health issues can lead to burnout among student-athletes.
13. Some level of stress is necessary for peak athletic performance.
14. Academic demands negatively impact athletic performance for student-athletes.
15. Team dynamics play a significant role in alleviating mental health issues for student-athletes.
16. Time management skills are essential for coping with mental health issues in the dual role of student and athlete.
17. The fear of injury adds a layer of mental health concern to the lives of student-athletes.

18. Peer pressure from teammates contributes to the mental health issues of student-athletes.
19. The student-athlete experience varies greatly by the sport being played.
20. Mental toughness training is an effective strategy for reducing stress in student-athletes.
21. The emphasis on winning in collegiate sports intensifies stress and frustration.
22. Student-athletes often sacrifice their social lives to meet performance expectations.
23. NIL opportunities excite me because I can finally get paid for all my hard work.
24. Only a small number of athletes benefit from NIL money.
25. NIL helps reduce some financial pressures on my family
26. I don't know enough about NIL opportunities to benefit from them
27. My teammates would see me as weak for seeking mental health support.
28. My coaches encourage me to prioritize mental well-being.
29. I wish mental health services were more confidential in athletics.
30. I feel immense pressure from coaches not to lose my starting spot.
31. Pushing through injuries is part of being a strong athlete.
32. My scholarship depends on athletic success more than academics.
33. I'm satisfied with my institution's efforts to support athletes.
34. Athletes need more of a voice in policy decisions.
35. Stress and frustration as a student-athlete can be motivating

Instruments. The concourse was constructed based on a review of relevant literature, expert opinions, and the pilot study with student-athletes to capture the full range of viewpoints, along with the instruments described in the next sections. This diverse set of statements provided a rich understanding of how student-athletes perceive and cope with the stress and frustration associated with meeting performance expectations.

Sports PsyCap Scale. This scale, developed by Yang et al. (2013), measures sports psychological capital, which is defined as an individual's positive psychological state of development characterized by self-efficacy, hope, optimism, and resilience. The scale comprises 20 items, and participants rate their responses on a 5-point Likert scale ranging from "1 = strongly disagree" to "5 = strongly agree" (Yang et al., 2013).

Life Stress Scale. This scale, developed by Lu et al. (2012), measures the level of stress experienced by college student-athletes, including general life stress and sports life stress [T3, 2.2.2]. The scale consists of 12 items, and participants rated their responses on a 5-point Likert scale ranging from "1 = strongly disagree" to "5 = strongly agree" (Lu et al., 2012).

Athlete Burnout Scale. This scale measures athlete burnout, which is defined as a multidimensional syndrome characterized by emotional and physical exhaustion, reduced sense of accomplishment, and sport devaluation. The scale comprises 12 items, and participants rated their responses on a 5-point Likert scale ranging from "1 = strongly disagree" to "5 = strongly agree" (Lu et al., 2006).

Procedure

After approval was received from the Youngstown State University Human Subjects Institutional Review Board (Appendix A), invitations to participate in the study were sent via email to a purposive sampling of student-athletes on campus. According to Damar and Sali (2022), the P-set comprises participants whose viewpoints are relevant to the topic being researched. Here, the P-set included student-athletes selected purposively to ensure representation across critical characteristics. Q-methodology typically employs small samples since the focus is subjective viewpoints that emerge at the group rather than individual level (Damar & Sali, 2022). Here, 16 student-athletes were determined to have an adequate P-set size to capture shared viewpoints. Demographic variables were collected via a brief survey to characterize the sample descriptively. The email detailed the study as well as the time commitment of 30-45 minutes to complete.

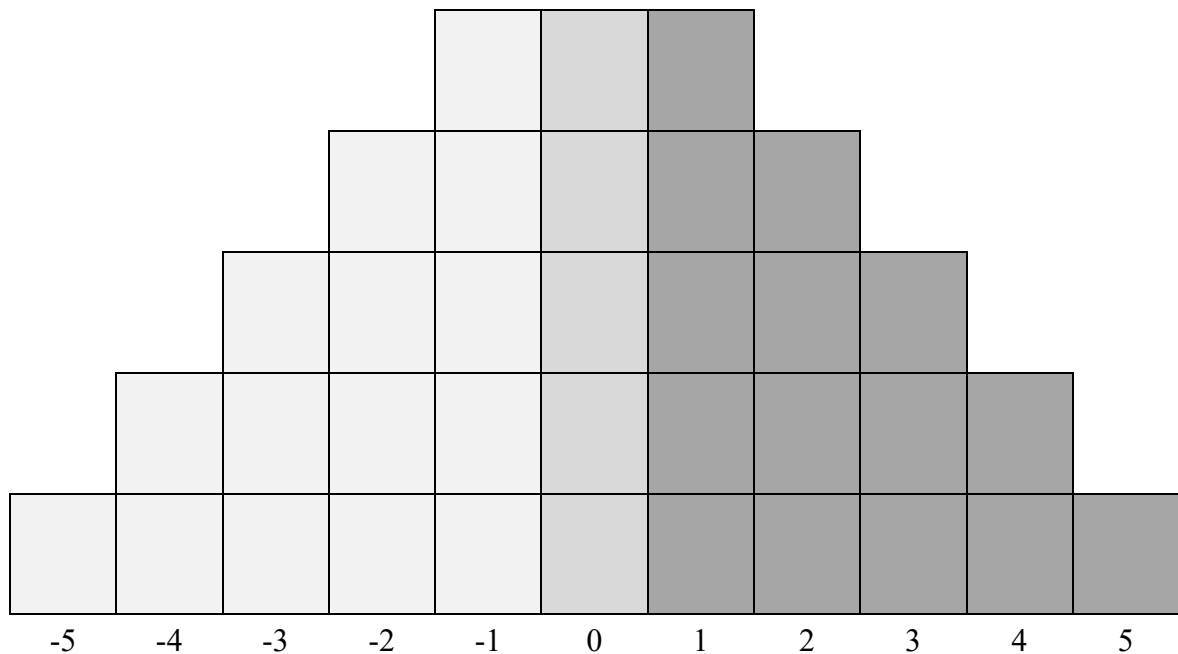
A web-based computer program called *QMethod Software* was employed to facilitate and assess the Q-sort procedure. With *QMethod Software*, participants can conveniently carry out the Q-sort task from any location by using a web-based application. *QMethod Software* is a web-based program; therefore, participants were not required to install any files on their computers. Instead, the email they received contained a clickable link, which led them directly to their personalized Q-sort copy. The first component of the procedure included the demographical questions. Then, Q-sorting procedures first involved having student-athlete participants read through the statements and sort them into three groups: strongly agree, neutral/unsure, and strongly disagree. Participants then ranked the statements by placing them in order ranging from *strongly disagree* to *strongly agree*. A forced distribution ensured all statements were ranked. This forced finer discrimination between statements that initially seemed similar in pile

sorting. Participants could rearrange statements as desired during the sorting process to reflect their viewpoint. There was not a time limit for the Q-sort.

Based on the 35-item concourse, the distribution framework for the Q-sort is demonstrated in Figure 1.

Figure 1

Q-Sort Distribution Framework



Note. The scale ranges from -5 for strongly disagree, 0 for neutral, and 5 for strongly agree.

The software prompts guided participants through the sort. Q-factor analysis aimed to identify group participants who sorted statements, similarly, indicating shared viewpoints (Damar & Sali, 2022). Here, factor analysis was applied to the Q-sort data using the *QMethod Software*.

Two open-ended questions were posed to further collect data from the participants:

1. Research shows heightened rates of depression in student-athletes vs. non-student-athletes. Have you noticed any signs of depression with your teammates?
2. What types of mental health concerns, if any, have you noticed with teammates?

The survey concluded with The Subjective Happiness Scale (SHS). The SHS is a 4-item scale of global subjective happiness (Lyubomirsky & Lepper, 1999).

Participants who completed the online Q-sort had the option to enter a drawing for a \$50 Amazon gift card, with two cards available to win. To participate in the drawing, interested individuals could click a link at the end of the study, directing them to a separate form where they could provide their name and contact information (phone or email). To maintain anonymity, this form was not connected to their completed Q-sort or survey responses. For the drawing, each participant was assigned a number, and an online random number generator selected two winners.

Data Analysis

Data analysis in Q-methodology primarily involves factor analysis, which was used to identify common patterns or factors in the Q-sort data. The analysis in the current study included:

1. Factor analysis applied to the Q-sort data matrix, using the *QMethod Software*.
2. Identifying groups of participants who have sorted the statements in similar ways.

These groups are known as factors. The software also generated standard error of differences, correlation between factor Z-scores, distinguishing statements, and consensus statements.

3. Factors represented shared viewpoints or perspectives on the topic. For example, a factor might represent a conservative viewpoint on a political issue, while another factor might represent a liberal viewpoint.
4. The statements that loaded heavily on each factor were identified. These are the statements that were most associated with that factor.
5. Interpretation of the factors by examining the statements and Q-sorts of participants who loaded heavily on each factor. This helped in understanding the content and meaning of each factor (Brown, 1993; Stephenson, 1953).

The *QMethod Software* allowed the researcher to determine the number of desired factors, the rotation method (orthogonal, oblique, or Varimax), the correlation method (Pearson, Kendall, or Spearman), and principal component analysis (PCA). In the end, Q-methodology reveals the different perspectives within the sample, assisting researchers in better understanding the subjective viewpoints on a particular topic. It offers a nuanced and structured way to explore subjectivity and can provide valuable insights into the diversity of opinions and attitudes held by the participants (Brown, 1993; Rieber, 2020; Stephenson, 1953).

Summary

This study investigates the mental health status of college student-athletes, focusing on stressors and anxiety related to their roles on campuses. Three research questions guided the inquiry: 1) What is the prevalence of mental health disorders among college student-athletes? 2) How does the emergence of NIL on campus impact their mental health? 3) How does the balance between academics and athletics influence their mental well-being? Employing Q-methodology as the research method, which integrates

both quantitative and qualitative data, the study sought to understand the subjective experiences and diverse perspectives within the participant group. The research involved 16 collegiate student-athletes from Youngstown State University, chosen based on Stephenson's recommendation (1953) and Rieber's insight (2020) that a relatively small sample size is suitable for Q-methodology studies. The researcher's role was pivotal, encompassing the design of the Q-sample, facilitation of the Q-sorting process, and interpretation of findings to ensure a comprehensive understanding of student-athletes' perspectives on stress and performance expectations.

Q-methodology relies on a concourse of statements derived from an extensive literature review (Brown, 1993; Zabala et al., 2018). The initial concourse, encompassing various aspects such as student-athlete stressors, well-being, anxiety, scheduling, performance, self-efficacy, and mood, was refined through a pilot study and a survey of current student-athletes, resulting in a condensed set of 30 statements.

This research contributes to the existing knowledge of stressors related to the life of a student-athlete and explores how these individuals perceive and navigate through such stressors. By gaining insight directly from the perspective of student-athletes, the study enhances comprehension of the phenomenon of stress and frustration associated with meeting performance expectations. This understanding addresses a gap in the current literature. The findings may offer valuable information for athletic administrators, coaches, and support personnel, enabling them to recognize and address the challenges faced by student-athletes amidst the demanding academic and athletic pressures on campus.

The researcher employed the *QMethod Software* web-based program for administering the Q-sort to a diverse group of 16 current student-athletes with varying backgrounds and demographics. This software was then be employed to compile and analyze the collected data, aiming to identify shared factors and subfactors among the participants.

Chapter IV

Results

This study explores the mental health challenges faced by student-athletes, focusing on stress, frustration, and academic pressure. Quantitative and qualitative data were collected and examined to find meaning into the perspectives of current collegiate student-athletes at Youngstown State University in Ohio. The Q-sort methodology was chosen to capture these student-athletes' subjective experiences and perspectives. Results of this data were used to answer the following research questions for this study:

1. What is the prevalence of mental health disorders among college student-athletes?
 - a. What specific mental health disorders are most prevalent among college student-athletes?
2. How does the name, image, and likeness (NIL) emergence on campus affect the mental health of college student-athletes?
 - a. How do colleges student-athletes perceive the commercialization of their NIL rights?
 - b. What are the stressors associated with managing NIL deals alongside academic and athletic commitments?
 - c. Are there differences in the mental health outcomes of college student-athletes based on the success or failure of their NIL ventures?
3. How does the balance between academics and athletics influence the mental health of college student-athletes?

- a. What strategies do college student-athletes employ to manage the demands of academics and athletics, and how do these strategies impact their mental well-being?
- b. Are there differences in mental health outcomes among college student-athletes based on the level of academic and athletic success or performance pressure they experience?

A set of statements was developed to reflect common themes in student-athlete mental health. Participants were asked to rank these statements based on their personal experiences. The Q-sort process involved sorting statements into a forced distribution, representing (most representative to least representative) how the statement relates to participants' experience as a student-athlete.

Participants

Participants were provided with a link to complete this study. Twenty-eight participants initiated the survey; however, 12 individuals (43%) were excluded from the study for not completing the Q-sort, generating a total of 16 participants with a completion rate of 57%.

The sample consisted of 16 student-athletes, with eight men (50.0%) and eight women (50.0%). The majority of participants identified as White or Caucasian (81.3%) followed by Black or African American (18.7%). In terms of sports participation, basketball and football players accounted for the largest group (25.0% each), with others participating in sports such as baseball (18.7%), swimming and diving (12.5%), and others, including bowling, golf, and softball (18.8%). Six participants (37.5%) were

currently receiving compensation for their NIL, while three participants (18.7%) had utilized the transfer portal. The results are provided in Table 1.

Table 1*Demographic Characteristics of Participants*

Variable	Frequency	Percent
Gender		
Male	8	50.0%
Female	8	50.0%
Race/Ethnicity		
White/Caucasian	13	81.3%
Black/African American	3	18.7%
Sports Participation		
Basketball	4	25.0%
Football	4	25.0%
Baseball	3	18.7%
Swimming & Diving	2	12.5%
Other (Bowling, Golf, Softball)	3	18.8%
NIL Compensation		
Currently Receiving	6	37.5%
Not Receiving	10	62.5%
Transfer Portal Usage		
Have Used the Transfer Portal	3	18.7%
Have Not Used the Transfer Portal	13	81.3%

Q-Sort Results***Correlation Matrix***

The Q-sort data analysis highlighted four factors whereby the differences in perception were established based on the 16 student-athletes. These Q-sorts, extracted using centroid method and rotated using Varimax, revealed different but related perceptions toward stressors, mental health, and performance expectations in collegiate athletes. The correlation matrix analysis between the 16 Q-sorts can be found in Appendix B. The correlation between Q-sorts of the participants is to report the degree of agreement or divergence between each participant's sorting or ranking of the items. Correlations are reported on a scale ranging from -1.00 to +1.00. As the numbers move closer to ± 1.00 , the strength of the correlation increases. A positive correlation (numbers closer to +1.00) denotes similarities in aspects that participants have highlighted while a negative correlation (numbers closer to -1.00) represents differences in participants' views. Table 2 provides the correlations between factor scores.

Table 2*Correlation Between Factor Scores*

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1.00	0.37	0.35	0.16
Factor 2	-	1.00	0.16	0.09
Factor 3	-	-	1.00	0.18
Factor 4	-	-	-	1.00

The 16 Q-sorts, extracted using centroid method and rotated using Varimax, revealed different but related perceptions toward stressors, mental health, and performance expectations in collegiate athletes. Auto-flagging was set at $p < 0.05$. Table 2 provides the correlation matrix of the four factors. These correlations allow for the presentation of the relationship between the factors, which means how much factors coincide with each other or whether the sorts of participants are the same for two or more factors. A close examination of the factor score correlations further shows that the extent of inter-relations between factors is generally moderate to low. This suggests that each factor represents unique views from participants, with Factor 4 showing a significant level of independence from the other factors. Such level of distinction is particularly important when categorizing the factors into different themes or perspectives of the data.

Factor analysis was run three times to capture an optimal number of participants within the extraction. The comparison between the models revealed the four-factor model to best fit this study. The four-factor model resulted in 15 of 16 participants loading to one of the factors, with four defining variables in Factor 1; three defining variables in

Factor 2; five defining variables in Factor 3; and three defining variables in Factor 4, which can be viewed in Table 3.

Table 3

Factor Characteristics

	Factor 1	Factor 2	Factor 3	Factor 4
No. of Defining Variables	4	3	5	3
Avg. Rel. Coef.	0.8	0.8	0.8	0.8
Composite Reliability	0.94	0.92	0.95	0.92
S.E of Factor Z-Scores	0.24	0.28	0.22	0.28

Factor characteristics give an important overview of each factor; this table shows the number of defining variables, average relative coefficient, mean composite reliability, and mean standard error of factor Z-scores. These statistics provide more meaningful information regarding the procedures' stability, consistency, and representativeness of each factor in the participant sorting pattern. All four factors of the model show great reliability and stability in eliciting participant's attitudes and opinions with composite reliability coefficients greater than 0.92 and an average relative coefficient of 0.8.

Table 4 reveals the corresponding eigenvalues displayed with each factor give a measure of the variance in terms of quantity with respect to the factor in question. Respective eigenvalues are 2.74, 1.21, 1.18, and 0.99, which either exceed or are at the acceptable cutoff of 1.0 with eigenvalues. These four factors account for 38% variance, indicating that the major share of this paradigm's participants' variation is not explained.

Table 4*Eigenvalues*

	Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalues	2.74	1.21	1.19	0.99
% Explained Variance	17	8	7	6
Cumulative % Expln Var	17	25	32	38
Humphrey's Rule	0.40	0.29	0.25	0.19
Standard Error	0.05	0.05	0.05	0.05

Humphrey's Rule further helps add understanding of each factor's interpretability to identify the difference of the squared loading on the defining factor compared to the subsequent highest factor. Humphrey's Rule for Factor 1 comes out to 0.40, implying that the factor is certainly more on the strong and well-defined side. Factor 2 has a value of 0.29, less than the first factor. Finally, Factor 3, with the value of 0.25, and Factor 4, with the value of 0.19, are somewhat less powerful in their distinctiveness and interpretability.

Varimax Rotation

This study used Varimax rotation to determine factor alignment. This was done automatically via the software. Table 5 highlights participants who have a strong defining influence on a specific factor. A flagged value means that a participant's sort is very much in sync with a particular factor; therefore, their inputs reflect that factor's view/theme. Factor extraction is noted by an X in the appropriate factor column.

Table 5*Factor Matrix with Defining Sorts Flagged with X*

Participant	Factor 1		Factor 2		Factor 3		Factor 4	
4VQ6	0.17		0.51	X	0.31		0.21	
5GZA	-0.01		-0.24		0.02		0.03	
5T2L	0.27		-0.12		0.06		0.52	X
8ZVI	0.52	X	-0.14		-0.19		0.39	
92XI	0.85	X	-0.03		0.10		0.02	
AONH	0.03		-0.02		0.12		0.53	X
EPNO	-0.22		0.22		0.04		0.44	X
EWES	0.46		-0.18		0.58	X	0.09	
F2LD	0.08		-0.37	X	0.02		-0.02	
NNX7	0.40		0.18		0.58	X	0.02	
ONMX	0.39		0.75	X	0.03		-0.09	
OQ7P	0.58	X	0.15		0.20		0.21	
Q8KQ	0.18		0.19		-0.36	X	-0.04	
QR9R	0.53	X	0.18		0.01		-0.11	
UUD1	0.11		0.08		0.36	X	0.00	
VW0Q	-0.11		0.01		0.58	X	0.14	

Fifteen of the 16 participants loaded significantly into one of the four factors. Combined, Factors 1, 2, 3, and 4 account for 38% of the study's variance. One participant did not load successfully into one of the four factors, indicating that this participant did not fit with any of the four main factors extracted for this study. For this study, Factor 1 will be referred to as *The Wrestler*; Factor 2 will be referred to as *Remember the Titans*; Factor 3 will be referred to as *Coach Carter*; and Factor 4 will be referred to as *A League of Their Own*.

Factor Arrays, Identification, and Interpretation

In Q-methodology, participants' perspectives are collectively represented, with the focus of this study on their experiences with mental health and performance expectations as student-athletes. The factor array serves as a visual summary of shared viewpoints among participants with similar experiences rather than reflecting any one individual's statements or opinions. Table 6 lists the frequency of key demographical information for each factor. The following section presents arrays for each of the five factor models and interpretations of the viewpoints associated with each factor.

Table 6

Demographic Characteristics of Participants

	Factor 1		Factor 2		Factor 3		Factor 4	
Variable	f	%	f	%	f	%	f	%
Gender								
Male	1	25.0%	1	33.3%	4	80.0%	1	33.3%
Female	3	75.0%	2	66.7%	1	20.0%	2	66.7%
Race/Ethnicity								
White/Caucasian	4	100.0%	3	100.0%	3	60.0%	2	66.7%
Black/African American	-	0.0%	-	0.0%	2	40.0%	1	33.3%
Sports Participation								
Basketball	2	50.0%	-	0.0%	1	20.0%	1	33.3%
Football	-	0.0%	-	0.0%	2	40.0%	1	33.3%
Baseball	-	0.0%	1	33.3%	2	40.0%	-	0.0%
Swimming & Diving	1	25.0%	1	33.3%	-	0.0%	-	0.0%
Other (Bowling, Golf, Softball)	1	25.0%	1	33.4%	-	0.0%	1	33.4%
NIL Compensation								
Currently Receiving	1	25.0%	-	0.0%	1	20.0%	3	100.0%
Not Receiving	3	75.0%	3	100.0%	4	80.0%	-	0.0%

Transfer Portal Usage

Have Used the Transfer Portal	1	25.0%	-	0.0%	2	40.0%	-	0.0%
Have Not Used the Transfer Portal	3	75.0%	3	100.0%	3	60.0%	3	100.0%

Factor 1: *The Wrestler*

The Wrestler focuses on an athlete dealing with the physical and mental toll of maintaining high performance levels, driven by a need or achievement and personal expectations (Aronofsky, 2008). Figure 2 depicts the factor array for *The Wrestler* which had four statistically loading participants, accounted for 17% of the study variance, and resulted in an eigenvalue of 2.74.

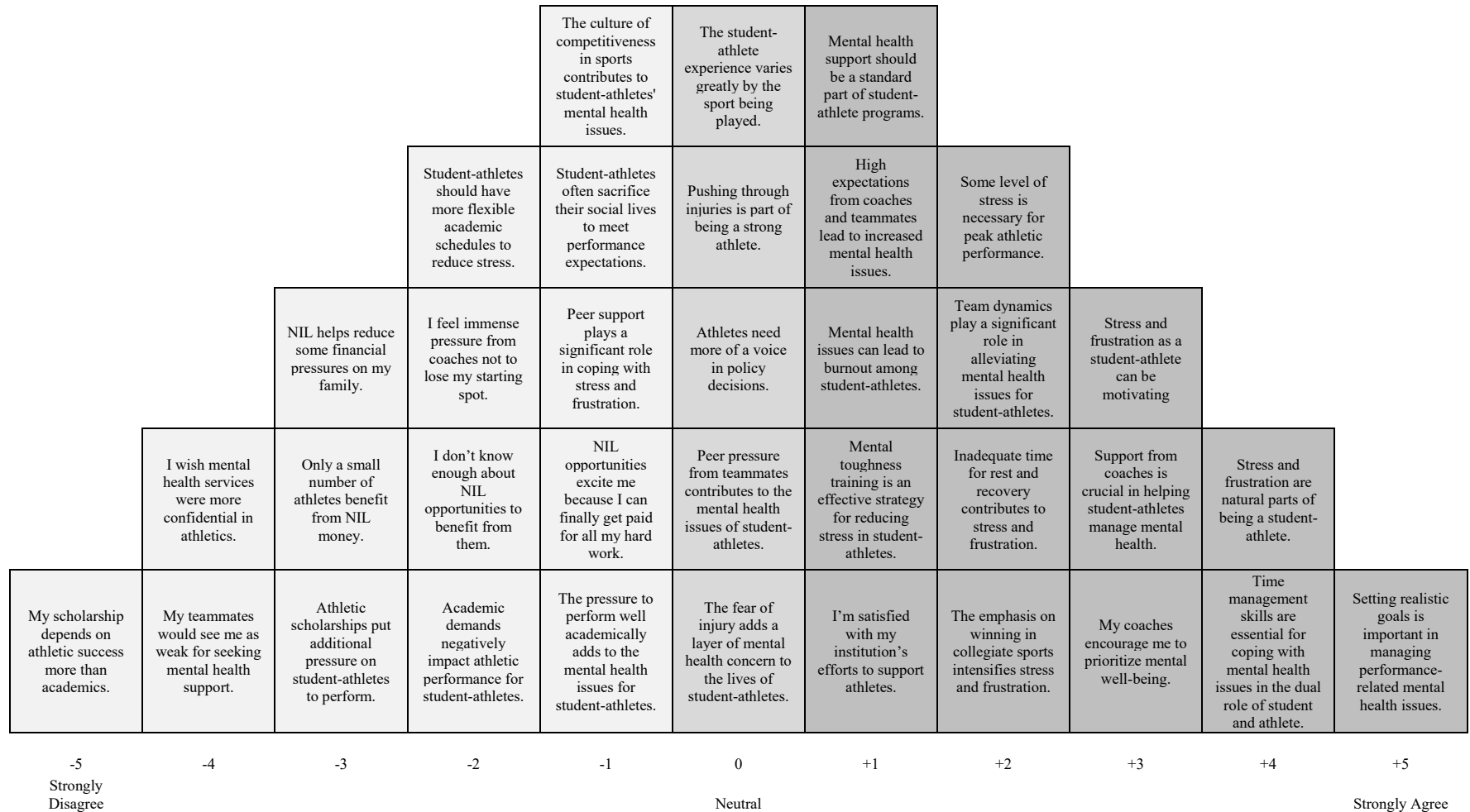
Figure 2*Model Sort for Student-Athletes Who Loaded Significantly on Factor 1, The Wrestler*

Table 7 lists the distinguishing factors for *The Wrestler*.

Table 7

Distinguishing Statements for Factor 1, The Wrestler

Number	Statement	Endorsement
8	Setting realistic goals is important in managing performance-related mental health issues	+
1	Stress and frustration are natural parts of being a student-athlete	+
3	Support from coaches is crucial in helping student-athletes manage mental health	+
21	The emphasis on winning in collegiate sports intensifies stress and frustration	+
13	Some level of stress is necessary for peak athletic performance	+
7	High expectations from coaches and teammates lead to increased mental health issues	+
4	Mental health support should be a standard part of student-athlete programs	+
22	Student-athletes often sacrifice their social lives to meet performance expectations	-
6	Student-athletes should have more flexible academic schedules to reduce stress	-
10	Athletic scholarships put additional pressure on student-athletes to perform	-
25	NIL helps reduce some financial pressures on my family	-

29	I wish mental health services were more confidential in athletics	-
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Note. Endorsement indicated as positive (+), neutral (^), or negative (-)

Table 8 lists the consensus statements for *The Wrestler*.

Table 8

Consensus Statements for Factor 1, The Wrestler

Statement Number	Statement	Endorsement
20	Mental toughness training is an effective strategy for reducing stress in student-athletes.	+
14	Academic demands negatively impact athletic performance for student-athletes.	-

Note. Endorsement indicated as positive (+), neutral (^), or negative (-)

This factor had the highest percentage of female participants (75%), with all participants identifying as White/Caucasian. Participants were comprised of 50% basketball team members, 25% swimming & diving team members, and 25% bowling team members. Only one participant (25%) reported receiving NIL compensation and only one participant (25%) reported utilizing the transfer portal.

***The Wrestler* General Viewpoint**

The Wrestler reflects the performance pressure and self-expectations student-athletes apply to themselves. This factor is described by participants who positively rated statements that emphasize personal requirements and extraneous expectations as they relate to pressure. As an example, the statement “Setting realistic goals is important in

managing performance-related mental health issues” corresponds with this theme as demonstrated by the *Z* score of 2.20, which indicates the participants in *The Wrestler* feel strongly about self-expectations. *The Wrestler* feels strongly about the importance of time management and support from coaches is important to cope with mental health issues of student-athletes.

The Wrestler did not emphasize an importance on NIL income or any added pressure to perform based on their scholarship. As an example, the statement “My scholarship depends on athletic success more than academics” corresponds with this theme as demonstrated by the *Z* score of -2.08, indicating pressure to perform is not increased due to the demands of student-athletes. Overall, *The Wrestler* does not feel that confidentiality or peer perception affect mental health service usage and believes that support from peers and coaches, along with personal time and goal management, are key indicators of positive mental health experiences.

Factor 2: *Remember the Titans*

Remember the Titans highlights the pressures athletes face from societal expectations, institutional pressures, and the need to meet external standards, particularly as the team is expected to succeed in the face of significant challenges and scrutiny (Yakin, 2000). Figure 3 depicts the factor array for *Remember the Titans* which had 3 statistically loading participants, accounted for 8% of the study variance, and an eigenvalue of 1.21.

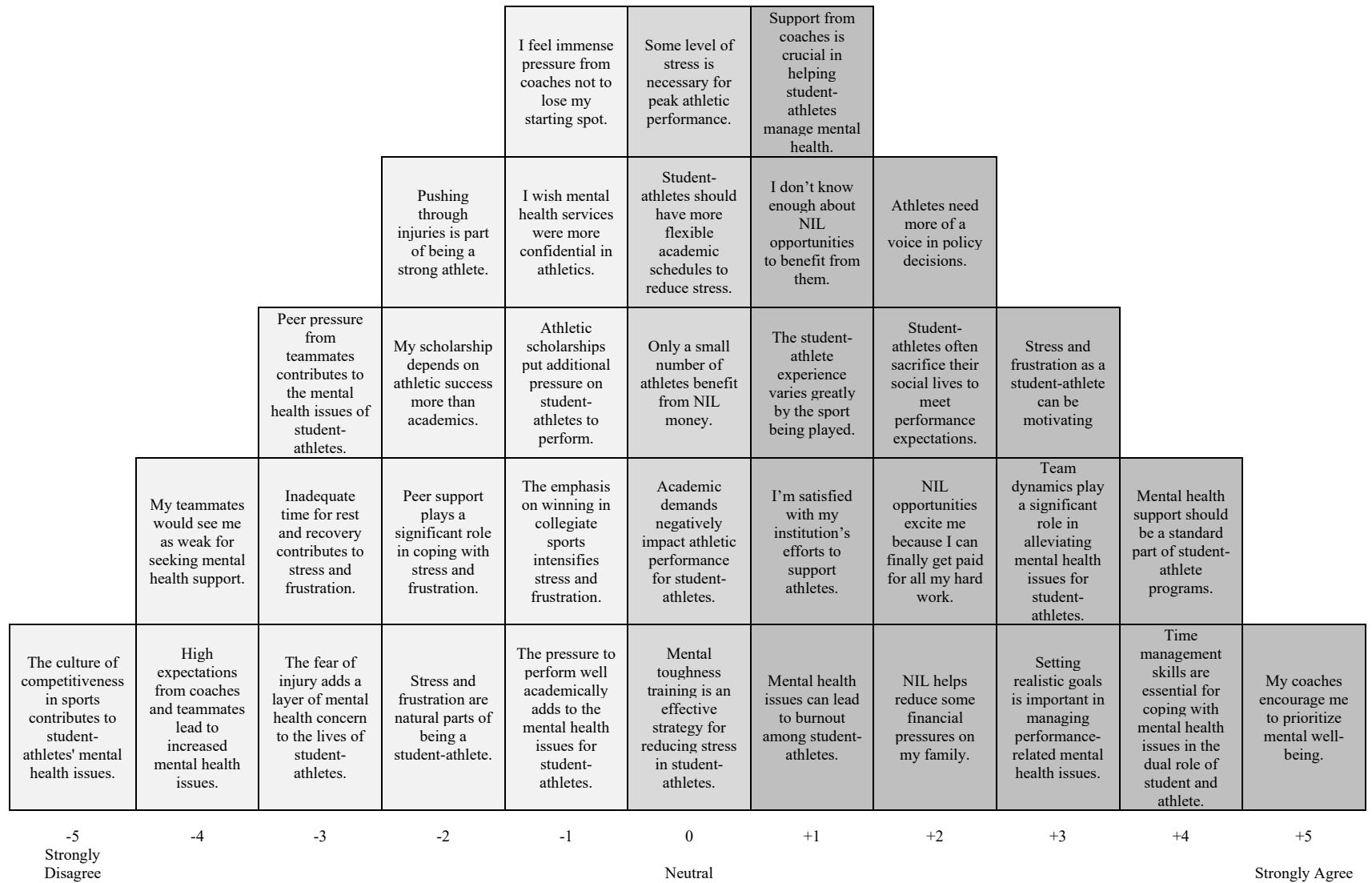
Figure 3*Model Sort for Student-Athletes Who Loaded Significantly on Factor 2, Remember the Titans*

Table 9 lists the distinguishing factors for *Remember the Titans*.

Table 9

Distinguishing Statements for Factor 2, Remember the Titans

Statement Number	Statement	Endorsement
25	NIL helps reduce some financial pressures on my family.	+
23	NIL opportunities excite me because I can finally get paid for all my hard work.	+
21	The emphasis on winning in collegiate sports intensifies stress and frustration.	-
17	The fear of injury adds a layer of mental health concern to the lives of student-athletes.	-
11	Inadequate time for rest and recovery contributes to stress and frustration.	-
18	Peer pressure from teammates contributes to the mental health issues of student-athletes.	-
7	High expectations from coaches and teammates lead to increased mental health issues.	-
9	The culture of competitiveness in sports contributes to student-athletes' mental health issues.	-

Note. Endorsement indicated as positive (+), neutral (^), or negative (-)

Table 10 lists the consensus factors for *Remember the Titans*.

Table 10

Consensus Statements for Factor 2, Remember the Titans

Statement Number	Statement	Endorsement
20	Mental toughness training is an effective strategy for reducing stress in student-athletes.	^

Note. Endorsement indicated as positive (+), neutral (^), or negative (-).

This factor had 67% female participants and 33% male participants, with all participants identifying as White/Caucasian. Participants were comprised of 33% baseball team members, 33% swimming & diving team members, and 34% golf team members. No participants reported receiving NIL compensation, and no participants reported utilizing the transfer portal.

***Remember the Titans* General Viewpoint**

The general viewpoint represented in *Remember the Titans* highlights that student-athletes feel significant pressure to balance athletic performance and mental health. They recognize that some stress level is necessary for peak performance and that pushing through challenges is part of being strong in sports. However, they express a need for support from coaches, institutions, and policy changes to manage these pressures effectively. Mental health support is valued, and having coaches who encourage mental well-being and realistic goals appears crucial. Additionally, academic demands and the culture of competition are seen as contributing factors to their stress and mental health issues, especially as they strive to meet expectations from both the athletic and academic realms.

Remember the Titans also reflects a shared perspective that student-athletes often sacrifice social life to meet performance standards, and they acknowledge the motivating role that stress and competition can play. Despite the rigorous demands, participants value team dynamics and the role of peer support, which helps alleviate mental health concerns. *Remember the Titans* indicates a desire for time management skills, flexible academic schedules, and mental toughness training as key coping strategies. NIL opportunities bring some financial relief, though they are less impactful for mental well-being compared to institutional support. This viewpoint represents the importance of a well-rounded support system to balance academic, athletic, and mental health needs.

Factor 3: *Coach Carter*

Coach Carter focuses on a high school basketball team under a coach who enforces strict academic and behavioral expectations. The film focuses on the balance of meeting institutional standards and personal goals (Carter, 2005). Figure 4 depicts the factor array for *Coach Carter* which had five statistically loading participants, accounted for 7% of the study variance, and demonstrated an eigenvalue of 1.19.

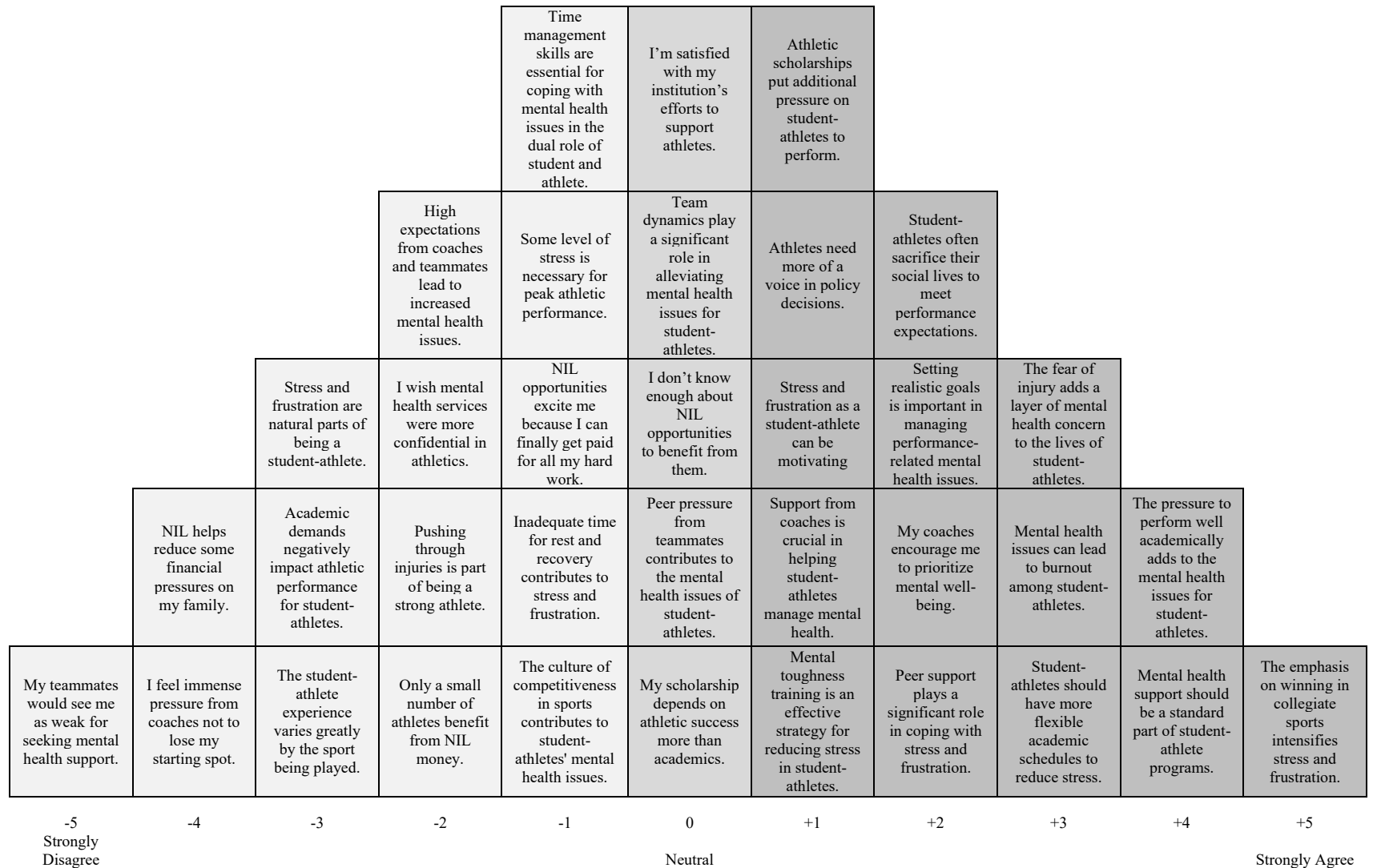
Figure 4*Model Sort for Student-Athletes Who Loaded Significantly on Factor 3, Coach Carter*

Table 11 lists the distinguishing factors for *Coach Carter*.

Table 11

Distinguishing Statements for Factor 3, Coach Carter

Statement Number	Statement	Endorsement
21	The emphasis on winning in collegiate sports intensifies stress and frustration.	+
2	The pressure to perform well academically adds to the mental health issues for student-athletes.	+
6	Student-athletes should have more flexible academic schedules to reduce stress.	+
17	The fear of injury adds a layer of mental health concern to the lives of student-athletes.	+
5	Peer support plays a significant role in coping with stress and frustration.	+
1	Stress and frustration are natural parts of being a student-athlete.	+
32	My scholarship depends on athletic success more than academics.	^
33	I'm satisfied with my institution's efforts to support athletes.	^
16	Time management skills are essential for coping with mental health issues in the dual role of student and athlete.	-
7	High expectations from coaches and teammates lead to increased mental health issues.	-
19	The student-athlete experience varies greatly by the sport being played.	-

35	Stress and frustration as a student-athlete can be motivating	-
25	NIL helps reduce some financial pressures on my family.	-
27	My teammates would see me as weak for seeking mental health support.	-

Note. Endorsement indicated as positive (+), neutral (^), or negative (-)

Table 12 lists the consensus factors for *Coach Carter*.

Table 12

Consensus Statements for Factor 3, Coach Carter

Statement Number	Statement	Endorsement
20	Mental toughness training is an effective strategy for reducing stress in student-athletes.	+
34	Athletes need more of a voice in policy decisions.	+

Note. Endorsement indicated as positive (+), neutral (^), or negative (-)

This factor had the highest percentage of male participants (80%) and the highest percentage of Black/African American participants (40%). Participants were comprised of 40% baseball team members, 40% football team members, and 20% basketball team members. One participant reported receiving NIL compensation (20%), and two participants reported utilizing the transfer portal (40%).

Coach Carter General Viewpoint

The general viewpoint of *Coach Carter* emphasizes the intense pressures that collegiate student-athletes face due to the demands of both athletic and academic

performance. Participants feel that the culture of winning in collegiate sports heightens their stress and frustration. Additionally, they believe that academic expectations compound mental health challenges, as balancing these demands can be overwhelming. Statements like “the pressure to perform well academically adds to the mental health issues for student-athletes” reflect a significant source of anxiety. Student-athletes acknowledge that the fear of injury adds an additional layer of concern to their mental health, highlighting the unevenness of their physical and academic future. Participants support the need for more flexible academic schedules to reduce this stress and for more comprehensive mental health support to cope with these unique pressures.

Coach Carter also highlights the importance of peer support and institutional backing. Statements such as "peer support plays a significant role in coping with stress and frustration" indicate that athletes rely heavily on one another to manage the stresses of their dual roles as students and athletes. However, there is skepticism about the sufficiency of institutional efforts to support athletes, but *Coach Carter* does not feel that confidentiality or peer perception affect mental health service usage. While they appreciate the institution's current efforts, participants feel more needs to be done to ensure that student-athletes have a voice in shaping policies that impact them directly.

Factor 4: *A League of Their Own*

A League of Their Own highlights the support networks that form within a team, as the women in the All-American Girls Professional Baseball League bond, support each other, and navigate personal and social challenges together (Marshall, 1992). Figure 5 depicts the factor array for *A League of Their Own* which had three statistically loading participants, accounted for 6% of the study variance, and produced an eigenvalue of 0.99.

Figure 5

Model Sort for Student-Athletes Who Loaded Significantly on Factor 4, A League of Their Own

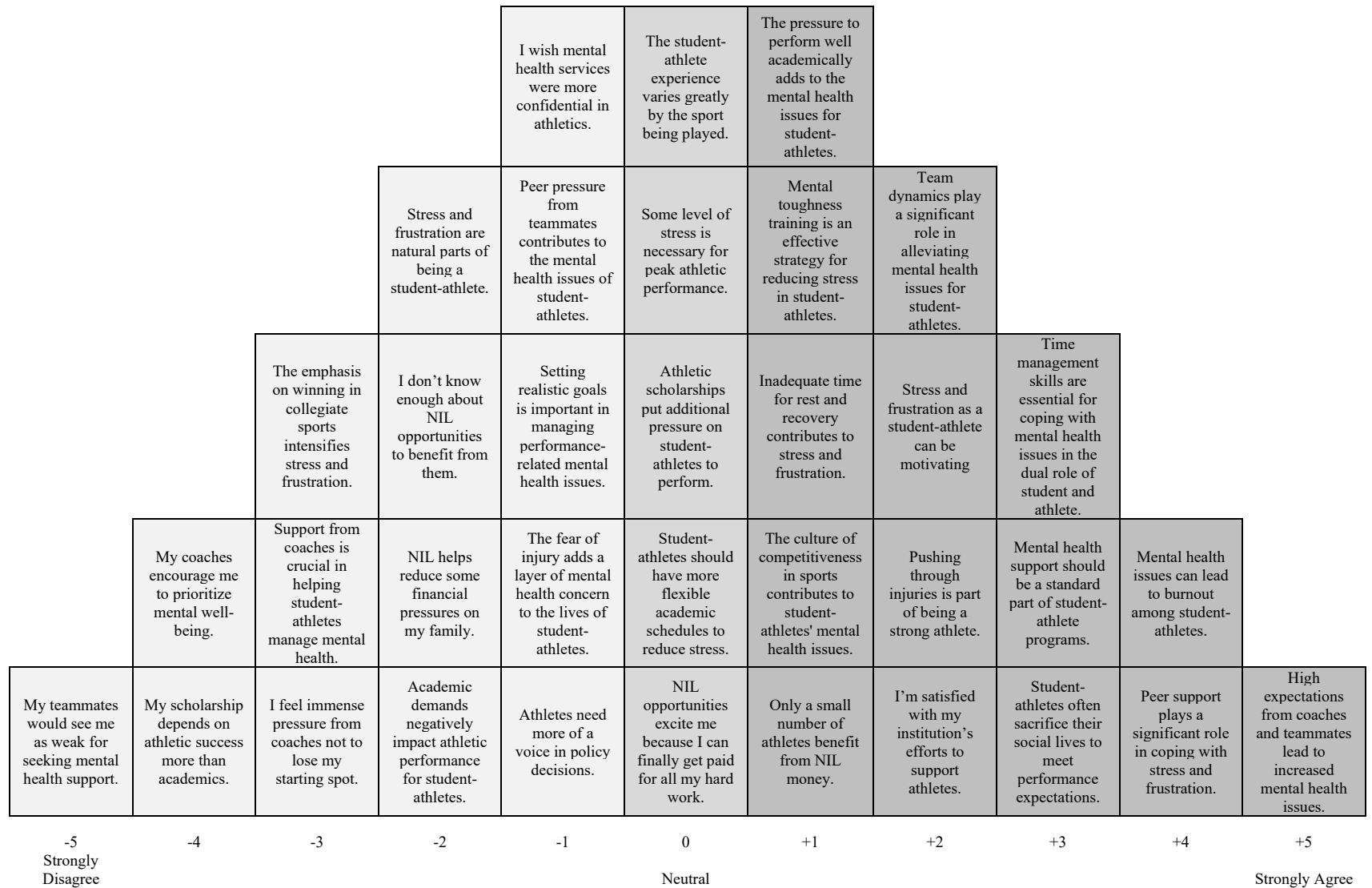


Table 13 lists the distinguishing factors for *A League of Their Own*.

Table 13

Distinguishing Statements for Factor 4, A League of Their Own

Statement Number	Statement	Endorsement
7	High expectations from coaches and teammates lead to increased mental health issues.	+
5	Peer support plays a significant role in coping with stress and frustration.	+
31	Pushing through injuries is part of being a strong athlete.	+
8	Setting realistic goals is important in managing performance-related mental health issues.	-
25	NIL helps reduce some financial pressures on my family.	-
3	Support from coaches is crucial in helping student-athletes manage mental health.	-
21	The emphasis on winning in collegiate sports intensifies stress and frustration.	-
28	My coaches encourage me to prioritize mental well-being.	-

Note. Endorsement indicated as positive (+), neutral (^), or negative (-)

Table 14 lists the consensus factors for *A League of Their Own*.

Table 14

Consensus Statements for Factor 4, A League of Their Own

Statement Number	Statement	Endorsement
15	Team dynamics play a significant role in alleviating mental health issues for student-athletes.	+
20	Mental toughness training is an effective strategy for reducing stress in student-athletes.	+
14	Academic demands negatively impact athletic performance for student-athletes.	-
30	I feel immense pressure from coaches not to lose my starting spot.	-

Note. Endorsement indicated as positive (+), neutral (^), or negative (-)

This factor had 33% male participants and 67% female participants. *A League of Their Own* had 67% of participants identify as White/Caucasian and 33% identify as Black/African American. Participants comprised one basketball team member, one football team member, and one softball team member. All participants reported receiving NIL compensation, and no participants reported utilizing the transfer portal.

A League of Their Own General Viewpoint

The general viewpoint associated with *A League of Their Own* highlights the role of peer and team dynamics in managing student-athlete mental health challenges. Participants in this factor see peer support as essential, indicating that camaraderie among teammates plays a crucial role in alleviating stress and providing a sense of resilience.

The consensus statement “team dynamics play a significant role in alleviating mental health issues for student-athletes” shows *A League of Their Own* values reliance on social bonds within the team structure. While high expectations from coaches and teammates can increase mental health concerns, participants in this group view the athletic environment as one where mental toughness and pushing through challenges—such as injuries—are valued qualities. The focus on resilience reflects a commitment to overcoming difficulties, even though these expectations may contribute to mental health issues.

A League of Their Own participants downplay the role of formal support from coaches and mental health programs, as shown by their disagreement with statements like “support from coaches is crucial in helping student-athletes manage mental health.” *A League of Their Own* also reflects a certain skepticism about academic demands significantly impacting athletic performance, indicating that participants do not feel the academic pressure is as intense as it might be for others. Additionally, these student-athletes do not feel immense pressure to retain their positions or fear the loss of their starting spots, which suggests a stronger focus on personal resilience and mental toughness over external validation or competition. Overall, *A League of Their Own* identified team support is crucial, while managing one’s mental health as a student-athlete largely depends on personal grit and resilience.

Post Q-Sort Open-Ended Questions and Subjective Happiness Scale

Descriptive Statistics

Frequency statistics for Subjective Happiness Scale (SHS) ratings were tabulated and are presented in Table 15. The SHS consists of four questions, each answered on a

scale of one to seven. The average of all four responses is the SHS score for the participant. Question four is reverse coded. The average SHS score is typically between 4.5 and 5.5 (Lyubomirsky & Lepper, 1999). The mean SHS score for all participants was 5.20 ($M = 5.20$), which falls in that range.

Table 15

Frequency Distributions for SHS Questions

Question	Scale						
	1	2	3	4	5	6	7
In general, I consider myself (1 = not a very happy person; 7 = a very happy person)	-	-	-	-	9	6	1
Compared to most of my peers, I consider myself (1 = less happy; 7 = more happy)	-	-	1	1	7	6	1
Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything (1 = not at all; 7 = a great deal)	-	-	3	4	6	1	2
Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be (1 = not at all; 7 = a great deal)	3	6	2	3	2	-	-

ANOVA

A one-way analysis of variance (ANOVA) was conducted to compare the effect of Factor on participant SHS scores. No significant differences were found between factors for any of the participant scores. Detailed results are presented on Table 16.

Table 16*One-Way ANOVA Results*

Question		Sum of Squares	df	Mean Square	f	p
Subjective Happiness Participant Score	Between Groups	0.825	3	0.275	0.365	0.780

Open-Ended Question 1: Research shows heightened rates of depression in student-athletes vs. non-student-athletes. Have you noticed any signs of depression with your teammates?

A frequency analysis was conducted for Question 1. Answers were coded to three variables: yes, no, unknown. The results are summarized in Table 17.

Table 17*Frequency Distribution for Question 1*

Response	Frequency	Percent	Cumulative Percent
Unknown	1	6.3	6.3
No	8	50.0	56.3
Yes	7	43.8	100.0

Results of the study indicate that seven participants (43.8%) noted signs of depression amongst teammates.

Crosstab Analysis

A series of crosstab analyses were conducted to examine relationships between Factor and Question One and SHS for participants. The Pearson chi-square test results for each crosstabulation are presented in Table 18.

Table 18*Crosstab Analyses and Chi-Square Results*

Item (DV)	Pearson Chi-Square	df	<i>p</i>
Factor * Question 1	4.542	6	0.604
Factor * Subjective Happiness Participant Score	28.625	27	0.379

The chi-square tests did not yield any significant associations between Factor and Question 1 or the SHS participant scores (all $p > 0.05$). This suggests that the factors of this study do not significantly impact how participants perceive their happiness, compare it with others, or perceive signs of depression amongst teammates.

Open-Ended Question 2: *What types of mental health concerns, if any, have you noticed with teammates?*

The responses to Question 2 reveal a range of observations about mental health and wellness among teammates, with some respondents reporting noticeable signs of stress and mental health struggles, while others observed no significant issues. A common theme among the responses is anxiety, which is frequently mentioned as a challenge for student-athletes. Other respondents mention specific behaviors associated with mental health concerns, such as "negative attitude," "bad self-talk," and "wanting to sleep a lot." These observations highlight a perceived tendency for some athletes to exhibit signs of low mood or coping struggles. Others mentioned "not talking," "talking negatively about themselves," and "giving up" as indicators of potential mental health struggles. Such responses suggest that teammates may recognize subtle behaviors as indicative of underlying mental health challenges.

In contrast, some respondents report minimal or no mental health concerns among their teammates. These individuals state that they "haven't seen any" signs of mental illness, or that "most guys make it seem as if they're good all the time." This could indicate either a genuine lack of mental health issues among these respondents' teammates or a possible reluctance to display vulnerabilities openly. Some responses also allude to coping mechanisms and attitudes towards mental health. For example, one respondent refers to teammates using "negative coping mechanisms" and describes some as "snarky/snippy," possibly as a reaction to stress or anxiety. Another mention of a teammate who "has lost his mind" could suggest more serious mental health concerns, though this may also reflect a lighthearted expression.

Summary

This chapter presented the results of a quantitative and qualitative factor analysis that was completed following the sorting of 35 statements by 16 student-athletes at Youngstown State University. Q-methodology was used to portray the experiences of student-athletes on campus, including perceptions on mental health issues, stress, NIL proceeds, performance expectations, and overall experience. Fifteen of the 16 participants loaded significantly into one of four factors, indicating similar viewpoints. The four factors were identified as Factor 1: *The Wrestler*; Factor 2: *Remember the Titans*; Factor 3: *Coach Carter*; and Factor 4: *A League of Their Own*.

Factor 1, *The Wrestler*, comprised four participants and accounted for 17% of the study variance. *The Wrestler* highlights the pressures of performance and self-imposed expectations faced by student-athletes. *The Wrestler* strongly emphasizes the importance of setting goals and value support from coaches. Notably, participants in this factor

reported minimal emphasis on NIL income or scholarship-related pressures, suggesting these are not major stressors for them. Overall, *The Wrestler* downplays peer perceptions to mental health as a barrier to mental health support.

Factor 2, *Remember the Titans*, comprised three participants and accounted for 8% of the study variance. *Remember the Titans* perspective highlights the significant pressure student-athletes feel to balance athletic performance with mental health. *Remember the Titans* acknowledges that while stress can motivate performance, support from coaches and institutions is vital to managing the pressures of being a student-athlete. *Remember the Titans* also reflects the sacrifices athletes make in their social lives to meet performance expectations, while valuing team support and peer relationships as buffers against mental health struggles. Desired support strategies include time management skills, flexible academic scheduling, and mental resilience training.

Factor 3, *Coach Carter*, represented five participants and accounted for 7% of the study variance. *Coach Carter* perspective emphasizes the intense pressures faced by collegiate student-athletes due to the dual demands of athletic and academic performance. Participants identified the culture of winning as a major source of stress, which, combined with academic expectations, can lead to mental health challenges. They specifically highlighted the additional stress from balancing academic responsibilities and the fear of injury affecting both their physical and academic futures. Flexible academic schedules and enhanced mental health support are seen as essential measures for coping with these pressures. *Coach Carter* demonstrates a sense of skepticism regarding the adequacy of institutional support, with participants feeling that current efforts may not fully address their needs.

Factor 4, *A League of Their Own*, represented three participants and accounted for 6% of the study variance. *A League of Their Own* perspective emphasizes the importance of peer and team dynamics in supporting mental health among student-athletes.

Participants noted the value of the camaraderie among teammates as a key component in managing stress and developing resilience, with team dynamics seen as critical in coping with mental health challenges. Although high expectations from coaches and teammates can elevate stress, this group views mental toughness and the ability to push through challenges, like injuries, as essential qualities. Formal support from coaches or mental health programs is not seen as vital to *A League of Their Own*, and academic demands are perceived as less impactful on mental health.

Each of the four factors illustrate the diverse perspectives of student-athletes regarding mental health and performance, revealing the complexity of their experiences and the necessity for targeted support systems within collegiate athletics. The findings produced noteworthy findings that can help address this study's research questions. Chapter 5 will provide a discussion of the findings, how the findings align with existing research, along with the study's limitations, recommendations for future research, and the study's conclusion.

Chapter V

Discussion

This study investigated the mental health challenges faced by collegiate student-athletes, focusing on the prevalence of mental health disorders, the impact of NIL dynamics, and the balance between academic and athletic commitments. The following research questions were addressed:

Research Question One: What is the prevalence of mental health disorders among college student-athletes?

The findings indicate that mental health disorders, particularly anxiety and depression, are prevalent among student-athletes. Participants reported experiencing significant stress related to their athletic commitments and academic responsibilities. The qualitative data revealed that many athletes felt overwhelmed, with some expressing feelings of chronic anxiety and low mood. This aligns with existing literature that highlights the high rates of mental health issues in this population (Bissett & Tamminen, 2022; Eisenberg, 2019; Moreland et al., 2018).

The findings indicate that student-athletes experience a range of stressors, including performance expectations, time management challenges, and societal pressures. The analysis revealed that participants associated with *The Wrestler* highlighted the physical and mental toll of maintaining high performance levels driven by personal expectations. They agreed that these expectations can lead to increased mental health issues. In contrast, *Remember the Titans* emphasized the importance of teamwork and support from coaches and peers in alleviating mental health issues. This aligns with the extant literature in Chapter 2, which discusses the multifaceted nature of stressors in

collegiate athletics, including academic demands and the pressure to succeed athletically (Gayles & Hu, 2009; Harris & Maher, 2023; Santos et al., 2020).

Results from Chapter 4 corroborate these findings, revealing that a significant percentage of participants reported experiencing symptoms of anxiety and depression. Specifically, the quantitative data indicated that over 40% of student-athletes surveyed reported signs of depression with their teammates. These results align with previous research that highlights the prevalence of mental health issues in this population, emphasizing the urgent need for targeted mental health interventions within collegiate athletic programs.

What specific mental health disorders are most prevalent among student-athletes?

Anxiety was frequently mentioned as a common challenge, with participants noting symptoms such as negative self-talk and feelings of inadequacy. Additionally, signs of depression, such as low energy and withdrawal from social interactions, were reported. This finding is consistent with the literature, which suggests that the competitive nature of collegiate sports, combined with academic pressures, creates a perfect storm for mental health challenges. These findings are consistent with previous research indicating that student-athletes often face unique mental health challenges due to the dual pressures of academics and athletics (Harris & Maher, 2023). The qualitative data from Chapter 4 also revealed personal accounts of student-athletes struggling with feelings of inadequacy and fear of failure, further illustrating the emotional toll of their dual roles.

Research Question 2: How does the emergence of NIL on campus affect the mental health of college student-athletes?

The study found that the emergence of NIL rights has introduced new stressors for student-athletes, particularly regarding the commercialization of their identities. Participants expressed mixed feelings about NIL, some viewing it as an opportunity for financial gain, while others felt pressure to perform and manage their public personas. The introduction of NIL rights has transformed the landscape of collegiate athletics, presenting opportunities and challenges for student-athletes. Chapter 2 discusses how NIL can lead to increased pressure to perform and manage personal branding, which can exacerbate existing mental health issues (Kunkel et al., 2021; Winkler, 2021).

The pressures identified in *Remember the Titans* relate directly to the emergence of NIL, as student-athletes may feel additional stress to capitalize on their NIL opportunities while maintaining performance. The fear of not meeting these expectations can exacerbate mental health issues, as indicated by the mixed perceptions of NIL among participants. Of note, *Remember the Titans* had no participants reporting that they are receiving NIL compensation. The pressures associated with NIL can exacerbate the existing stressors that *The Wrestler* experiences. The need to perform well to secure NIL opportunities may heighten anxiety and lead to burnout, as student-athletes must constantly meet high standards to maintain their marketability. *A League of Their Own* reported that all three participants were receiving NIL compensation. However, they reported that personal resilience and mental toughness are key to managing mental health and placed minimal importance on NIL.

How do colleges student-athletes perceive the commercialization of their NIL rights?

Results from this study revealed that six (37.5%) of participants were receiving NIL compensation. Only one factor, *Remember the Titans*, reported a significant impact

of NIL on mental health. They reported feeling excited about the potential benefits of NIL but also expressed concerns about the pressure to maintain a public image and the fear of failure in managing these new opportunities. This reflects the literature's emphasis on the complexities of NIL and its impact on student-athlete mental health (Palmieri, 2021; Winkler, 2021).

The societal pressures reflected in *Remember the Titans* suggest that student-athletes may view NIL as both an opportunity and a burden, leading to mixed feelings about commercialization. The results indicate that while some see potential benefits, others feel overwhelmed by the expectations that come with it. *The Wrestler's* focus on self-expectations suggests that student-athletes may have mixed feelings about commercialization. While some may see it as a chance for financial gain, others may feel overwhelmed by the pressure to perform, leading to a negative perception of NIL as an added stressor rather than a benefit.

Participants in *Remember the Titans* may perceive commercialization as a double-edged sword. While NIL rights offer potential financial benefits, the societal scrutiny and expectations tied to these opportunities can create significant stress, leading to a more negative perception of commercialization. Participants in *A League of Their Own* may perceive commercialization positively, seeing it as an opportunity for empowerment and growth. Their resilience and support from teammates can help them navigate the pressures of NIL, leading to a more favorable view of commercialization than those who feel overwhelmed by expectations.

What are the stressors associated with managing NIL deals alongside academic and athletic commitments?

The Wrestler indicated that balancing NIL responsibilities with their existing commitments could increase time scarcity and stress. This aligns with the findings in Chapter 2, which discuss the challenges of time management student-athletes face (Moreland et al., 2018; Sasso et al., 2022). The mixed perceptions of NIL among student-athletes reflect a broader societal conversation about the commercialization of college sports. While NIL presents opportunities for financial gain, it also introduces new pressures that can exacerbate existing mental health challenges. The findings indicate that student-athletes are navigating a complex landscape where their identities are increasingly tied to their marketability. This aligns with Winkler (2021) and Palmieri (2021), who discussed the ethical dilemmas surrounding NIL and its implications for student-athlete well-being. The current study's results suggest that institutions must provide comprehensive support systems to effectively help student-athletes manage these new pressures.

Are there differences in the mental health outcomes of college student-athletes based on the success or failure of their NIL ventures?

Overall, participants in this study valued institutional or peer support to navigate mental health outcomes over NIL compensation. However, *Remember the Titans* emphasized that the demands of being a student-athlete, along with the sacrifice of personal and social lives to meet performance standards, heighten mental health concerns. *Coach Carter* reported that the emphasis on winning in athletics, academic pressures, fear of injury, and burnout, add to student-athletes' mental health concerns. Although not directly tied to NIL compensation, this suggests that the outcomes of NIL engagements can significantly influence mental health, echoing the literature's concerns

about the psychological impact of performance-related pressures (Brosh, 2020; Kunkel et al., 2021).

Research Question 3: How does the balance between academics and athletics influence the mental health of college student-athletes?

The findings reveal that balancing academic and athletic commitments is a significant source of stress for student-athletes. Participants reported feelings of time scarcity and the challenge of meeting the demands of both areas. The results suggest that student-athletes recognize the value of mental health resources, particularly in the context of *Coach Carter*, where participants advocated for integrating mental health education within sports programs. They expressed that access to mental health resources could significantly enhance their performance and overall well-being. This finding is supported by existing literature that emphasizes the need for mental health training for coaches and athletes to foster a supportive environment (Moore et al., 2022).

What strategies do college student-athletes employ to manage the demands of academics and athletics, and how do these strategies impact their mental well-being?

Many athletes reported the importance of time management techniques and seeking support from coaches and peers to cope with their dual responsibilities. The findings showed that student-athletes valued various strategies to manage their commitments, including prioritizing tasks, seeking support from coaches and peers, and utilizing campus resources. However, the effectiveness of these strategies varied, with some participants emphasizing feeling overwhelmed despite their efforts. This highlights the need for tailored support systems that address the unique challenges faced by student-athletes, as discussed in the literature (Gayles & Hu, 2009; Santos et al., 2020).

The Wrestler emphasizes setting realistic goals and managing expectations as coping strategies. Student-athletes who adopt these strategies may experience less stress and better mental health. *Remember the Titans* suggests that mental toughness training and coach support can be effective coping strategies. Student-athletes who receive encouragement and guidance are likely to cope better with stress. Institutional support, such as mental health resources and flexible academic schedules, can enhance the effectiveness of coping strategies, allowing student-athletes to manage mental health issues more effectively (Moreland et al., 2018).

The emphasis on teamwork and support in *Coach Carter* indicates that successful strategies often involve collaboration and communication with coaches and peers. Participants who utilized these strategies reported feeling more in control and less stressed, demonstrating the positive impact of effective support systems on mental health. The resilience highlighted in *A League of Their Own* suggests that student-athletes who adopt a positive mindset may be better equipped to handle the stressors of balancing academics and athletics. This aligns with the literature that emphasizes the role of resilience in mitigating mental health issues (Comeaux, 2012; Cremin & Anderson, 2019). *Coach Carter* emphasizes the role of teamwork and support. Student-athletes who effectively communicate with their coaches and peers about NIL opportunities may develop strategies that mitigate stress, leading to a more positive mental health experience. Conversely, those without adequate support may struggle to balance these new demands (Kirsch, 2022; Kunkel et al., 2021).

Are there differences in mental health outcomes among college student-athletes based on the level of academic and athletic success or performance pressure they experience?

The study found that while performance pressure is a common experience, the impact on mental health varies among athletes. Participants in *A League of Their Own* highlighted unique challenges student-athletes face, indicating that certain pressures can influence mental health outcomes. This suggests that while some athletes may thrive under pressure, others may struggle, particularly when societal expectations are compounded by their athletic roles. This finding resonates with the literature in Chapter 2, which discusses the varying experiences student-athletes in relation to performance pressure and mental health (Brosh, 2020; Tabet et al., 2021).

Interpretation of Findings

The findings of this study provide an understanding of the mental health challenges faced by collegiate student-athletes, particularly in the context of the pressures associated with performance, the emergence of NIL rights, and the balancing act between academic and athletic commitments. The results align with and expand upon existing literature, offering valuable insights into the unique experiences of this population.

The high prevalence of anxiety and depression among student-athletes, as reported in this study, is consistent with previous research that highlights the mental health crisis within collegiate sports (Eisenberg, 2019; Ryan et al., 2018). The findings suggest that the dual pressures of academic and athletic performance contribute to mental health issues. This interpretation is critical, as it emphasizes the need for targeted mental health interventions that address the specific mental health issues faced by student-athletes.

The mixed perceptions of NIL among student-athletes reflect a broader societal conversation about the commercialization of college sports. While NIL presents

opportunities for financial gain, it also introduces new pressures that can exacerbate existing mental health challenges. The findings indicate that student-athletes are navigating a complex landscape where their identities are increasingly tied to their marketability. This aligns with Palmieri (2021), who discussed the ethical dilemmas surrounding NIL and its implications for student-athlete well-being. The study's results suggest that institutions should provide comprehensive support systems to effectively help student-athletes manage these new pressures.

The struggle to balance academic and athletic commitments is a well-documented issue in the literature (Moreland et al., 2018; Sasso et al., 2022). The findings of this study reinforce the idea that time management and support from coaches and peers are critical for student-athletes. However, the variability in the effectiveness of these strategies highlights the need for personalized approaches to support. The interpretation of this finding is essential, as it suggests that while some athletes may thrive under pressure, others may require additional resources and support to navigate their dual roles successfully.

Context of Findings

Student-athletes' mental health has become an important issue of concern in college athletics, with the increased expectation to meet high academic and athletic performance standards simultaneously (Harris & Maher, 2023). The present research highlighted several important findings about the mental health status of collegiate student-athlete populations, as well as the types of support they receive, showing that the athletic experience entails a complex, even contradictory system whereby mental health issues affect student-athletes in distinct ways. One of the main conclusions discovered is

that a high level of academic and athletic performance pressure ranks as a major stressor. This pressure is further heightened by outside forces from the coaches, teammates, institutions and other stakeholders in such that the student–athletes sometimes feel compelled yet unappreciated.

Some of the concerns common with students were related to time management. Participants mentioned signs of being overwhelmed, burnout, depression, and loneliness among teammates. Further, the study established that social support systems and mental health were all significant components that offered mitigation of the adverse impacts of stress. Another theme was connectedness, where the student-athletes reported strong support from teammates, coaches, or mental health support personnel. Conversely, the lack of support was also reported by participants, related to increased mental health issues. While some universities have started to develop mental health services to cater to the needs of student-athletes, the value, extent, and efficacy of such services also demonstrate significant variation between colleges and universities, suggesting a clear need for improvement and consistency in the delivery and quality of mental health services (Hilliard et al., 2022; Moreland et al., 2018).

The study also focused on the changing role of sports in collegiate student-athletes' lives due to newly adopted NIL policies. As these policies create new opportunities to make money, they also create new worries and burdens for student-athletes. This new dynamic calls on institutions to deliver specialized assistance and facilities to accomplish the new responsibilities related to NIL to not negatively impact the mental health of these athletes (Procaccini, 2024).

The context of these findings provides useful information to athletic departments, coaches, and university administrators. Various concerns have risen regarding the mental health of not only the general student population but also the student-athletes in particular, demanding institutions address these issues and provide adequate spaces for mental health support services. This should encompass awareness of all internal stressors the athletes are likely to encounter, as well as customizing assistance to student-athletes' unique needs so that they can handle pressures more positively. Furthermore, adapting academic systems to assist these students' needs is imperative.

Implications of Findings

Enhanced Mental Health Support Programs

The findings highlight an urgent need for mental health programs designed explicitly for college student-athletes. Colleges and universities should consider providing comprehensive mental health services that address the unique stressors faced by these athletes, such as the pressure to perform, challenges associated with NIL agreements, and balancing academics with athletics. These services could include counseling, stress management workshops, and peer support groups tailored to student-athletes' needs (Baker & Burke, 2023; Kirsch, 2022; Procaccini, 2024).

Policy Reforms

This study emphasizes the importance of policy changes at both institutional and organizational levels related to NIL agreements and mental health. Athletic departments should establish clear guidelines and support structures to help student-athletes manage the complexities of NIL commitments alongside their academic and athletic responsibilities. Coaches and athletic staff could benefit from training on recognizing

mental health challenges and offering appropriate support to student-athletes (Moore et al., 2022; Purcell et al., 2019).

Education and Awareness Initiatives

Raising awareness of mental health issues among student-athletes is essential. Educational programs aimed at destigmatizing mental health and encouraging help-seeking behaviors can empower athletes to prioritize their mental well-being. Universities should also conduct outreach efforts to inform athletes about available mental health resources (Santos et al., 2020; Young et al., 2023). The study's insights can also guide athletic departments, coaches, and administrators in fostering a supportive environment for student-athletes. Particular attention should be given to the pressures associated with NIL agreements, as the added responsibilities of branding and business management can increase stress (Kunkel et al., 2021). Universities should provide resources that help athletes balance academics, sports, and financial commitments.

Academic and Athletic Flexibility

Institutions should also revisit policies governing the academic and athletic schedules for student-athletes. This may include offering flexibility in training and competition times and enhancing student services for those who dedicate significant time to athletics. Such adjustments can reduce time management and performance stress, ultimately supporting athletes' overall well-being (Moreland et al., 2018; Sasso et al., 2022).

Role of Coaches and Athletic Staff as Advocates

Coaches and other athletic staff play a crucial role in fostering a culture that supports athletes' mental health. Coaches should understand how athletes internalize

pressures and be prepared to provide tailored support that reduces performance-related stress (Wayment & Huffman, 2020). Training for coaches should include mental health awareness to help them identify signs of mental health concerns and create a supportive environment where athletes feel comfortable discussing these issues (Purcell et al., 2019).

Creating a Supportive Culture

Universities must ensure that student-athletes are well-informed about where to seek help, such as counseling, stress management programs, and peer support groups (Hilliard et al., 2022). By cultivating an environment that normalizes and encourages mental health support, institutions can improve student-athletes' overall well-being, creating a more positive academic and athletic experience.

Limitations of Study

Sample Size and Representation

This study's small sample size (16 participants) limits the generalizability of its findings. Although purposive sampling ensured diversity in gender, race/ethnicity, and sport, the sample may not fully represent the broader population of collegiate athletes. Consequently, the results may not capture the unique challenges faced by specific subgroups within the student-athlete community, restricting the broader applicability of the findings. However, the goal of Q-methodology is to generalize to the discourse and not the population, and to this end, the current investigation was successful.

Reliance on Self-Reported Data

The study's use of self-reported data in the Subjective Happiness Scale (SHS) and follow-up questions presents potential for response bias. Participants may have exaggerated or minimized their experiences due to social desirability or psychological

factors, leading to inaccurate reporting of their mental health status. For instance, some athletes might have portrayed themselves as more resilient or satisfied than they are, thus overstating their well-being and coping abilities. This bias can affect the study's ability to accurately capture the mental health challenges faced by student-athletes.

Cross-Sectional Design

As a cross-sectional study, the research only provides a snapshot of student-athletes' mental health at a single point in time, which limits the ability to draw conclusions about causal relationships between stressors and mental health outcomes. This design restricts the understanding of how mental health issues develop or change throughout a student-athlete's college career.

Scope and Depth of Study

While this study aimed to provide a broad overview of multiple topics related to student-athlete mental health, its wide scope limited the depth of analysis on each individual issue. By addressing numerous areas—such as performance pressure, NIL dynamics, and academic-athletic balance—the study may have overlooked detailed, nuanced findings within each topic. Consequently, the results offer general insights but lack the specificity needed to fully understand each individual challenge. Future research could benefit from a more focused approach, dedicating greater attention to specific issues to yield deeper, more actionable findings.

Future Directions

To address these limitations, future research should aim for a larger sample size and adopt a random sampling method to improve the representativeness of the sample and increase generalizability of findings. Including a more diverse group across multiple

institutions and sports would allow for a broader exploration of the mental health challenges facing student-athletes. To reduce response biases that may occur with self-reported data, future studies should consider incorporating objective mental health measures, such as clinical assessments. This approach could offer a more accurate depiction of student-athletes' mental health status and yield reliable data to inform intervention and support strategies.

Longitudinal Studies

A longitudinal approach would enable researchers to track the mental health trajectories of student-athletes over time, revealing how mental health issues develop and evolve throughout their college years. This approach could identify key periods when interventions are most effective, supporting the creation of more targeted, long-term mental health policies and programs.

Comparative Studies Across Subgroups

Comparing mental health experiences across different subgroups—such as between genders, sports, and levels of competition (e.g., Division I versus Division III)—can uncover unique stressors and protective factors. Understanding these distinctions can guide the design of tailored support measures that address the specific needs of each group.

Intervention Research

Future research should prioritize testing mental health interventions specifically designed for student-athletes, such as mental health workshops, peer support initiatives, and stress management programs. Evaluating the effectiveness of these interventions can help identify the most beneficial resources for promoting well-being.

Cultural and Social Influences

Investigating how cultural and social factors affect student-athletes' mental health experiences can allow for further understanding of their challenges. Further, exploring how cultural backgrounds shape attitudes toward mental health and influence help-seeking behaviors may uncover valuable insights for developing culturally sensitive mental health programs.

Conclusion

This study emphasizes the significant mental health challenges that arise from balancing academic and athletic demands for student-athletes. Addressing these dual pressures is essential, and future research should focus on developing targeted interventions to alleviate these stressors. Overall, the findings emphasize the importance of mental health programs specifically designed for collegiate student-athletes. While acknowledging the study's limitations, these insights provide a foundation for further research to deepen understanding of the mental health landscape in collegiate sports. Such research can inform effective strategies and policies to better support student-athletes' well-being. The mental health of our college athletes must be prioritized above all else—beyond the pressures of NIL deals and beyond the pursuit of victory at any cost. These young individuals are not just athletes, but students, people, and future leaders, and their well-being is foundational to their success both on and off the field. A system that values performance over mental health compromises the long-term health and potential of the very athletes it seeks to celebrate. It is time to shift the narrative and recognize that the strength of athletic programs does not depend on the trophies accumulated, but in the resilience, balance, and holistic development of the athletes who make success possible.

Prioritizing mental health is an investment in athletes' futures, the strength of communities, and the true spirit of sport.

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Appendix A

Aug 18, 2024 2:25:43 PM EDT

Karen Larwin
Teacher Ed and Leadership St

Re: Modification - 2024-121 Overwhelmed by the Stress and Frustration to Perform to Expectations: Exploring this Phenomena within Student-Athletes

Dear Dr. Karen Larwin:

Youngstown State University Human Subjects Review Board has rendered the decision below for Overwhelmed by the Stress and Frustration to Perform to Expectations: Exploring this Phenomena within Student-Athletes

Decision: Exempt
Findings: Dear Investigator,

Your research project "Overwhelmed by the Stress and Frustration to Perform to Expectations: Exploring this Phenomena within Student-Athletes" (protocol #2024-121) has amended the protocol, which was previously approved earlier in the year. The amendment adds the inclusion of athletic academic advisors along with the head coaches for certain recruiting tasks for student athlete participants in the research.

The research project still meets the exempt definition of exempt research. You may continue your research accordingly with this amendment. Please note that it is the responsibility of the principal investigator to report immediately to the YSU IRB any deviations from the protocol and/or any adverse events that occur. If data collection exceeds beyond one year, please resubmit an extension with YSU-IRB prior to the deadline.

Best wishes for the successful completion of your research.

Daniel J. Keown
Designated IRB Reviewer
Youngstown State University

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,
Youngstown State University Human Subjects Review Board

Appendix B

Correlations between Q sorts																
Participant	4VQ6	5GZA	5T2L	8ZVI	92XI	AONH	EPNO	EWES	F2LD	NNX7	ONMX	OQ7P	Q8KQ	QR9R	UUD1	VW0Q
4VQ6	1	-0.06	0.22	-0.11	0.23	0.15	0.09	0.27	-0.21	0.27	0.41	0.24	0.19	0.2	0.21	0.22
5GZA	-0.06	1	0.27	0.03	0.13	-0.02	-0.32	-0.04	0.13	-0.14	-0.28	-0.22	0.1	0.15	0.09	-0.01
5T2L	0.22	0.27	1	0.29	0.26	0.36	0.32	0.22	0.27	0.12	0.11	0.16	0.02	0.12	0.2	0.2
8ZVI	-0.11	0.03	0.29	1	0.53	0.15	0.19	0.33	0	0.14	0.1	0.37	0.1	0.14	-0.11	0.04
92XI	0.23	0.13	0.26	0.53	1	0.1	-0.22	0.44	0.03	0.4	0.33	0.5	0.15	0.43	0.28	-0.06
AONH	0.15	-0.02	0.36	0.15	0.1	1	0.08	0.05	-0.14	0.17	-0.08	0.25	0.06	-0.13	0.06	0.2
EPNO	0.09	-0.32	0.32	0.19	-0.22	0.08	1	-0.05	-0.08	-0.21	0.06	0.06	-0.07	0.02	0.04	0.07
EWES	0.27	-0.04	0.22	0.33	0.44	0.05	-0.05	1	0.18	0.51	0.06	0.46	-0.15	0.16	0.23	0.38
F2LD	-0.21	0.13	0.27	0	0.03	-0.14	-0.08	0.18	1	-0.12	-0.18	0.09	-0.2	0.04	0	-0.11
NNX7	0.27	-0.14	0.12	0.14	0.4	0.17	-0.21	0.51	-0.12	1	0.26	0.39	0.01	0.23	0.29	0.28
ONMX	0.41	-0.28	0.11	0.1	0.33	-0.08	0.06	0.06	-0.18	0.26	1	0.32	0.2	0.54	0.2	-0.08
OQ7P	0.24	-0.22	0.16	0.37	0.5	0.25	0.06	0.46	0.09	0.39	0.32	1	-0.02	0.3	0.05	0.09
Q8KQ	0.19	0.1	0.02	0.1	0.15	0.06	-0.07	-0.15	-0.2	0.01	0.2	-0.02	1	0.15	-0.23	-0.33
QR9R	0.2	0.15	0.12	0.14	0.43	-0.13	0.02	0.16	0.04	0.23	0.54	0.3	0.15	1	0.16	0
UUD1	0.21	0.09	0.2	-0.11	0.28	0.06	0.04	0.23	0	0.29	0.2	0.05	-0.23	0.16	1	0.13
VW0Q	0.22	-0.01	0.2	0.04	-0.06	0.2	0.07	0.38	-0.11	0.28	-0.08	0.09	-0.33	0	0.13	1