



# Sport Social Work Journal

Volume 5,  
Issue 1, 2024

# Sport Social Work Journal (ISSN: 2835-5571)

[OpenJournals.bsu.edu/SportSocialWorkJournal](http://OpenJournals.bsu.edu/SportSocialWorkJournal)

[SSWJ.org](http://SSWJ.org)

## Editorial Board

Dr. Matt Moore (Ph.D, MSW) Miami University - Editor

Dr. Stacy Eileen Kratz (Ph.D, LCSW, CAP) 98point6 Inc. - Associate Editor

Dr. Nafees Alam (Ph.D, LMSW) Boise State University

Dr. Akilah Carter-Francique (Ph.D.) Benedict College

Dr. Marc Felizzi (Ph.D, LCSW) Millersville University

Dr. Paul Gorczynski (Ph.D., CPsychol, AFBPsS) University of Greenwich

Dr. Ginger Gummelt (Ph.D, LCSW) Lamar University

Dr. James Houle (Ph.D., ABPP) Ohio State University

Cindy Miller Aron (LCSW, CGP, FAGPA) Ascend Consultation in Healthcare

Dr. Tarkington Newman (Ph.D, MSW, MS) University of Kentucky

Daniel Pollack (MSW, JD) Yeshiva University

Dr. Jerry F. Reynolds (Ph.D, LMSW) Ball State University

Dr. Vanessa Robinson-Dooley (Ph.D, LCSW, CNP) Simmons University

Dr. Lorin Tredinnick (Ph.D, MSW, LSW) Kean University

Dr. Stéphanie Turgeon (Ph.D., Ps.éd.) Université du Québec en Outaouais

Dr. Khirey Walker (Ph.D., MS) Elon University

*Sport Social Work Journal is published and supported by Ball State University Libraries, Muncie, Indiana.*

*Sport Social Work Journal is supported by the [Alliance of Social Workers in Sport](#).*

[Visit the website](#) to submit a manuscript or to contact the editors. Authors retain copyright to their contributions but agree to license published content under a [Creative Commons Attribution-NonCommercial-NoDerivates 4.0 License](#).



**BALL STATE  
UNIVERSITY**

University Libraries



## Power 5 University Football Athletics: Consider Offering Social Work as a Degree Plan for Athletes

**Mikki E. Muglia**

*Anne and Henry Zarrow School of Social Work, University of Oklahoma*

---

*The profession of social work is meaningful – creating agents of change who are not afraid to challenge injustices while developing better communities. As activists, social workers promoted the need for athletes to be recognized as vulnerable due to their unique and definable identity and specific needs. Sport social work continues to expand, now reaching into creating practicum field placements for social work students in athletic departments. This article asks the most prominent universities to consider empowering their football athletes to complete a social work degree. Social work is highly versatile and can be tailored to help the student-athlete who has a goal of opening a non-profit, making policies, or becoming a licensed clinician. Furthermore, this article will discuss equipping student-athletes to help each other and their communities by attaining a social work degree.*

*Keywords: sport social work, football, Division I football, Power 5, student-athlete, social work degree*

College football players experience past, present, and future forms of distinctive and specific pressures, demands, and expectations on and off the field. In addition to the pressure, Power 5 Division I football teams' athletes must be recognized as having their own athletic identity and culture. Student-athletes should be encouraged by support staff to explore career options and not simply a degree. Power 5 Division I conference schools should consider supporting a social work degree for football student-athletes, which can provide a lifelong career that empowers athletes with a purpose, a sense of belonging, and the ability to impact their community once the game inevitably ends.

### **A Vulnerable Population**

The National Association of Social Workers (NASW) (n.d.) states that the profession's mission is to improve the lives of individuals and communities. The evidenced-based practice profession heavily relies on its code of ethics which dictates a social worker's strength in values

of integrity, cultural humility, social justice, and competence (Moore & Gummelt, 2018). Furthermore, the Preamble of the National Association of Social Worker's Code of Ethics (2023) reads, "The primary mission of the social work profession is to enhance human well-being and help meet the basic human needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed, and living in poverty." Social work focuses on the person in their environment, can understand their background and know how to apply it to the situation, and can utilize tools and techniques to provide helpful services (NASW, n.d.).

Researchers explain that with the risk of exploitation, unique physical and behavioral health, and identity issues, the athlete population can be considered vulnerable and needs specialized services (Gill Jr., 2008; Bennett, 2022; Harper, 2018; Hruby, 2021). On a micro level, sports can inspire, teach grace and respect for others, and show how to set goals (Moore & Gummelt, 2018). On a macro level, sports can unite community members and tackle physical and psychological social problems (Moore & Gummelt, 2018). While sports have positives, there are just as many negatives, especially on an elite playing level like a Power 5 Division I conference team. Power 5 university teams make millions of dollars in programming from football and basketball, with the athletes targeted for commercial gain (Broughton, 2020; Dodd, 2023). Now that athletes can profit from their name, image, and likeness (NIL), they are heavily recruited by both universities and corporate sponsors (Thompson, 2022). High school-student-athletes frequently make long-term and psychologically intense decisions without financial or legal guidance and support (Thompson, 2022).

Athletes should be recognized as a vulnerable population by which social workers can respond to their needs accordingly. With increasing awareness, the subfield of sport social work has gained popularity (Michael, 2023). Sport social work programs and certifications currently focus on but are not limited to, understanding and supporting athletes across their lifespan, helping athletes use their platforms for social justice awareness, and providing mental health services (Moore & Gummelt, 2018). As sport social work continues to emerge, student-athletes could be encouraged to choose the field. Retired athletes can become social workers and gain licensure as clinicians who can care for themselves, each other, and their communities.

### **Inside an Athlete**

Division I college athletes are challenged to find stability between their roles as athletes and students, but internal and external influences can often obstruct the balance. Success in football relies on an equivalent outcome in the classroom, as good academic standing dictates the chance to compete (Yukhymenko-Lescroart, 2014). Moreover, all student-athletes are unique individuals with diverse socioeconomic backgrounds, coming from different stages of personal, professional, and academic development.

Athletes are not invincible to pain, mental health symptoms, or adversarial social situations. Diverse professional backgrounds agree that athletes are vulnerable to mental health concerns such as depression, anxiety, eating disorders, substance abuse, and suicide (Houltberg, 2018; Reardon et al., 2017; Ströhle, 2019). Depression and anxiety are common among athletes, especially student-athletes of color and those who report family economic hardships (NCAA, 2022). Covid-19 had a lasting effect on this population, who continue to report up to two times higher rates of anxiety, depression, and mental exhaustion post-pandemic (NCAA, 2022). Mental

health symptoms and disorders, unique social situations, and intense and often life-long pain commonly co-occurs with the athletic population.

College athletes can spend up to 50 hours a week involved physically and mentally in their sport, resulting in positive and negative consequences (Hruby, 2021; Porter, 2019). On the positive side, football coaches can teach values of hard work, respect, honesty, trust, punctuality, personal responsibility, and family (Hughes, 2010). However, hard work and long hours may not be rewarded with an National Football League (NFL) career. In 2019, for Power 5 schools, an estimated 197 athletes out of 1,769 eligible players were drafted into the NFL, resulting in an 11% chance of making it “pro” (NCAA, 2020). These statistics show the intense pressure an athlete has to perform, which can result in anxiety, increasing preseason injury rates (Li et al., 2017).

An athlete’s behavioral health extends outside of traditional diagnoses, as physical injuries, trauma to the body, and watching someone get hurt can also affect one’s mental health. Physical risk factors include concussions, chronic traumatic encephalopathy (CTE), bacterial infections, and over-training injuries (Ströhle, 2019). Researchers have found that post-traumatic stress disorder (PTSD) can be incurred from direct physical injury, abusive power dynamics, and witnessing traumatic events within teams (Aron et al., 2019). PTSD can impact an athlete’s psychosocial functioning and delay recovery from musculoskeletal injuries (Aron et al., 2019). Post-concussion depression can occur in athletes who have had a concussion; however, if neither injury nor depressive symptoms are reported, it is hard to treat the individual (Sarac et al., 2018).

Social work looks into the micro, mezzo, and macro work and will try to understand the athlete’s situational and environmental factors like social justice and racial issues, academic and learning concerns, adverse childhood experiences, and how being away from family members can pose a significant risk to the mental health of a college student-athlete (Harper, 2018; O’Hara, 2020; Reardon et al., 2017; Stokowski et al., 2017; Agyemang et al., 2010; Williams, 2010). When asked about family finances and mental health, student-athletes reported feeling overwhelmed by all they had to do (65%), that they felt mentally exhausted because of it (58%), and that they were experiencing sleep difficulties (49%) and anxiety (46%) (NCAA, 2022). Black men reported higher concerns of financial worries (38%) compared to white men (21%) (NCAA Research, 2022). The numbers are less surprising when considering research shows minority men are generally recruited from schools with fewer resources than white men, automatically giving them a disadvantage (Harrison et al., 2006). However, when black male athletes attempt to prioritize academics, researchers have found that sometimes the athletes are discouraged by coaching staff and instead told to focus on the sport (Martin et al., 2010). Sports are often a way out of past circumstances for any individual, particularly people of color and from lower socio-economic backgrounds who spend their entire lives up until this point building a career (Edwards, 2000).

## Applicable Theories

### Identity Theory

In identity theory, an individual has a role within a social structure they have identified with and belong to and have created for themselves a unique way of presenting and identifying themselves within that structure (Burke & Stets, 2009). Role, group, and personal identities will

form to create one complete identity structure (Burke & Stets, 2009). Additionally, an individual relies on verification from their social group to remain balanced; both positive and negative messages can affect an individual's emotional state (Burke & Stets, 2009). In general, identities are thought to be stable, but can change over time and can include crisis moments (Barriopedro et al., 2019; Burke & Stets, 2009).

The athletic identity is distinct, comes with values, norms, and rules, and can be measured with the Athletic Identity Measurement Scale (Brewer et al., 1993). This population presents with its own unique set of conditions, and prior knowledge and anticipation can assist. Researchers state that an athlete's expectations often require a refusal to accept limitations, strive for perfection, taking on pain and risk while defining these norms as "positive deviance" (Bennett, 2022). Most athletes begin training young to become elite-level football players, such as those that play for a Power 5 Division I conference school (Haugaasen et al., 2014; Wiersma, 2000). Additionally, research shows that black men are taught from an early age to place sports above education (Harper, 2018). Most elite-level athletes have played their entire lives, training many hours of the day to be able to play at a Division I school.

Furthermore, research shows that retirement from an athletic career could create an identity crisis (Barriopedro et al., 2019). When the time comes to transition out of football, the athletic identity can have a negative effect on the individual, including the avoidance of exploring other career options and comprehensive self-well-being (Harrison et al., 2014; Mathews et al., 2021). However, for many young men, their athletic identity is who they are, and they thrive when others know they are an athlete (Harrison et al., 2014). Researchers know that transitional responses can include psychological distress (anxiety, depression, stress) and lead to college student-athletes being unprepared for life after sport (Mathews et al., 2021).

### **Social Cognitive Career Theory**

The social cognitive career theory (SCCT) aims to explain how academic experiences influence someone's educational and future career choices, thereby gaining personal success through goal setting. The model consists of three cognitive variables in which self-efficacy, outcome expectations, and personal goals interact to affect performance and choices (Brown, 2002). As the most researched pillar of the three, self-efficacy allows for the ability to identify career goals and barriers, making transitions easier when necessary (Brown, 2002; Wendling & Sagas, 2020). Self-efficacy is a psychological concept that often refers to one's belief in themselves and can influence their confidence, behavior, motivation, and abilities to accomplish tasks and create goals. Research shows that fueling interests through goal setting strengthens competency, which will build confidence and self-efficacy (Brown, 2002). School inevitably ends for all players, regardless of an NFL career, and utilizing the social cognitive career theory model may assist with closing the gap between academic and career development. After a lifetime investment, students with strong athletic identities may need help setting goals outside their competing sport (Lally & Kerr, 2005). SCCT research in sports shows that confident, conscientious, extroverted, and open student-athletes can quickly implement steps and make goals when necessary (Wendling & Sagas, 2020). Student-athletes who perceived positive outcomes of career choices had higher self-efficacy, and those who were conscientious had a better understanding of themselves with which to create future career plans (Demulier et al., 2013). Furthermore, research has found that coaches do not directly influence an athlete's

decision but that self-efficacy and internal confidence are the keys to advancing life after sport (Wendling & Sagas, 2020). Using SCCT's transition resources to build self-efficacy, manage outcome expectations, and establish career goals, common biopsychosocial barriers among student-athletes are surpassed.

### **Life After Sports**

Activists, researchers, and athletes are asking for more options for life after sports (Harrison et al., 2014; Hruby, 2021; NCAA, 2016; Wendling & Sagas, 2020). Football players spend up to 50 hours in football-related activities, so it is crucial to responsibly manage their small academic window of time (Hruby, 2021; Porter, 2019). However, athletes recognize their time commitment to practice, and the game is extensive and directly affects their degree and career choices (Hruby, 2021; Porter, 2019). Consequentially, in a 2016 study by the NCAA, student-athletes, and coaches supported moving toward spending less time in sport-related activities for career and educational development (NCAA, 2016).

General career preparation and planning include exploring alternative career options, experiencing non-athletic activities, and acknowledging there will be a life after football eventually (Wendling & Sagas, 2020). Some research has found that at many Division I schools, athletes are forced to choose between football and academics, often resulting in a more manageable or attainable degree than the one they had wanted (Jayakumar & Comeaux, 2016). The top five popular majors at Power 5 schools include communications, social sciences, business, interdisciplinary studies, and arts and sciences (Ferguson, 2016). Social sciences, including sociology, human science, and behavioral sciences, have become increasingly popular choices for football student-athletes (Ferguson, 2016). This suggests choosing a degree to further life after sports is optimal but is only sometimes considered or pursued.

### **Understanding The Power 5's Impact**

In the NCAA, 65 universities comprise the Power 5 conferences: Atlantic Coast Conference, Big Ten Conference, Pac-12 Conference, Big 12 Conference, the Southeastern Conference, and Notre Dame. High school athletes hoping to make it to the NFL will likely want to play for one of these larger conference schools as it raises their draft chances. Between 2016 and 2021, 145 first-round draft picks were chosen from the Power 5; comparatively, 14 made it from smaller conferences (Fox Sports, 2021). Furthermore, Power 5 schools can offer better scholarships and (NIL) related initiatives (Bromberg, 2021).

The Power 5 have an immense ascendancy that should be used for the betterment of their football players. In 2015, during the NCAA annual convention, Power 5 universities were granted autonomy allowing these conferences to become a sub-division of Division I schools. The restructuring allowed for Power 5 athletic departments to disperse their resources easier, like monetary allocations to athletes, without smaller schools blocking through votes. With many schools moving conferences, some feel the need for the Division to be restructured again, primarily because of how much each school can afford to offer the athlete for scholarships (Dellenger, 2022). A future convention will likely hear of the requests for restructuring all three Divisions so that each can make its legislation according to the specific needs of their athletics (Dellenger, 2022). With newfound, growing strength, The Power 5's autonomy has created

beneficial laws such as requiring all Division I schools to make mental health resources and services available through the athletic department or a counseling service department (Hosick, 2019). Additionally, the NCAA's Constitution was updated to reflect their stance on athlete's health and overall well-being by adding the term "mental health" into the Constitution. For example, to destigmatize and legitimize mental health, the Constitution now reads, "facilitate an environment that reinforces physical and mental health within athletics by ensuring access to appropriate resources and open engagement with respect to physical and mental health" (NCAA, 2023).

While these changes suit student athletes' mental health, little has changed concerning time off the playing field. Aside from a few general rules, most have remained steady, stating indeterminate education hours, training times, and games allowing dictation by the schools (NCAA, 2023). The undefined terms of the NCAA Constitution could be why smaller Division I schools can offer specialized courses, and larger schools, particularly those with Division I basketball and football programs, push student athletes into less academically challenging programs. Others believe it to be the NCAA minimum academic requirements that allow the coaches to pressure athletes into less marketable degree programs simply to keep up with a player's eligibility standards (Childs Jr., 2021).

### **Future Considerations**

Elite-level football student-athletes face numerous obstacles on their sprint to an NFL career that might not materialize for various factors. Coaches, family, doctors, teachers, and others, can influence decisions. However, the one with all the power to vindicate a player's destiny is themselves. Student-athletes have unique values and beliefs, distinct identities, and specific mental and physical characteristics but are not alone because they have each other. Student-athletes can become social workers, who in turn, can circle back to help raise up the next group of student-athletes because they understand each other best.

Power 5 Division I conference schools should consider supporting a social work degree for football student-athletes. A social work degree provides person-centered growth and professional and interpersonal development. The degree choice can be partnered with the student's athletic identity and the social cognitive career theory model to become successful. Social work provides a career that empowers the athlete with a purpose and a sense of greater belonging once the game inevitably ends. The idea is not revolutionary. For example, the Baltimore Ravens hired a former linebacker to become the team's director of player engagement, who holds a position that educates current players on financial education, community activities, and internships in careers outside of anything sports-related (Smith, 2019). Nevertheless, once again, not every athlete makes it to the NFL, and student-athletes can be equipped to help themselves and their teammates through a social work degree they can obtain while they play their sport in college.

Additionally, as sport social work is a newly emerging area, this paper recommends further research in Division I football as an exemplar for expanding and scaling programs into other athletic venues and as a bridge to further understanding resource allocation in athletic departments. Power 5 football athletic departments are the most well-financed and resourced of all collegiate sports. More research will help understand how these resources can be used to improve lifelong outcomes for all student-athletes.

### References

- Agyemang, K., Singer, J. N., DeLorme, J. (2010). An exploratory study of black male college athletes' perceptions on race and athlete activism. *International Review for the Sociology of Sport*, 45(4), 419-435.
- Aron, C. M., Harvey, S., Hainline, B., Hitchcock, M. E., & Reardon, C. L. (2019). Post-traumatic stress disorder (PTSD) and other trauma-related disorders in elite athletes: A narrative review. *British Journal of Sports Medicine*, 53(12), 779-784.
- Barriopedro, M., López de Subijana, C., Muniesa, C., Ramos, J., Guidotti, F., & Lupo, C. (2019). Retirement difficulties in Spanish athletes: The importance of the career path. *Sport, Exercise, and Performance Psychology*, 8(4), 387-400.
- Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology*, 24(2), 237-254.
- Bromberg, L. (2021, July 1). *In the NIL arms race, some schools are going the extra mile to help their athletes*. Sports Illustrated. <https://www.si.com/college/2021/07/01/name-image-likeness-programs-schools-ncaa>.
- Broughton, D. (2020, August 17). Power five: An \$8.3 billion revenue powerhouse. *Sports Business Journal*.  
<https://www.sportsbusinessjournal.com/Journal/Issues/2020/08/17/Colleges/Revenue.aspx>
- Brown, D. (2002). *Career choice and development* (4<sup>th</sup> ed.). Jossey-Bass.
- Burke, P. J., & Stets, J. E. (2009). *Identity theory*. Oxford University Press.
- Childs Jr., D. R. (2021). Experiences of division I football black male student-athletes and their perceptions of career and professional development. [Dissertation]. ProQuest Dissertations Publishing.
- Dellenger, R. (2022, January 20). *The fight over the future of college sports is here: 'It needs to implode.'* Sports Illustrated. <https://www.si.com/college/2022/01/20/ncaa-future-power-5-football-basketball-money>.
- Demulier, V., Scanff, C. L., & Stephan, Y. (2013). Psychological predictors of career planning among active elite athletes: An application of the social cognitive career theory. *Journal of Applied Sport Psychology*, 25(3), 341-353.

- Dodd, D. (2023, March 16). *Arizona president talks keeping Pac-12 together, TV deal expectations, deadlines, Big 12 interest and more*. CBS Sports. <https://www.cbssports.com/college-football/news/arizona-president-talks-keeping-pac-12-together-tv-deal-expectations-deadlines-big-12-interest-and-more/>.
- Edwards, H. (2000). Crisis of Black athletes on the eve of the 21<sup>st</sup> century. *Society*, 37(3), 9-13.
- Ferguson, J. (2016, August 18). *Most popular academic majors for 2016 Power 5 conference football players*. Bleacher Report. <https://www.bleacherreport.com/articles/2658255-most-popular-academic-majors-for-2016-power-5-conference-football-players>.
- Fox Sports. (2021, April 22). *On the outside looking in: How non-Power 5 players are woefully overlooked*. <https://www.foxsports.com/stories/nfl/power-5-recruiting-nfl-draft-treylance>.
- Gill Jr., E. L. (2008). Mental health in college athletics: It's time for social work to get in the game. *Social Work*, 53(1), 85-88.
- Harper, S. R. (2018). Black male student-athletes and racial inequities in NCAA division I college sports: 2018 edition. *Los Angeles University of Southern California Race and Equity Center*. <https://abfe.issuelab.org/resources/29858/29858.pdf>.
- Harrison, C. K., Comeaux, E., & Plecha, M. (2006). Faculty and male football and basketball players on university campuses: An empirical investigation of the "intellectual" as mentor to the student athlete. *Research Quarterly for Exercise and Sport*, 77(2), 277-284.
- Harrison, C. K., Tranyowicz, L., Bukstein, S., McPherson-Botts, G., & Lawrence, S. M. (2014). I am what I am? The Baller Identity Measurement Scale (BIMS) with a division I football team in American higher education. *Sport Sciences for Health*, 10, 53-58.
- Haugaasen, M., Toering, T., & Jordet, G. (2014). From childhood to senior professional football: Elite youth players' engagement in non-football activities. *Journal of Sports Sciences*, 32(20), 1940-1949.
- Houltberg, B. J., Wang, K. T., Qi, W., & Nelson, C. S. (2018). Self-narrative profiles of elite athletes and comparisons on psychological well-being. *Research Quarterly for Exercise and Sport*, 89(3), 354-360.
- Hosick, M. B. (2019, January 24). *Access to mental health services guaranteed by autonomy conferences*. NCAA. <https://www.ncaa.org/news/2019/1/24/access-to-mental-health-services-guaranteed-by-autonomy-conferences.aspx>.
- Hruby, P. (2021, September 21). *'They don't feel adequately prepared': How schools struggle to ready athletes for success after college sports*. Global Sport Matters.

<https://globalsportmatters.com/research/2021/09/21/schools-struggle-ready-athletes-success-after-college-sports-ncaa-eddie-comeaux/>.

Hughes, W. R. (2010). *A comparison of high school football coaches' personal, American cultural and football values* (Publication No. 3458504) [Doctoral dissertation, Michigan State University]. ProQuest Dissertations and Theses Global.

Jayakumar, U. M., & Comeaux, E. (2016). The cultural cover-up of college athletics: How organizational culture perpetuates an unrealistic and idealized balancing act. *Journal of Higher Education*, 87(4), 488-515.

Lally, P. S., & Kerr, G. A. (2005). The career planning, athletic identity, and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport*, 76(3), 275-285.

Li, H., Moreland, J. J., Peek-Asa, C., & Yang, J. (2017). Preseason anxiety and depressive symptoms and prospective injury risk in collegiate athletes. *The American Journal of Sports Medicine*, 45(9), 2148-2155.

Mathews, A. M., Berger, B. G., Darby, L. A., Owen, D. R., & Tobar, D. A. (2021). Athletic identity, career maturity, and subjective well-being of NCAA division I and III football players. *Journal of Sport Behavior*, 44(3), 321-338.

Michael, M. (2023, July 14). New course introduces students to emerging field of sport social work. *Health and Society*. <https://news.syr.edu/blog/2023/07/14/new-course-introduces-students-to-emerging-field-of-sport-social-work/>.

Moore, M. A. & Gummelt, G. (2018). *Sport social work: Promoting the functioning and well-being of college and professional athletes*. Cognella Academic Publishing.

NCAA. (2023, August 20). *Division I 2023-24 Manual*. <https://web3.ncaa.org/lstdbi/reports/getReport/90008>.

NCAA. (2020, April 20). *Football: Probability of competing beyond high school*. <https://www.ncaa.org/sports/2015/2/27/football-probability-of-competing-beyond-high-school.aspx>.

NCAA. (2022, May). *NCAA student athlete well-being study (Fall 2021)* [PowerPoint slides]. [https://ncaaorg.s3.amazonaws.com/research/other/2020/2022RES\\_NCAA-SA-Well-BeingSurveyPPT.pdf](https://ncaaorg.s3.amazonaws.com/research/other/2020/2022RES_NCAA-SA-Well-BeingSurveyPPT.pdf).

NCAA. (2016, April). *Results of division I time demands survey*. [PowerPoint slides]. [https://ncaaorg.s3.amazonaws.com/research/d1/2016D1RES\\_TimeDemandsSurvey.pdf](https://ncaaorg.s3.amazonaws.com/research/d1/2016D1RES_TimeDemandsSurvey.pdf).

- O'Hara, D. (2020, August 27). *Athletes protesting social injustice get support from sport psychologists*. American Psychological Association. <https://www.apa.org/members/content/athletes-protest-social-injustice>.
- Reardon, C. L. (2017). Psychiatric comorbidities in sports. *Neurologic Clinics*, 35(3), 537-546.
- Sarac, N. J., Sarac, B., Pedroza, A., & Borchers, J. (2018). Epidemiology of mental health conditions in incoming division I collegiate athletes. *The Physician and Sports Medicine*, 46(2), 242-248.
- Smith, L. (2019, November 26). *Some athletes struggle with life after games end*. Global Sports Matters. <https://globalsportmatters.com/business/2019/11/26/some-athletes-struggle-with-life-after-games-end/>.
- Stokowski, S., Blunt-Vinti, H., Turk, M., Hardin, R., Goss, B. D. (2017). I know I can learn: The perceptions of NCAA division I football college athletes with learning disabilities [Special issue]. *Journal of Issues in Intercollegiate Athletics*.
- Ströhle, A. (2019). Sports psychiatry: Mental health and mental disorders in athletes and exercise treatment of mental disorders. *European Archives of Psychiatry and Clinical Neuroscience*, 269, 485- 498.
- Thompson, T. P. (2022). Maximizing NIL rights for college athletes. *Iowa Law Review*, 107(1) 1347-1387.
- Wendling, E., & Sagas, M. (2020). An application of the social cognitive career self-management to college athletes' career planning for life after sport. *Frontiers in Psychology*, 11(9), 1-14.
- Wiersma, L. D. (2000). Risks and benefits of youth sport specialization: perspectives and recommendations. *Pediatric Exercise Science*, 12(1), 13-22.
- Williams, C. (2010). *Environmental factors affecting elite young athletes*. Medicine and Sport Science.
- Yukhymenko-Lescroart, M. (2014). Students and athletes? Development of the Academic and Athletic Identity Scale (AAIS). *Sport, Exercise, and Performance Psychology*, 3(2), 89-101.



## Mental Health Training for Coaches: A Policy, Practice, and Research Commentary

**Samantha Bates**

*College of Social Work, The Ohio State University*

**Obidiah Atkinson**

*Physical Education Department, State University of New York Cortland*

---

*This commentary connects policy, practice, and research to provide an update on the status of mental health education and training for coaches, specifically those in K-12 educational settings. Our aim is to discuss current needs regarding student-athlete mental health and advocate coaches be trained on best practices regarding mental health to empower them to go beyond the “X’s and O’s.” We sought to advance the conversation on training coaches by mapping the current policy landscape of coach training and education in the U.S. regarding mental health, summarizing best practices for developing mental health trainings, and outlining opportunities for future research. For sport social workers, understanding the landscape across policy, practice, and research can help us work toward the mission of promoting individual and community well-being through partnerships between social work and athletics.*

*Keywords: policy, mental health training, coaches, practice, research*

**T**he landscape of sport is constantly evolving, and so too are the needs of new generations of student-athletes. The National Collegiate Athletic Association (NCAA, 2021) Student-Athlete Well-being Survey indicated that student-athletes are experiencing elevated levels of mental exhaustion, anxiety, hopelessness, and feelings of depression. Risks for mental health concerns were the highest among females, student-athletes of color, those identifying as LGBTQ+, and athletes experiencing economic hardships. Comparable concerns also are evident among high school-aged adolescents, and about half of all high school students in the United States (U.S.) play on at least one sport team annually (Centers for Disease Control and Prevention [CDC], 2023). Among high schoolers, the CDC (2022) reported that 37% of youth reported feeling persistently sad or hopeless, and 19% seriously considered attempting suicide in the past year. In response to these alarming trends, the U.S. Surgeon General put forth an advisory statement calling for a swift, coordinated, and interprofessional response to address the

youth mental health crisis. The statement reflects growing concerns relevant to social workers across sectors of sport, education, mental health, child welfare, and other youth-serving systems regarding the need to support young people's mental health and well-being (Barker et al., 2021; U.S. Surgeon General Advisory, 2021).

Of additional concern, student-athletes playing in interscholastic school settings are known to experience stigma and immense pressures increasing their risks for poor psychological health and maladaptive coping compared to other populations. In fact, the NCAA (2020) Goals Study found 24% to 31% of collegiate student-athletes admitted feeling significantly overwhelmed while balancing academics and athletics. Moreover, 91% of high school student-athletes reported experiencing heightened stressors associated with sport participation (Ward et al., 2023). While some acute stress is healthy and may boost performance, chronic or sustained stress can lead to mental health concerns like depression and anxiety (Schneiderman et al., 2005). Coupled with these trends are the long-lasting effects of the COVID-19 pandemic and ever-evolving sociocultural issues in sport (i.e., recruitment pressures; name, image, likeness; social media; hazing; discrimination; resource inequities, etc.) that have likely only exacerbated risks for heightened stress among student-athletes. Now more than ever, coaches must be equipped to support student-athletes by teaching life skills to help them cope with adversity and recognize, address, and respond to mental health concerns.

While there is a pressing need to prepare coaches, the policy context reflects a landscape where attention is often paid to ensuring coaches are trained to respond to safety concerns and teach tactics and techniques, not to respond to mental health concerns. As a result, gaps in training likely contribute to low confidence levels and missed opportunities for coaches to support student-athletes beyond the field, mat, court, etc. Indeed, findings from the U.S. National Coach Survey (Anderson-Butcher & Bates, 2022) conducted primarily with high school coaches indicated only 29% of coaches report feeling confident in their ability to address student-athlete mental health concerns, yet 76% are interested in more training on mental health. Findings illuminate opportunities to improve coach efficacy beyond traditional coaching practices to include a focus on promoting overall health and development with an emphasis on mental health. However, the status of mental health training for coaches working in interscholastic school settings remains relatively unidentified from a policy, practice, and research perspective.

The purpose of this commentary is to (a) map the current policy landscape of training and education for school-based coaches in the U.S. regarding mental health; (b) summarize findings on best practices for mental health interventions and trainings for coaches, and (c) outline opportunities for future research regarding mental health trainings for coaches. Our commentary focuses on coaches connected to educational settings, notably those in K-12 contexts, defined as school-based coaches. School-based coaches represent educators and community members coaching sports affiliated with public, private, or charter K-12 schools and governed by state entities including sport associations, interscholastic athletic association, educational governing bodies (e.g., Departments of Education), or local boards. We focus on this population of school-based coaches in lieu of the on-going youth mental health crisis and because schools are significant to social workers as the largest subspecialty in the profession are practitioners working in child and family settings (Council on Social Work Education, 2020).

Understanding the landscape of coach education and training in K-12 contexts can inform and improve school and sport social work practice and research in areas of prevention and intervention. Our commentary also synthesizes findings from systematic and narrative reviews

published in the last five years on best practices regarding mental health training for coaches (Bissett et al., 2020; Breslin et al., 2022). We conclude by describing opportunities for future research opportunities for sport social workers to play a role in advancing coach education and training through advocacy, practice, and scholarship.

### **Policy Landscape**

Education and training for school-based coaches in the U.S. is complex and overseen by multiple entities (Fawver et al., 2020; Van Mullem & Mathias, 2021). To date, no centralized governing body in the U.S. approves coach education and training requirements, provides oversight of training content, assesses the impact of training requirements, facilitates access to open learning environments, or sets supervision standards to continuously improve coaching education. Rather, state- and local-governing bodies such as interscholastic athletic associations, educational entities (e.g., state departments of education), state activity associations, principal associations, and individual school districts are those designated to set coach training requirements and enact licenses to school-based coaches (Atkinson et al., 2022). The benefit of this decentralized approach is that individual states and municipalities can administer training requirements that meet their local, specific, and contextualized needs. Alternatively, the downfall of this approach is a lack of consistency by state, resulting in discrepancies in coach preparation and training expectations by geographic region. Atkinson and colleagues (2022) document evidence of this widespread disarray in training requirements and licensure processes for school-based coaches, noting how this structure contributes to differences in content, costs, and compliance criteria (e.g., annually, biannually) across the U.S.

Beyond variable governance structures, licensure processes for school-based coaches in most states also prioritize training on physical health and safety-related issues, not mental health. For example, all states mandate training on concussions and 92% of states cover first aid and cardiopulmonary resuscitation. In addition, 57% of states require sudden cardiac arrest training and 33% of states have added a training on heat illness/acclimatization to their coach licensure process (Atkinson et al., 2022). This emphasis on physical health and safety is important to safeguard student-athletes from injuries, a protective factor when thinking about the prevention of mental health concerns. However, only 8% of states require training on character education that covers the content areas of sportspersonship, citizenship, and ethics in youth sports. Moreover, several states only require coaches to complete one sport pedagogy-related training, which often includes coaching strategies such as establishing a team culture and using effective instruction and management skills. Unfortunately, the curricula within these trainings often fail to go beyond the “X’s and O’s” and physical health and safety. To demonstrate, Atkinson and colleagues (2022) conducted an internal audit of training content within Ohio’s coach training requirements. The authors found that only 19% of nearly 14 hours of content focused on social-emotional health or principles of positive youth development as compared to 54% of curricular content dedicated to physical health and safety. Results are concerning as a lack of emphasis on these topics certainly does not aid nor intervene in the prevention of mental health concerns.

In regard to intervening and responding to mental health crises, we argue coaches are even more ill-equipped based on the current policy landscape. To our knowledge, only two states mandate training for school-based coaches on mental health explicitly. Indeed, Ohio is the first state to mandate mental health training for coaches at the state level. House Bill 33, passed in

July of 2023, is the first of its kind in the U.S. and will be embedded within Ohio's coach licensure process. The goal of this training is to equip coaches with the tools needed to identify mental health issues and link and refer student-athletes to mental health supports in their schools and communities. Although the list of trainings that meet state requirements is not yet public, curricula are being reviewed and approved by Ohio's Department of Mental Health and Addiction Services. This partnership demonstrates evolving cross-sector collaborations that are unprecedented in other states. Moreover, in New York, coaches are required to complete a training on the "Theory and Techniques of Coaches" and "Philosophy, Principles, and Organization of Athletics in Education". These trainings cover various topics, including coaches' responsibilities as an educator, motivational techniques, and effective coaching methodologies, and recently has added topics related to supporting student-athlete mental health.

Beyond these two states that mandate mental health trainings, some states have started to offer additional opportunities for coaches to learn about supporting student-athlete mental health. For example, Wyoming and Michigan offer supplemental summer clinics for coaches; however, these trainings are not mandated at the state level. In Wyoming, coaches can enroll in the "Theory of Coaching" training, which covers sport-specific content related to human development and the developmental psychology of student-athletes. Michigan State University's Institute for the Study of Youth Sport also offers coaches the opportunity to enroll in their summer coaches' school as credit in Michigan's "Coach Advancement Program." The central theme of the summer school varies each year and allows coaches to hear from trained experts in domains of athlete development and mental health on topics such as engagement, coping, stress, burnout, and psychological safety in sport. Locally, principal associations and school districts may mandate mental health training for coaches, yet within the broader decentralized structure, one could argue that historically this is likely a small percentage due to trends in coaches' confidence levels addressing mental health concerns among student-athletes. This policy context highlights immense opportunities for coalition-building and advocacy to ensure sport is a context that focuses on the whole child, not just the athlete.

### **Practice Landscape**

If future efforts aim to address gaps in mental health training for coaches nationwide, sport social workers, policymakers, and sport leaders will need to understand best practices regarding the design and delivery of mental health interventions. Recently, Breslin and colleagues (2022) conducted a systematic review of sport-focused mental health awareness programs that utilized experimental or quasi-experimental designs. Scholars identified five studies examining mental health trainings implemented with coaches that varied in time and content. Across studies synthesized in this review, scholars found mental health trainings for coaches often ranged from 1.5 to 12 hours and included psychoeducational content, case studies, role play, videos, and discussions. Such approaches were effective for increasing knowledge, such as recognition of mental illness and depression and anxiety literacy and increasing confidence in one's ability to help (Bapat et al., 2009; Breslin et al., 2017; Pierce et al., 2010; Sebbens et al., 2016). Of interest to sport social workers, coaches who participated in an 8-hour mental health first aid training reported reductions in stigma, increased knowledge of mental disorders, and increased confidence in their ability to help someone (Bapat et al., 2009). This may be one avenue to collaborate with school-based coaches to address training gaps.

Researchers have also reviewed extant literature to frame the role of sport coaches in mental health prevention and promotion to guide education and training development. Bissett and colleagues (2020) conducted a narrative review on the role of coaches and mental health help-seeking behaviors. Across 21 studies and using a modified Delphi method, Bissett et al. (2020) concluded that at the primary level, coaches can support mental health by communicating and placing value on the role of seeking help, as well as describing their roles and responsibilities in supporting mental health in accordance with organizational protocols. In addition, coaches can engage in healthy self-care and avoid stigmatizing language to promote positive behaviors among student-athletes. At the secondary level, coaches need to attend to behavioral changes among athletes, respond within the appropriate bounds to connect athletes to resources, and initiate referrals consistent with organizational protocols in the event of an emergency. Finally, at the tertiary level, coaches can protect confidentiality and modify sport-related demands to keep athletes engaged with the team and accommodate their treatment needs while engaged in mental health services (Bissett et al., 2020). This review, informed and co-developed with and among coaches, denotes opportunities to develop trainings that helps coaches foster supportive team cultures, encourage care-seeking, and support student-athletes receiving treatment or those in crisis.

### **Research Landscape**

Notably, research on best practices continues to emerge, especially in lieu of the mental health crisis in schools following the COVID-19 pandemic. For sport social workers, this presents opportunities to build upon existing research to illuminate evidence-based approaches and inform policy change, as evidenced by Bates and colleagues (2023). As a starting point, however, more research is needed to identify effective design elements, dosages, and content areas that result in behavioral changes for coaches. Further, scholars have opportunities to explore whether enacting uniform regulations and consistent training requirements across states improve coaches' perceptions of readiness to support student-athlete mental health or influence the behaviors of school-based coaches in practice (i.e., Do policy mandates related to mental health trainings translate to changes in coach behaviors and competencies?).

In addition, we must focus efforts on tailoring trainings toward the developmental needs of student-athletes. Several studies within Breslin and colleagues' (2022) review did not focus on trainings implemented in K-12 settings, pointing to gaps in our understanding of what training format and content works, for whom, under what circumstances, and why. Future research studies examining implementation practices also are warranted, such as those focusing on factors associated with delivery, including coaches' levels of readiness and buy-in, the backgrounds of the trainers, and the extent of input provided by coaches, athletic directors, and mental health providers in developing the training sessions.

Scholars and practitioners must also examine the effectiveness of trainings with school- and community-based coaches to fully capture whether investments in prevention can mitigate risks for maladaptive coping and improve help-seeking behaviors as athletes reach higher levels of competition. There is also an evident need to explore outcomes associated with trainings implemented in different sport contexts (e.g., team vs. individual sport; male vs. female teams, etc.). Capturing outcomes beyond coaches' perceptions and knowledge would also strengthen our understanding of how participation in training influences coaching behaviors and

complements other important coaching outcomes, including athlete-coach relationships and coach retention, satisfaction, stress, and performance (e.g., wins and losses, promotions, etc.). In this domain, sport social work scholars are uniquely positioned to advance research in this space, given our commitment to working across athletic systems to enact social change.

## Conclusion

This commentary sought to illuminate factors associated with policy, practice, and research regarding mental health training for coaches. For sport social workers, this commentary frames strengths and opportunities to help us work toward the mission of promoting “individual and community well-being through partnerships between the profession of social work and the field of athletics (Alliance of Social Workers in Sports, 2023).” Given current needs and risks among student-athletes, addressing gaps in coach training requirements regarding mental health is imperative and can happen through advocacy for more training mandates, through practice by implementing training with the needs and voice of coaches in mind, and through research by continuing to distill best practices in design and delivery.

## References

- Alliance of Social Workers in Sports. (2023). *Alliance of Social Workers in Sports bylaws*. <https://www.aswis.org/bylaws>.
- Anderson-Butcher, D., & Bates, S. (2022). National coach survey: Final report. *LiFEsports, The Ohio State University*. <https://www.aspeninstitute.org/wp-content/uploads/2022/11/national-coach-survey-report-preliminary-analysis.pdf>.
- Atkinson, O., Bates, S., Anderson-Butcher, D., Mack, S., & Goodway, J. (2022). Mapping school-based coach education requirements in the United States. *International Sport Coaching Journal*, 10(2), 276-288.
- Bapat, S., Jorm, A., & Lawrence, K. (2009). Evaluation of a mental health literacy training program for junior sporting clubs. *Australasian Psychiatry*, 17(6), 475–479.
- Barker, R., Hartwell, G., Bonell, C., Egan, M., Lock, L., & Viner, R. (2021). Research priorities for mental health in schools in the wake of COVID-19. *Journal of Epidemiol Community Health*, 76, 448-450.
- Bates, S., Anderson-Butcher, D., Ute, D., McVey, D., Mack, S. Nothnagle, E., Wade-Mdivanian, R., Davis, J., DeVoll, J., Vassaloti, J., Hix, J., Pata, K., Bobek, N., Ludban, C., Myers, K., Porter, K., Quackenbush, J., Roberts, J., Hajjar, N., Durbin, P., Wolfe, T., Magistrale, N. (2023). Mental health training for high school coaches and athletic directors: Community-based participatory research to coach beyond. *International Journal of Sport Science & Coaching*.

- Bissett, J. E., Kroshus, E., & Hebard, S. (2020). Determining the role of sport coaches in promoting athlete mental health: A narrative review and Delphi approach. *BMJ Open Sport & Exercise Medicine*, 6(1), 1–9.
- Breslin, G., Shannon, S., Haughey, T., Donnelly, P., & Leavey, G. (2017). A systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches, and officials. *Systematic Reviews*, 6(177), 1–15.
- Breslin, G., Shannon, S., Cummings, M., & Leavey, G. (2022). An updated systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches, officials and parents. *Systematic Reviews*, 11(1), 1-29.
- Centers for Disease Control and Prevention. (2022). *Youth risk behavior survey: data summary & trends report 2009-2019*. <https://www.cdc.gov/healthyyouth/data/yrbs/pdf/YRBSDataSummaryTrendsReport2019-508.pdf>.
- Centers for Disease Control and Prevention. (2023). *Youth risk behavior survey: Explorer. High school students who play on at least one sports team*. <https://yrbs-explorer.services.cdc.gov/#!/graphs?questionCode=H80&topicCode=C06&location=XX&year=2021>.
- Council on Social Work Education [CSWE]. (2020). *2019 statistics on social work education in the United States*. <https://www.cswe.org/Research-Statistics/Research-Briefs-and-Publications/2019-Annual-Statistics-on-Social-Work-Education>.
- Fawver, B., Beatty, G. F., Roman, J. T., & Kurtz, K. (2020). The status of youth coach training in the United States: Existing programs and room for improvement. *International Sport Coaching Journal*, 7(2), 239–251.
- National Collegiate Athletic Association. (2020). *NCAA goals study*. <https://www.ncaa.org/sports/2013/11/20/ncaa-goals-study.aspx>.
- National Collegiate Athletic Association. (2021). *Student-athlete well-being survey results*. <https://www.ncaa.org/sports/2020/5/22/ncaa-student-athlete-well-being-study.aspx>.
- Pierce, D., Liaw, S.T., Dobell, J., & Anderson, R. (2010). Australian rural football club leaders as mental health advocates: An investigation of the impact of the Coach the Coach project. *International Journal of Mental Health Systems*, 4, 1-8.
- Schneiderman, N., Ironson, G., & Siegel, S.D. (2005). Stress and health: Psychological, behavioral, and biological determinants. *Annual Review of Clinical Psychology*, 1(1), 607-628.

- Sebbens, J., Hassmén, P., Crisp, D., & Wensley, K. (2016). Mental health in sport (MHS): Improving the early intervention knowledge and confidence of elite sport staff. *Frontiers in Psychology, 7*, 911.
- United States Surgeon General Advisory. (2021). *Protecting youth mental health*. <https://www.hhs.gov/sites/default/files/surgeon-general-youth-mental-health-advisory.pdf>.
- Van Mullem, P., & Mathias, K. (2021). Coach development: Practical recommendations for interscholastic sport. *International Sport Coaching Journal, 8*(1), 101–112.
- Ward, T., Stead, T., Mangal, R., & Ganti, L. (2023). Prevalence of stress amongst high school athletes (v2). *Health Psychology Research, 11*, 1–6.



## Sport Social Work: Unique Opportunities, Benefits, and Barriers

**Tarkington Newman**  
*University of Kentucky*

**Levone Lee**  
*University of Kentucky*

**Kaitlin Okamoto**  
*U.S. Soccer Foundation*

**Cecelia Tarr**  
*Insights Training Group, LLC*

**Lauren Beasley**  
*Georgia State University*

**Erica Magier**  
*Pickerington Local School District*

**Carlyn Kimiecik**  
*Purdue University*

**Anita Tucker**  
*University of New Hampshire*

---

*Sport social workers operate across all sport systems and settings, from youth recreation to professional athletics. Due to the diversity of ways in which social work practice intersects with sport, the specialization of sport social work remains nebulous. To begin to disentangle this ambiguity, the current exploratory study sought to better understand the unique perspectives and lived experiences sport social workers who: (1) use sport to promote healthy development and holistic wellbeing, and (2) provide services to those involved in sport to promote healthy development and holistic wellbeing. Following the recommendations of Braun et al. (2021)—who positioned the online survey as a qualitative research tool—a 29-item online questionnaire was administered to the Alliance of Social Workers in Sport email listserv. In total, 84 participants engaged in the survey. Findings highlight unique opportunities for sport social workers (e.g., teach life skills; engage in interprofessional collaborations), benefits of having sport social workers (e.g., enhance treatment, social work values), and barriers that sport social workers face (e.g., lack of education, sport culture). The ability to better understand the ways in which social workers operate at the intersection of social work and sport is a critical next step in advancing the profession, as well as the unique area of sport social work practice.*

*Keywords: social work practice, student-athlete, sport, mental health, social justice*

Sport social work is emerging as an important specialization of social work practice in the United States (Anderson-Butcher & Bates, 2021; Moore et al., 2018; Newman et al., 2019). However, the specific roles of a “sport social worker” remain unclear within the social work profession and across sport systems. Recent research indicates established and aspiring social workers exploring professional opportunities in sport settings are encountering limited educational opportunities (e.g., academic programs, continuing education, professional development) (Magier et al., 2022). This scarcity of applicable social work education may be hindering sport social workers’ ability to engage in competency-based social work practice.

To further establish sport social work as a unique specialization within the social work profession and competently prepare the next generation of social workers, it is necessary to delineate this broad and diverse area of practice. Prior research (see Tarr et al., 2023) has suggested that sport social work may be delineated in three distinct ways at the interpersonal (i.e., clinical) level: (1) using sport to promote healthy development and holistic wellbeing, often through sport-based programming for youth; (2) providing services to those involved in sport to promote healthy development and holistic wellbeing, often mental/behavioral health services for competitive athletes; and (3) working in sport with the goal of promoting healthy development and holistic wellbeing, often as a sport coach. The ability to disentangle the diversity of ways in which social workers operate at the intersection of social work and sport is a critical next step in advancing the unique specialization.

Within the current study, the former two distinctions were explored, as they align with the traditional conceptualizations of social work practice; specifically, the use of recreation and play by social workers to promote healthy development (Lawson, 2005) and mental/behavioral health services offered by social workers to competitive athletes (Hanna, 1993). For instance, Anderson-Butcher et al. (2018) examined the impact of a community-based youth sport program designed to promote the development and transfer of life skills among youth recognized as being socially vulnerable (i.e., youth of color, youth from low-income communities). Findings from their study indicated that youth with relatively low levels of life skills (e.g., self-control, effort, teamwork, social responsibility) experienced consistent long-term growth over the course of two years. On the other hand, Beasley et al. (2021) underscored the alignment of social work ethics and values for sport social workers who are embedded within collegiate athletic departments and provide distinct perspectives within multi-disciplinary sports medicine teams. Further, findings from their study suggest that sport social workers recognized athletes as a diverse, yet vulnerable population with unique needs—a notion underscored by the International Olympic Committee’s consensus statement on mental health in elite athletes (Reardon et al., 2019).

## The Emergence of Sport Social Work

The origins of sport social work date back to at least the Hull House era in the late 1800’s. The Hull House was one of the first established community-based social service agencies in the United States that used sport/recreation as an intervention to promote physical wellbeing and fostering community engagement (Reynolds, 2017). However, it was not until the early 2000s, when Lawson and Anderson-Butcher (2000) penned a pivotal manuscript advocating for *the social work of sport* that the specialization began to become recognized by social work and sport professionals alike. Since the turn of the century, scholars have illustrated the use of sport to promote healthy youth development (Riley & Anderson-Butcher, 2012) and demonstrated the

© 2024 Newman et al. Distributed under [CC-BY-NC-ND 4.0 license](#).

SSWJ 5(1). Find Issues at [OpenJournals.bsu.edu/SportSocialWorkJournal](https://openjournals.bsu.edu/SportSocialWorkJournal) and [SSWJ.org](https://doi.org/10.33043/SSWJ.6qbzr7r).  
<https://doi.org/10.33043/SSWJ.6qbzr7r>.

need for social workers within competitive athletics to support athlete mental/behavioral health (Beasley et al., 2022). Even outside of social work, disciplines and professions—including sport psychology (Newman et al., 2019), counseling (McHenry et al., 2022), and sport management (Cox et al., 2022)—have begun to explore the emergence of sport social work.

However, the professionalization of sport social work can be traced back to 2013 when the Social Work and Sport Association at the University of Michigan School of Social Work hosted an interdisciplinary conference entitled *Beyond the Playing Field: The Social Impact of Sport* (Newman et al., 2016). This conference convened many of the leading scholars, policymakers, administrators, and practitioners who had been working at the intersection of social work and sport. Speakers and panelists included youth sport scholars from The LiFEsports Initiative and the Institute for the Study of Youth Sports, as well as community leaders, high school coaches, University of Michigan athletic directors, and mental health professionals.

To structurally support the emergence of sport social work as a unique social work specialization, the Alliance of Social Workers in Sports (ASWIS) became an official 501(c)(3) in 2017. As the preeminent sport social work organization, ASWIS hosts an annual symposium, offers a professional certificate program, and provides networking opportunities for practitioners, administrators, educators, and students alike. In 2022, as interest in this unique area of social work practice continued to grow, the University of Michigan School of Social Work created an *Online Sport Social Work Certificate Program* as a form of continuing education. Because the Council on Social Work Education (CSWE), American Psychological Association (APA), and other adjacent accrediting bodies do not currently require mental health professionals to engage in curriculum specific to understanding sports across the lifespan, the certificate program aims to advance social workers' knowledge, skills, and abilities as they relate to sports. Additionally, in 2022, the *Sport Social Work Journal* was established, which holds a mission to advance individual and community wellbeing by offering scholarly insights into the convergence of sports and social work practice, theory, and research.

While more academic courses and professional certificate programs are emerging (Bates & Kratz, 2022), most learning opportunities occur informally (Magier et al., 2022). In fact, Clark et al. (2022) suggested that the limited availability of practicum sites to train students in sport social work is a challenge that social work field education needs to remedy. Thus, despite the evolution of sport social work, there is still a great deal of uncertainty surrounding this unique intersectional area of social work practice. For example, research by Beasley et al. (2021), which explored the experiences of licensed social workers in collegiate athletics, found that the role of the social worker is often misunderstood. Indeed, sport social workers are often lumped into *sport psychology* services, despite performance psychology (i.e., sport psychology) and mental/behavioral health (i.e., a component of sport social work) being two distinct areas of professional competence (McHenry et al., 2021). Further, sport social workers have expressed concerns about common misconceptions of the profession, which have fostered the widespread belief that social work is solely focused on child welfare and/or social welfare programs (Newman et al., 2022).

These misconceptions may stem from the diversity of ways in which sport social workers operate. The current exploratory study aims to disentangle this ambiguity, by exploring the unique experiences and perspectives of sport social workers. Specifically, the current exploratory study seeks to increase understanding of the experiences of sport social workers who: (1) use

sport to promote healthy development and holistic wellbeing, and (2) provide services to those involved in sport to promote healthy development and holistic wellbeing.

## Method

### Procedures

All study procedures were approved by the first author's university institutional review board. Participants were recruited from the ASWIS email listserv, which included approximately 150 individual members, most of whom, but not all, practice within the United States. At the time of the study, ASWIS was the only organization focused specifically on the practice, policy, advocacy, and networking of social workers in sport ([aswis.org](http://aswis.org)). The recruitment email provided overviews and examples of sport social workers who: (1) use sport to promote healthy development and holistic wellbeing (e.g., community organization using sport to teach life skills to youth participants) and/or (2) provide services to those involved in sport to promote healthy development and holistic wellbeing (e.g., a licensed social work clinician embedded within a college athletic department).

### Population

To participate in the study, participants had to be at least 18 years old and have earned (at minimum) a Bachelor of Social Work (BSW) degree. In total, 84 participants<sup>1</sup> consented to participate in the current study. Demographic information was collected at the end of the questionnaire, with both multiple choice and open-ended questions such as age, race/ethnicity, gender, licensing, and education. Among sport social workers who shared their demographic characteristics, most participants self-identified as white ( $n = 34, 70.8\%$ ), followed by Black ( $n = 7, 14.6\%$ ), multiracial ( $n = 4, 8.3\%$ ), and another race/ethnicity (e.g., Asian, Latin@;  $n = 3, 6.3\%$ ). Additionally, most participants identified as female ( $n = 28, 58.3\%$ ), and participants were, on average, 42.4 years old. Approximately 74.0% ( $n = 37$ ) of participants earned an MSW as their highest level of education, had an averaging of 15.1 years social work experience, and the majority earned their social work licensure ( $n = 39, 78.0\%$ ).

### Instrument

Braun et al. (2021) positioned that “qualitative surveys, which prioritize qualitative research values, and harness the rich potential of qualitative data, have much to offer qualitative researchers, especially given online delivery options” (p. 641). Thus, as a way to inclusively increase participation and enhance the diversity of voices represented in the research, an online “qualitative survey” may help to mitigate common barriers when conducting qualitative research (e.g., travel logistics, financial restrictions, technology issues). The current study featured a 29-item online questionnaire, which was developed from a previous questionnaire designed to explore experiences and practices of social workers using adventure therapy techniques (for

---

<sup>1</sup>Please note that not all participants disclosed their demographic information; thus,  $n$ 's do not add up to 84.

© 2024 Newman et al. Distributed under [CC-BY-NC-ND 4.0 license](https://creativecommons.org/licenses/by-nc-nd/4.0/).

SSWJ 5(1). Find Issues at [OpenJournals.bsu.edu/SportSocialWorkJournal](https://openjournals.bsu.edu/SportSocialWorkJournal) and [SSWJ.org](https://www.sswj.org).  
<https://doi.org/10.33043/SSWJ.6qbzr7r>.

more details about the questionnaire, see Tucker & Norton, 2013), which was at the time, a similarly emerging area of social work practice.

For the current study, the revised questionnaire was reviewed and pilot tested among a small group of social work students (bachelor- and master-level) and social work professionals who had knowledge of sport social work (but were not members of ASWIS at the time of the study, thus could not participate in the study). This group was convened through the research team's professional networks. This review helped to ensure that the questionnaire followed a logical flow and coherence of the open-ended questions. Specifically, the questionnaire was comprised of a series of multiple-choice options and question stems that routed participants to specific open-ended questions. These open-ended questions were organized into five main sections: (1) previous experiences in sport, (2) experiences using sport in social work practice, (3) professional experiences as a social worker in a sport setting, (4) perspectives of social work and sport, and (5) work history and demographics. The questionnaire took approximately 15-20 minutes to complete, and participants did not receive compensation.

The previous experience in sport section included multiple-choice questions such as, "Please indicate your previous personal experiences in sport." and "Please indicate if you have ever worked in or with the following sport settings as part of your social work practices...". Therefore, the multiple-choice options were only to ensure that each participant responded to the appropriate series of questions, which was dependent upon their sport social work experience. For instance, those who indicated they use to promote healthy development and holistic wellbeing were asked, "Please explain your role and how you used sport as part of your social work practice, including the setting and population." and "From your perspective, how can sport be used in social work practice?" Whereas participants who provided services to those involved in sport to promote healthy development and holistic wellbeing were asked, "Please explain your position and role when professionally working in or with a sport setting, including the setting and population." and "What are the benefits of having social workers in traditional sport systems?"

### **Data Analysis**

The questionnaire was administered online via Qualtrics. Microsoft Excel was used to help organize and clean the data. Qualitative data were analyzed using a combination of content analysis (Rubin & Babbie, 2016) and thematic analysis (Braun & Clarke, 2006) approaches, which helped to construct relevant themes and subthemes within the data. Specifically, categories (e.g., sport as a component of social work practice) and subcategories (e.g., opportunities, benefits, barriers) were preemptively delegated. Responses to specific open-ended questions (i.e., raw data) were then organized within the categories and subcategories. Once the raw data were organized, unique codes were then inductively generated to represent the unique responses to each open-ended question. Upon coding the data, themes (e.g., health promotion, life skills) were inductively constructed from the data. Quotes from participant responses to the open-ended questions are provided throughout to highlight the meaning of themes.

### **Results and Discussion**

The following sections are oriented around sport social workers who: (1) use sport to promote healthy development and holistic wellbeing, and (2) provide services to those involved

in sport to promote healthy development and holistic wellbeing. Further, within these two distinctions, findings are organized around the subcategories of *opportunities*, *benefits*, and *barriers* are discussed.

### **Sport as a Component of Social Work Practice**

Participants provided insight related to when and how they used sport as a component of their social work practices. For some, sport was used as a medium (i.e., setting, platform, vehicle) when providing services and/or as a tool (i.e., approach, technique, intervention) to promote targeted outcomes. In other words, sport was an essential treatment component in working with clients.

#### ***Opportunities to Use Sport in Social Work Practice***

Sport social workers described several unique opportunities that allowed them to intentionally use sport to promote intended outcomes when working with clients. Specifically, participants shared how sport can be used to support overall health and wellness, as well as promote the development and transfer of life skills.

**Health Promotion.** Participants described how sport can be used to support and promote both mental and physical health. For example, SW23 shared, “I access sport and physical activity with clients in my practice from kids, youth, adults of all ages. I recommend sport and [physical activity] to all clients for fitness and mental wellbeing.” Similarly, SW50 stated, “sport can be used as an intervention to treat numerous mental health concerns.” SW57 added, “it can be a catalyst...to deal with anxiety, depression, and overall mental health.” For instance, SW51 shared that they use sport as “an outlet for emotional frustrations” when working with clients. Participants also highlighted how sport can be used to provide avenues for physical health, such as serving to “help sedentary people become more active” (SW5) and to “educate persons who may not know how to be physically active” (SW77). In the end, sport was described as being used “as a source of healing, tying physical and mental health together” (SW63). Overall, participants emphasized that sport could serve as a viable tool to support mental and physical health. Specifically, sport social workers utilize sport to enhance fitness, address mental health concerns, alleviate emotional frustrations, promote physical activity, and foster belonging and community.

**Teaching Life Skills.** Advancing from general health promotion, sport was identified as a way to teach valuable life skills in clinical settings, afterschool activities, and community-based programs. In fact, SW31 stated, “sports provide a great format for teaching life skills across the entire [life] span.” SW72 added, “sports can be used to build resilience, relationships, social skills, perseverance...” SW51 provided several examples, “sports are great for teaching social interactions, for teaching emotional regulation, for teaching a sense of achievement.” SW58 continued, “in my school social work role, I use sports activities (i.e., shooting hoops) to guide my students in lessons around emotions and behaviors, coping skills, and brain functioning to name a few things.”

SW53 provided further explanation about how life skills can be taught through sport and said, “[sport] allows opportunities for conversation around leadership, communication skills, diversity, and much more.” SW33 provided additional insight:

At the clinical level, sports used in group therapies help build trust, teach healthy skills for self-care and emotional outlet, and build social skills. At the community level sports can increase youth social skills, healthy living and fight childhood obesity, build healthy relationships, and create diverse environments to help increase acceptance and inclusion. Several others discussed the importance of life skills transference, specifically that “how to relate life skills and mental health to sport” (SW17); and conversely, that “sports offer unique opportunities to teach skills and support healthy development” (SW18). With sport social workers highlighting the role of sport in fostering resilience, social interactions, emotional regulation, leadership, and communication skills, sport was recognized as a valuable means of teaching life skills across various settings.

### ***Benefits of Using Sport in Social Work Practice***

Participants also discussed the benefits of using sport in their social work practice. Namely, the use of sport provided access and increased treatment opportunities among unique populations who are often challenging to reach due to accessibility and resource allocation or resistance to engagement with social services.

**Serving Unique and Challenging to Reach Populations.** Participants spoke of the ability to use sport to reach unique populations who have distinct needs. SW67 explained, “athletes may be [an] underserved, at-risk, population” and that “sport allows the social worker or practitioner to engage with the client in a way that is easy and natural for [the athlete]” and helps them “meet the client where they are.” In fact, SW18 suggested that “athletes have unique behavioral and developmental characteristics that social workers should be prepared to address in practice.” For example, SW53 wrote, “it is also beneficial to understand sports and the demanding pressures that are placed upon these athletes.” SW58 noted, “...because of this [their unique needs], interventions [and] therapy may not feel as invasive for athletes, which is a good thing because more athletes will seek out services.” In the end, “certain populations that were previously difficult to reach are more likely to receive care” (SW43). Interestingly, SW33 suggested that sport social workers may be uniquely equipped to provide “peer support [as] there are a lot of former athletes who are now social workers.” In all, participants highlighted the unique position of sport social work in comprehending the unique needs of athletes, enabling them to effectively service challenging-to-reach populations, thus increasing the likelihood of providing care to athletes.

**Enhancing Treatment.** Sport can be used to enhance assessments for, and services provided to, athletes and other sport stakeholders. As SW67 noted, “Sports can be, and are, great mechanisms to promote rapport and counseling adherence.” This sport social worker went on to explain:

I’ve used sports as an introduction... I have spent a lot of time engaging with collegiate athletes in their own environment, that is, at practice, in the training room, at team meetings and randomly on campus, all with the hopes to build a relationship that might serve, in the future, as an impetus to get into counseling.

Participants also describe how sport can be used to provide a safe place for some clients. This was the case for SW72, who indicated that “sport can also be a safe haven.” SW77 added, “sports are an outlet, just like music and art,” and “sports are a lot of people’s coping mechanisms.” These uses of sport seemed to be especially important during difficult times in

both treatment and life. In fact, SW50 explained that sport was seen as a way to aid treatment goals because sport can help “promote understanding of difficult concepts.” SW26 added, “sport can be used to reduce stress... and boost health.” Ultimately, these sport social workers believed that sport was a setting that provided “enjoyment and fulfillment in the activity” (SW30), which both directly and indirectly contributed to their ability to meet the diverse needs of their clients.

### ***Barriers When Using Sport in Social Work Practice***

Although the use of sport helped sport social workers provide care, participants also identified a variety of barriers. Specifically, participants indicated that as an emerging area of practice, there is a general lack of understanding from other social workers. In this same vein, participants also discussed the lack of education and training available, both during their academic preparation and as a part of continuing education.

**Lack of Understanding.** Participants discussed that the relative novelty of using sport as a component of social work practice was, at times, a barrier. This resistance stemmed from several sources, including clients and other social workers. As SW50 noted, “sport within social work is a relatively new idea and some may not understand.” SW26 echoed this sentiment and said, “[sport] is not widely accepted yet. Thus, sport may be seen as a non-essential or inappropriate intervention with many ‘classical’ social work clientele (e.g., individuals struggling with homelessness, addiction, etc.)”

There were also perceived barriers related to other social workers, social work programs, and social work organizations. SW33 explained:

Another massive barrier is the lack of support of sport social work by social work organizations, NASW<sup>2</sup>, CSWE<sup>3</sup>, SSWR<sup>4</sup>, schools of social work, and athletic departments. Though it is a newly developing field, there has been little to no support from within the social work profession. Social work claims to be inclusive, but just like many other bias views of athletes and athletics, the social work community has not seen athletes or athletics as a vulnerable population, which is a massive negative effect on the growth of sport social work.

In fact, SW57 themselves stated, “[sport social work] has not yet received enough evidence-based data that has been able to adequately demonstrate its effectiveness.” However, even with such shortcomings, SW34 felt that “older generation of faculty do not want to bring any new ideas into the profession. We are teaching today’s students for yesterday’s problems. We need to teach them for today’s challenges in our society.” As highlighted, sport social workers feel that their social work colleagues often maintain an inaccurate understanding of athlete populations and their unique needs across the lifespan.

**Lack of Education and Training.** Participants also cited a lack of educational opportunities as a perceived barrier for using sport as a component of social work practice. This included specific training for using sport as a medium and tool for treatment. Both SW3 and SW31 both stated that there is currently a “lack of resources to support a new emerging field,” and SW23 cited a “lack of sport-specific education and training... as well as qualified supervisors.” Another respondent cited a specific example and stated that there is currently “a

<sup>2</sup>National Association of Social Workers (NASW)

<sup>3</sup>Council on Social Work Education (CSWE)

<sup>4</sup>Society for Social Work and Research (SSWR)

© 2024 Newman et al. Distributed under [CC-BY-NC-ND 4.0 license](https://creativecommons.org/licenses/by-nc-nd/4.0/).

SSWJ 5(1). Find Issues at [OpenJournals.bsu.edu/SportSocialWorkJournal](https://openjournals.bsu.edu/SportSocialWorkJournal) and [SSWJ.org](https://sswj.org).  
<https://doi.org/10.33043/SSWJ.6qbzr7r>.

lack of expertise” (SW18). Ultimately, there was a general sentiment that there is an overall lack of education and training available to teach sport social workers how to effectively use sport as a component of their practices. SW5 concluded, “There isn’t much training, there isn’t much knowledge on how this can be implemented.” The notable scarcity of educational opportunities for individuals pursuing a career in sport social work underscores the challenge of effectively integrating sports into evidence- and competence-based social work practice.

### **Provide Services within Sport**

In addition to using sport as a component of their social work practices, participants discussed the provision of services within organized sport systems and settings. In other words, these sport social workers outlined where and how they operate within sport systems such as in community-based sport settings (e.g., community or local recreation centers), high school athletic teams, and the National Collegiate Athletic Association (NCAA).

### ***Opportunities for Social Workers in Sport Systems and Settings***

Participants identified several ways in which sport social workers can provide services within a variety of sport systems and settings. Distinct categories include providing direct practice, supporting macro-level social work, advocating for social justice, and engaging in interprofessional collaborations.

**Direct Practice.** Participants discussed opportunities for sport social workers to provide direct practice within sport by using generalist and clinical skills. As SW20 indicated, sport social workers within sport can act as “athletic counselors, providing mental health and substance education, assessment, treatment, consultation and referral.” The ability to provide a range of services within a diversity of roles may be because of foundational social work education and training. For instance, SW68 cited the use of a “holistic approach to engage, understand, and support the athlete as a human being.” By using a holistic approach, which is unique to the social work profession, sport social workers are able to “provide counseling to athletes seeking to manage [both] mental health and improve performance, in and out of their sport” (SW59). SW67 echoed this sentiment and said, “social workers come in at a great location, with a holistic approach to serving for the entire wellbeing of athletes, therefore helping them with sports performance and more general life issues.” SW23 also shared, “I also provide psychotherapy for athletes of all ages, abilities, and levels (specialize in working with high performance/elite athletes).” Much like how some sport social workers use sport for health promotion and to teach life skills, sport social workers who work within sport systems and settings are able to serve the many needs of athletes and other sport stakeholders through a myriad of direct practices.

**Macro Practitioners.** In addition to providing direct practice, sport social workers indicated that they are involved in a variety of macro-level initiatives. SW72 explained this opportunity:

I think social workers can professionally work in or with sport settings in a variety of ways. Community development, at the collegiate and professional level, at the high school and even elementary level. This all can be done in individual and group formats; it can be done on the micro, mezzo, and macro level.

SW77 also noted that “community programs/organizations could utilize social workers with administrative focus.” To this point, sport social workers may be capable of fulfilling administrator roles, providing “macro level management” and program development (SW33). Regardless of the type of macro initiative, social workers are able “to raise awareness for the needs of athletes and enhance the wellbeing and effective functioning of athletes through advocacy, research, . . . , and policy change” (SW19). Taken together—direct practice and macro-level social work—help to illustrate the diverse skill sets that sport social workers are capable of embodying as service providers within a variety of sport systems and settings.

**Advocating for Social Justice.** Additional opportunities for sport social workers situated in sport settings involve the social justice promotion and the enhancement of diversity, equity, and inclusion. This “social justice orientation” is at the heart of the profession and is specified in the NASW Code of Ethics (SW25). SW53 explained:

Social justice is extremely important as athletes identify with various identities and ethnic backgrounds. It is critical for social workers to share perspective with others on athletes being considered a vulnerable population as it is necessary to look at these individuals as holistic human beings and not value them based on their sport and talent.

Even on the international stage, SW23 advocates for social justice, specifically “gender equality and inclusion” in their “international work as a United States Sport Envoy with US Dept of State on special assignment.”

Regardless of the sport system or setting, “social workers can focus on injustices and help create a new paradigm” (SW28) and be “a means to reduce barriers to social justice” (SW71). In fact, as SW19 stated, sport social workers are positioned to “give athletes a voice so they can destigmatize mental health problems.” This role as an advocate for athletes was also echoed by SW67, who said sport social workers have an opportunity to serve “as an advocate for the athletes and their entire performance – both as athletes and people. There is, after all, not much of a legitimate barrier between who someone is as an athlete and as a person” (SW67). Thus, aligning with the mission of the profession, social workers should “be a support for athletes who may not have anyone that has their best interest in mind” (SW65). Overall, sport social workers underscored the importance of the holistic health of athletes, address injustices, and reduce barriers, all of which ultimately strengthen equity and social justice efforts.

**Interprofessional Collaboration.** Sport social workers working within sport can provide clarification around roles and procedure, improve communication, and ensure interprofessional collaborations and interdisciplinary teams consider the needs of individual athletes (e.g., strengths-based and client-centered approaches). For instance, SW65 stated that sport social workers are trained to “. . . work interprofessionally with others and be a mediator in different situations.” SW67 added that sport social workers “could also serve as case-managers and more of a liaison, detached case-management style.” Further, SW30 described sport social workers as being able to “blend in with the training and medical staff as part of their team to help work with athletes as an added support system.” Respondents also noted that social workers can be available as “consultants for programs, teams, coaches, individual athletes” (SW57) and “as consultants for overarching bodies, such as USA Swimming” (SW77). Ultimately, these sport social workers indicated that they are capable and equipped to work alongside other mental and behavioral health specialists, as well as a range of sport-specific stakeholders.

### *Benefits of Social Workers Providing Services in Sport*

Participants discussed many benefits of having social workers embedded in sport organizations. These benefits included social work values, ethics, and skills, as well as a focus on holistic health and advocacy.

**Social Work Ethics, Values, and Skills.** Several distinctive aspects of the social work profession were viewed as uniquely beneficial when providing services and support within sport. Many of these were centered around the NASW Code of Ethics and professional values. SW65 explained, “the core values of the social work profession really benefit us in the sports setting. The sports setting can be a high stakes, intense environment and social work brings a calming approach to this environment.” SW59 added, “social workers are trained in person-in-environment and system perspective, which gives a broader scope when assessing and supporting individual athletes who have pressure from several systems in their lives.” Moreover, participants, such as SW6, highlighted specific skills that social workers possess including “case management and therapeutic skills, [and] compassion.” In fact, SW3 noted, “social workers are trained to address a wide range of issues including life skills, diversity, substance use, ...prevention, etc.” And SW30 added that social workers are trained related to “knowledge of the baseline of mental health conditions that could affect [athlete] health and mindset.” In the end, sport social workers—because of their professional ethics and values—are positioned to serve the diversity of unique needs that athletes and other sport stakeholders may have, regardless of the specific sport system or setting.

**A Focus on Holistic Health.** In addition to the social work profession’s unique ethics, values, and skills, participants discussed their focus on supporting holistic health. As SW28 explained, “in a sports environment where all are taught to be mentally tough, it’s imperative to know that athletes are human and have emotions that need to be attended to.” To this point, SW3 remarked, “social workers can support the health and wellness of athletes by looking beyond their athletic identity.” SW76 described this holistic perspective:

They [social workers] are a more holistic approach to the wellbeing of athletes. Moreover, they are necessarily trained to approach situations more holistically; and therefore, have a broader understanding of athletes and the worlds in which they inhabit. This, by definition, blesses [social workers] with a more total, complete perspective of athletes and all the barriers and challenges to wellbeing and sports performance that they may face.

As SW68 noted, sport social workers are trained “to embrace mental wellness as a supportive human experience.” Additionally, sport social workers are often trained to support major life transitions. Within a sport context, this may illustrate an athlete’s acclimation to intercollegiate athletics or an athlete’s eventual retirement from sport. As SW49 suggested, “life after support [post-athletic career] is a prime opportunity for social workers to use the skills we possess.” Ultimately, participants felt that “social work and sport work go hand in hand” with social work being “an assets to sports because of an internal focus supporting athlete success” (SW58). In essence, sport social workers can support athletes’ holistic health and elevate wellbeing beyond their athletic identity.

**Advocacy.** Much like opportunities to promote social justice, sport social workers highlighted “the need for advocacy and access to sports for all” (SW77). In fact, SW33 stated that “the most important is the focus social work puts on advocacy and speaking for

marginalized populations.” The ability to advocate for populations who may be socially vulnerable and/or marginalized may be especially important for athletes of color and international athletes in “NCAA<sup>5</sup> DI<sup>6</sup> programs at predominantly white institutions” (SW18). More generally, as SW57 reflected, “many people still have a skewed perspective of athletes as not being ‘human’ in many ways and thus don’t really need any help (that is beginning to change thankfully).” SW76 concluded, “in my eyes, this put [sport social workers] in the perfect place to be an advocate and server of athletes in all their pursuits, both athletically and personally.” As such, sport social workers have a critical role of addressing misconceptions about athletes, and positioning themselves as advocates to support athletes both in their athletic and personal endeavors across the lifespan.

### *Barriers for Social Workers Providing Services in Sport*

In addition to identifying benefits of having social work professionals operate within sport systems and settings, participants also identified several barriers that hinder their ability to provide services. These barriers included sport culture itself, stigma around help-seeking behaviors, and the confusion about social work.

**Sport Culture.** At the macro-level, social work, as a profession “may not be aligned with profit and productivity objectives” of sport leagues, sport teams, and sport administrators (SW18). At the team and individual levels, athletes are often achievement-oriented and value “sports performance” and “immediate outcomes/results” (SW68). SW67 added that there is “less appreciation for mental health...as compared to physical [performance] in sport and those who inhabit the athletic world.” Thus, the overvaluation of winning, immediacy, and sport performance is, at times, at odds with the process-oriented, holistic perspectives, and multi-level approaches used by social workers.

**Help-Seeking Stigma.** Aligned with sport culture, participants, such as SW65, recognized that the “stigma in seeking a mental health professional is a major barrier when working in the sports setting.” SW57 added—that related to mental health—there is “a lack of genuine knowledge of many people involved in sports” and there is a need for “overcoming the stigma of utilizing any services (particularly mental health)”. In fact, SW68 suggested that “the stigma around mental health clashes against the mindset of sports performance and tough mindedness.” However, as SW53 mentioned, “sport should be discussed within the same conversations of mental health. Individuals need to be educated around the stigmatization of mental health within the world of athletics and different techniques to challenge this stigma.” While stigma surrounding mental health persists across sport, particularly competitive sport, sport social workers may be uniquely equipped to help address and assuage this issue.

**Confusion about Social Work.** Sport social workers also noted that, within sport, there was a lack of understanding about the social work profession. For instance, SW19 stated there is a “lack of knowledge [from] others about the role of social workers.” SW67 also suggested that there is a “newness and novelty of sport social work” throughout the sport community. To this point, SW77 added that there is a “lack of awareness of what we [sport social workers] can

---

<sup>5</sup>National Collegiate Athletic Association (NCAA) regulates collegiate athletics among about 1,100 schools in the United States, Canada, and Puerto Rico.

<sup>6</sup>Division I (DI) is the highest level of intercollegiate athletics sanctioned by the NCAA in the United States, which accepts players globally.

offer.” They continued, “sports psychology is commonly known, however the role of a social worker in sport settings is largely unheard of” (SW77). SW1 added that there may actually be “competition from sport psychology.” However, this lack of clarity—and at times, competition—was not only resigned to the sport community and traditional sport-based service providers, such as sport psychology professionals. As SW43 noted, a barrier to providing services is that “people, including the social worker, not knowing what their role is.” Therefore, much like there is a perceived lack of understanding within the broader social work profession, there may also be a general lack of understanding throughout sport systems and settings.

### Concluding Remarks

Sport social work is an emerging specialization within social work practice. However, social workers have been using sport and/or working within sport systems for decades (Hanna, 1993; Lawson, 2005; Reynolds, 2017). Still, many aspects of this unique area of practice remain unexplored within social work literature. Findings help illustrate the diversity of ways in which social workers engage with sport. For instance, sport social workers who utilize sport as an intervention use a holistic perspective to assess, treat, and serve athletes. Further, findings suggest that sport can be used as an experiential learning technique to promote the development and transfer of life skills. Another example may include youth who are learning to use mindfulness and positive self-talk as a strategy to better regulation their emotions. However, there are limits to what can be acquired within the confines of a traditional therapeutic environment. By practicing such skills outside of an office setting, youth (athletes and nonathletes, alike) can actively engage in unique learning opportunities that may help them not only develop critical life skills but allow them to practice transferring such skills to other life domains (Pierce et al., 2022).

Sport social workers are increasingly stepping into a variety of interprofessional roles across sport systems and settings by providing clinical mental/behavioral health support to elite athletes, designing and implementing community- and faith-based youth sport programming, advocating for social justice both in and through sport, and leading macro-level policy initiatives. Findings gleaned from the current study suggest that the profession’s unique ethics, values, and skills position sport social workers to competently serve the diverse needs of athletes and other sport stakeholders. This positionality has been discussed in previous research, which explored how the values of the social work profession are applied when providing mental and behavioral health services in collegiate athletics (Beasley et al., 2022). More tangibly, social workers working within sport can provide clinical treatment, mental health education, and case management—growing areas of need from youth sports to professional leagues (Vella et al., 2021). Further, sport social workers can continue to break down mental health stigmas and assuage concerns about seeking mental health support, particularly within competitive and performance-oriented climates.

At the macro-level, findings from the current study highlight sport social workers’ commitment to social justice, which helps to advance the understanding of sport social workers from a non-clinical perspective. As sport is a microcosm of society (Newman et al., 2019), athletes have continued to speak out against systemic inequities and economic, political, and social injustices (Kluch, 2021; Mac Intosh et al., 2020; Martin et al., 2022). Thus, sport social workers—due to the NASW Code of Ethics—may be uniquely educated and trained to disrupt

injustice and promote social change. Just as within any ‘traditional’ social work setting, sport social workers must meaningfully partner with communities (e.g., athletes, teams, organizations) to advocate for social justice.

### **Limitations and Future Directions**

Findings notwithstanding, several methodological limitations should be recognized. First, participants were recruited through the ASWIS listserv. As an emerging area of practice, there may be other social workers outside of the ASWIS network who are using and/or working in sport, particularly sport social workers outside of the United States. For instance, Moreau et al. (2018) forwarded the notion of eductrainers (i.e., a combination of social work and coach) within a Canadian context, and Spruit et al. (2018) demonstrated the effect of a Dutch sport-based intervention to prevent juvenile delinquency. Future studies should consider using Tucker & Norton’s (2013) approach for participant recruitment, which randomly sampled members of a national social work organization (i.e., NASW) that was not specific to a particular social work specialization. To gain perspectives of sport social work outside of the United States, international organizations—such as the International Federation of Social Workers and the International Association for Social Work with Groups—may be helpful in recruitment efforts. The ability to sample a larger and more diverse population may lead to further insights and estimates into how vast (or limited) sport social work may be.

Additionally, although most of the items in the questionnaire were open-ended, semi-structured interviews and/or focus groups may provide a more nuanced understanding of the diversity of ways in which sport social workers operate. However, the current study does advance our understanding of sport social work through a novel qualitative approach (i.e., the online survey as a qualitative research tool; Braun et al., 2021), as much of the previous research in this area has used semi-structured interviews (Beasley et al., 2021; Beasley et al., 2022; Magier et al., 2022; Newman et al., 2021; Newman et al., 2022).

As sport social work continues to grow, so too must the education and training available for social workers. Findings from the current study discussed the current lack of known education, training, and supervision related to all forms of sport social work (i.e., using sport, working in sport). This too was highlighted through research conducted by Magier et al. (2022), which advocated for the official recognition of sport social work from the major social work governing bodies within the United States (e.g., NASW, CSWE, SSWR). Without appropriate education and training, social workers may not have the requisite professional competence to provide culturally (i.e., sport culture) appropriate services to athletes and other sport stakeholders (Beasley et al., 2021). Moreover, by further professionalizing sport social work, other mental and behavioral healthcare professionals (e.g., sport psychologists, athletic trainers, team medical doctors, etc.) may become more aware of the unique ethics, values, and skills of the social work profession. This ability to serve on interprofessional and interdisciplinary teams also has been suggested by McHenry et al. (2021). Working with interprofessional and interdisciplinary teams will not only help to better serve the diverse needs of athletes and sport stakeholders, but also may help to decrease help-seeking stigma and disrupt the current sport culture that values winning over wellness.

Finally, future research should consider exploring the dual role of the social work sport coach (Newman et al., 2022), which was outside of the original scope of the current study.

Similar to eductrainers (Moreau et al., 2018), those who simultaneously embody both roles may hold key insights, particularly related to youth sport coaching and promoting social justice (Camiré, 2022) and positive youth development (PYD)-focused coach education (Santos et al., 2019). Further, as sport social workers continue to serve the unique needs of elite athletes, research is needed to explore if/how social work practices can enhance athlete performance, particularly within interprofessional and multi-disciplinary sports medicine teams. In the end, findings from the current study help to illustrate the diversity of ways in which sport social workers use sport and/or work within sport systems. As the needs of athletes and sport stakeholders continue to evolve, so too must the professions and professionals who aim to serve their needs. Social workers, due in part to their education and training, may be uniquely positioned to help enhance human wellbeing and meet the basic human needs of all people, with particular attention to the needs of people who are recognized as socially vulnerable.

### References

- Anderson-Butcher, D., & Bates, S. (2021). Social work and youth sport. *Child and Adolescent Social Work Journal*, 38(4), 359-365.
- Anderson-Butcher, D., Martin, E., Paluta, L., & Gould, D. (2018). Patterns of social skill development over-time among clusters of LiFEsports participants. *Children and Youth Services Review*, 87, 17-25.
- Bates, S., & Kratz, S. (2022). Integration, creation, and growth: A path forward for sport social work education. *Sport Social Work Journal*, 1(1), 115-135.
- Beasley, L., Hardin, R., Magliocca, J., & Smith, Z. (2021). The experiences of social workers in NCAA Division I athletic departments. *Journal for the Study of Sport and Athletes in Education*, 15(3), 193-218.
- Beasley, L., & Hoffman, S., & Andelin, R. (2020). Physical health literacy of student-athletes. *Health & Social Care in the Community*, 29(5), e116-e125.
- Beasley, L., Newman, T., & Hardin, R. (2022). Sport as a social work specialty: Perspectives of licensed social workers employed in collegiate athletics. *Advances in Social Work*, 21(4), 1212-1288.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., Clarke, V., Boulton, E., Davey, L., & McEvoy, C. (2021). The online survey as a qualitative research tool. *International Journal of Social Research Methodology*, 24(6), 641-654.
- Camiré, M. (2022). The two continua model for life skills teaching. *Sport, Education, & Society*.

- Clark, G. W., Robinson, Y., Fischer, D., & Vanderwill, W. (2022). Sport social work: The maize & blueprint. *Sport Social Work Journal*, 1(1), 53-59.
- Cox, A., Beasley, L., & Hardin, R. (2022). Application of social work theory in sport management curriculum: Ecological systems theory. *Sport Management Education Journal*, 16(1), 116-120.
- Hanna, E. (1993). The psychodynamically oriented clinical social worker as sports consultant: A preliminary report. *Clinical Social Work Journal*, 21(3), 283-300.
- Lawson, H. (2005). Empowering people, facilitating community development, and contributing to sustainable development: The social work of sport, exercise, and physical education programs. *Sport, Education and Society*, 10(1), 135-160.
- Lawson, H., & Anderson-Butcher, D. (2000). The social work of sport. In C. Simard, G. Thibault, C. Goulet, C. Pare, & F. Bilodeau (Eds.), *Sport for all and governmental policies* (pp. 480-489). International Olympic Committee.
- Magier, E., Newman, T., Kimiecik, C., Okamoto, K., Beasley, L., Shute, L., & Tucker, A. (2022). Understanding the needs of social workers in sport settings: Opportunities for specialized education and training. *Journal of Social Work Education*, 59(2), 331-345.
- Martin, E., Kluch, Y., Mac Intosh, A., Kujala, S. (2022). Collegiate athletes engaging in activism: Perceptions of social justice causes and support from significant social agents. *Sport Social Work Journal*, 1(1), 163-182.
- McHenry, L., Beasley, L., Zakrajsek, R., & Hardin, R. (2022). Mental performance and mental health services in sport: A call for interprofessional competence and collaboration. *Journal of Interprofessional Care*, 36(4), 520-528.
- Moore, M., Ballesteros, J., & Hansen, C. (2018). The role of social work values in promoting the functioning and well-being of athletes. *Journal of Social Work Values and Ethics*, 15(2), 48-61.
- Moreau, N., Thibault Lévesque, J., Molgat, M., Jaimes, A., Parlavecchio, L., Chanteau, O., & Plante, C. (2018). Opening the black box of a sports-based programme for vulnerable youth: The crucial role of social bonds. *Qualitative Research in Sport, Exercise and Health*, 10(3), 291-305.
- Newman, T., Magier, E., Kimiecik, C., & Burns, M. (2021). The relationship between youth sport participation and aggressive and violent behaviors: a scoping review of the literature. *Journal of the Society for Social Work and Research*, 12(2), 371-389.

- Newman, T., Magier, E., Okamoto, K., Kimiecik, C., Shute, L., Beasley, L., & Tucker, A. (2021). Social work in sport: Playmakers in the athletic arena. *Journal of Social Work, 1*(1), 1-23
- Newman, T., Okamoto, K., Kimiecik, C., Magier, E., Beasley, L., Shute, L., Knuettel, M., Tarr, C., & Tucker, A. (2022). Sport as an emerging area of social work practice: New playmakers in the athletic arena. *Sport Social Work Journal, 1*(1), 35-52.
- Newman, T., Okamoto, K., Kimiecik, C., Sohns, E., Burns, M., & Magier, E. (2019). The role of social workers in sport: Shared values and opportunities for interprofessional collaborations. *Journal of Sport Psychology in Action, 10*(3), 137-150.
- Newman, T., Ortega, R., Lower, L., & Paluta, L. (2016). Informing priorities for coaching education: Perspectives from youth sport leaders. *International Journal of Sports Science & Coaching, 11*(3), 436-445.
- mental health. *International Journal of Sport and Exercise Psychology, 1*-18.
- Pierce, S., Scheadler, T., Anderson-Butcher, D., Amorose, A., & Wade-Mdivanian, R. (2022). Social skill transfer from a sport-based positive youth development program to the school setting. *Sport Social Work Journal, 1*(1), 78-95.
- Reardon, C., Hainline, B., Aron, C., Baron, D., Baum, A., Bindra, A., ... & Engebretsen, L. (2019). Mental health in elite athletes: International Olympic Committee consensus statement. *British Journal of Sports Medicine, 53*(11), 667-699.
- Reynolds, J. (2017). Jane Addams' forgotten legacy: Recreation and sport. *Journal of Issues in Intercollegiate Athletics, 11*, 18.
- Riley, A., & Anderson-Butcher, D. (2012). Participation in a summer sport-based youth development program for disadvantaged youth: Getting the parent perspective. *Children and Youth Services Review, 34*(7), 1367-1377.
- Rubin, A., & Babbie, E. (2016). *Empowerment series: Research methods for social work*. Cengage Learning.
- Santos, F., Gould, D., & Strachan, L. (2019). Research on positive youth development-focused coach education programs: Future pathways and applications. *International Sport Coaching Journal, 6*(1), 132-138.
- Spruit, A., Hoffenaar, P., van der Put, C., van Vugt, E., & Stams, G. (2018). The effect of a sport-based intervention to prevent juvenile delinquency in at-risk adolescents. *Children and Youth Services Review, 94*, 689-698.

- Tarr, C., Newman, T., Santos, F., & Turgeon, S. (2023). The duality of sport social workers coaching critical positive youth development within competitive youth sport. *International Sport Coaching Journal*, *11*(1), 124-135.
- Vella, S., Schweickle, M., Sutcliffe, J., & Swann, C. (2021). A systematic review and meta-analysis of mental health position statements in sport: Scope, quality and future directions. *Psychology of Sport and Exercise*, *55*, 101946.



## The Management of Spectators Through the Lens of High School Athletic Directors

**Nick Elam**

*Teachers College, Ball State University*

**Jerry Reynolds**

*Department of Social Work, Ball State University*

**Matt Moore**

*Department of Family Science and Social Work, Miami University*

**Shelby Weathersby**

*Department of Social Work, Ball State University*

---

*The purpose of this study is to explore the perceptions of athletic directors at high school sporting events during the COVID-19 pandemic. Four hundred twelve (412) high school athletic directors were surveyed and 112 responded. Participants responded to demographic items, and a qualitative, open-ended prompt to elicit detailed experiences, emotional responses, and perceptions of sporting events during the COVID-19 pandemic. Through a grounded theory approach, the following themes emerged: a strong desire for in-person attendance at sporting events, community responses that challenged health and safety of spectators and athletes, and the necessity for COVID-19 related changes such as digital ticketing virtual spectating opportunities. The study illuminates the necessity for flexibility and innovation during a crisis, in ways that are relevant to school leaders entrusted to foster a positive environment at athletic events. Some level of demand for virtual spectating experiences is likely to continue or increase in the future for post-pandemic sporting events. Further research can identify exemplary practices, and those exemplars can serve as a model for other schools and athletic directors.*

*Keywords: high school athletics, spectator behavior, athletic directors, COVID-19*

According to 2018-19 estimates from the National Federation of High School Sports (NFHS, 2022), 7.9 million athletes participate in sanctioned high school athletics in the United

States. For these high school athletes, athletic directors provide the oversight of athletic programs in their school settings. This oversight includes event management, hiring, scheduling, fundraising, budgeting, compliance, and spectator management (Hums & McLean, 2013; Ratts et al., 2022; Sullivan et al., 2014). These responsibilities require athletic directors to make decisions about how to foster a safe and positive sporting environment for their student-athletes. Decision about fostering a safe and positive sport environment to on a new meaning as a result of the COVID-19 pandemic (Ganzar et al., 2022; Zviedrite et al., 2021).

The COVID-19 pandemic forced the first closure of a U.S. school on February 27, 2020, and by March 30, 2020, more schools across the U.S. school closed (to remain closed through the end of the 2019-2020 academic year) (Zviedrite et al., 2021). Most schools offered virtual learning formats to mitigate the academic effects of school closure. The educational, physical health, and mental health effects of widespread school closures, and the closures' effectiveness in combating the spread of COVID-19, will take years to research and understand (Curran et al., 2020; Pyo, 2020; Reid, 2021). Of particular concern with this study is the impact COVID-19 had on athletic directors responsible for the overall climate, health, and safety of high school sports (Bellibas & Liu, 2018; Capp et al., 2022; Reid, 2021). Athletic directors faced challenging leadership decisions necessitated by the pandemic (DeMatthews et al., 2023; Grooms & Childs, 2021; Hayes & Derrington, 2023).

Even before the pandemic, the role of an athletic director was emotionally demanding (Hums & McLean, 2013). Managing athletic programs during the pandemic presented the heightened challenge of managing participant (e.g., athletes, coaches, officials) and spectator behavior (e.g., families, students, and community members) in an environment that was unfamiliar (virtual) and/or potentially hazardous (COVID-19 itself) or volatile (spectators' responses to COVID-19 regulations) (Ratts et al., 2022; Sullivan et al., 2014). Specifically, these challenges included community response and behavior with the health and safety guidelines of multiple entities (i.e., Department of Health, Centers for Disease Control) and minimizing barriers to in-person participation. These challenges were important to address knowing the importance of high school sports on mental health, physical activity, and quality of life for student-athletes, families, and communities (Easterlin et al., 2019; Eime et al., 2013; Marques et al., 2016; McGuine et al., 2021). A key factor to high school sport outcomes is the presence of spectators at events (Dorsch et al., 2009; Knight & Holt, 2014; Wiersma & Fifer, 2008).

While, high school athletic directors regularly manage spectator behavior among their many responsibilities, the academic years 2020-2021 and 2021-2022 posed heightened challenges to athletic directors in this regard. In order to encourage spectator involvement, athletic directors had to think strategically about the deployment of technology and differentiated methods of communicating with stakeholders and engagement of spectators. These included, but were not limited to cashless transactions, digital ticket sales, and the use of various tools to live stream games and virtual spectating opportunities because of attendance restrictions at school venues. Ratts and colleagues (2022) conducted interviews with high school athletic directors and found these new uses of technology were helpful in navigating these challenges of the pandemic and many athletic directors elected to continue using tools going forward. Among these are the provision of live streaming competitions and games.

Though the prevalence of live streaming is of high school athletics is newer, scholars such as Reynolds et al. (2022) explored the psychosocial experiences of parent spectators in youth settings, building upon limited research in this area (Weed, 2007, 2008, 2020). Reynolds et

al. (2022) found virtual experiences brought both negative and positive psychosocial experiences for parent spectators. These associated experiences included feelings of gratitude for the continuation of sports, modified interactions with both the athlete participants and other spectators, and feelings of detachment, grief, and loss associated with modifications to spectator engagement, stemming from the pandemic. Participants wanted a return to in-person attendance. Pierce et al. (2020) highlighted the importance of spectator presence through a survey of 10,000+ stakeholders in the youth sports domain (administrators, coaches, and parents). The survey concluded limits placed upon spectator presence evoked elevated levels of dissatisfaction among spectators (i.e., fans and parents).

This study specifically examined the reflections of athletic directors about whether and how to admit spectators during the COVID-19 pandemic. This included questions about both the positive and negative impacts of such decisions (Legg, 2021; Omli & Wiese-Bjornstal, 2011; Stefanson et al., 2020). The aim of this research study was to (a) explore the experiences of athletic directors as it pertained to spectator behavior during the pandemic. This study is relevant to any athletic director or school leader who is entrusted to foster a positive sporting environment. Even though this study focused on interscholastic athletics within the United States, findings from this study have relevance in any nation where interscholastic sporting events are played before spectators.

## Method

### Data and Participants

We limited the study pool to high school athletic directors from a midwestern state. Participants worked for both public and private high schools with sanctioned sport programs. The research team sent a secure link to a Qualtrics© electronic survey to a high school athletic administrators list serve. A convenient sample along with the use of a virtual platform allowed the research team to reach a large sample in a cost-effective manner. The final sample included 112 out of a possible 412 participants (Indiana High School Athletic Association, 2022). This was a 27% response rate. This was a cross-sectional, exploratory study. Within the state involved in this study, there are approximately 152,000 students (of all identified genders) who participate in high school athletics, ranking 18<sup>th</sup> nationally. The state where data collection occurred allowed decisions about sport spectating to happen at the local level. Athletic directors shared in this decision-making process. All in-person spectating did require compliance with masking, social distancing, and other safety requirements.

### Demographic Characteristics

All study participants listed their title as athletic director (n = 112). The largest percentage of participants reported being in their current position between 1-4 years (n = 43, 38%). Another 32% (n = 36) reported serving as an athletic director for 5-9 years with the remaining 30% (n = 33) reporting more than 10 years of service. 80% of participants (79.5%, n = 89) identified as White. The remaining 20.5% (n = 23) identified as Black or African American. Individuals identifying as a male (90%, n = 101) comprised most of the sample. The remaining

10% (n = 11) identified as female. Participants ranged in age from 29-75 years old with a median age of 48.5 (SD = 6.2).

Participants reported the largest percent of their schools had a rural designation (57%, n = 64) with 23% (n = 26) being urban, and 20% (n = 22) suburban. There was an equal number of schools within each class. Classes sizes are based on the number of students attending schools and the historical athletic success of programs. Both Class 2A and 4A represented 28% (n = 21) of the sample with Class 3A (26%, n = 29) and Class A (18%, n = 21) representing the remaining schools. The largest percentage of schools reported 25-50% of their students received free or reduced lunch (43%, n = 48). 70% (n = 78) of schools reported less than 25% of their students identify as an ethnic or racial minority. Over 92% (n = 104) reported a public-school designation. 86% percent of schools (n = 96) offered virtual spectating options at some point during the COVID-19 pandemic.

### Procedure

After the sponsoring university's Institutional Review Board granted approval, the research team sent study information through the approved list serve. The list serve posting provided details on the nature of the study, described the inclusion and exclusion criteria, and provided individuals with a secure link to the survey. We collected informed consent via the survey software prior to participation. Participation in the study was voluntary and anonymous.

### Instrumentation

Participants provided demographic information about themselves, and their high school as noted in the previous section. Following these demographic questions, participants read an adapted open-ended prompt (Omli & Lavoie, 2012) about their leadership experience. The prompt read:

*The COVID-19 pandemic changed the spectator environment for all involved in high school athletics. Recall your experience as an administrator over the past two years at your school, in terms of managing the behavior and physical presence of spectators. If you were responsible for creating virtual spectating experiences for parents and fans, please share your experiences in this domain as well. Describe your experience in as much detail as possible.*

The open-ended question sought to prompt robust descriptions of emotional experiences and the lived experiences of the studied population (Omli & Lavoie, 2012). A pilot test with five athletic directors not involved or included in the research provided the research team an opportunity to evaluate and clarify the wording of the open-ended question. The pilot group made no suggested edits to the prompt.

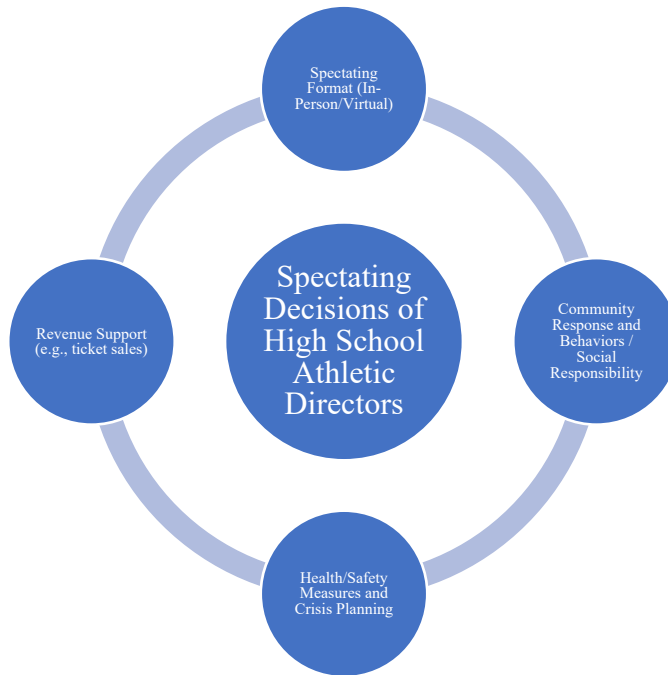
### Data Analysis

Given how COVID-19 prompted many changes to the spectator environment for high school sports, we employed an exploratory design. Given the novelty of how athletic directors

managed spectator experiences throughout a global pandemic, we used a grounded theory approach for data analysis (Creswell, 2003; Oliver, 2012; Omli & Lavoie, 2009; Reynolds et al., 2022). Grounded theory is different from typical theories in the social sciences in that it often does not include causal relationships between variables (Corbin & Strauss, 1990) and is appropriate for analyzing responses from a sample of more than 30 participants (Oliver, 2012; Omli & Lavoie, 2009; Author et al., 2022). This approach is important when the phenomena associated with research has limited precedent (Creswell, 2003). Specifically, the research team followed these procedures for data analysis (Omli & Wiese-Bjornstal, 2011):

1. The research team retrieved participant responses to the aforementioned prompt from a secure online database. Responses ranged from one sentence to over 300 words in length. Qualtrics© did not place limitations on the number of characters participants could type.
2. Members of the research team read all responses to the prompt multiple times to become familiar with the spectating experiences of athletic directors. Members of the research team also used an intercoder agreement (O'Connor & Joffe, 2020). This agreement provided guidelines for coding strategies, definitions, and coding procedures.
3. Each member of the research team reviewed responses to the prompt line-by-line. Members of the research team created a preliminary code for each unit of meaning derived from the prompt (i.e., a sentence or paragraph used by a participant to describe a specific event). The research team triangulated these preliminary codes amongst the various coders.
4. During the coding process, members of the research team grouped data themes with common properties into a single code until a set of three themes emerged that provided a comprehensive account of the data while minimizing conceptual overlapping among themes. The consolidation of data themes involved a constant comparative process which is a hallmark of grounded theory (Oliver, 2012; Omli & Lavoie, 2009; Author et al., 2022). Throughout the constant comparative process, codes that emerged from participant responses were repeatedly compared to the raw data (e.g., responses from other athletic directors). We revised responses until the codes most accurately described a collective summarization of the participant experiences (Creswell, 2003). Three themes emerged to broadly describe the spectating experiences: (1) powerful desire for in-person attendance (e.g., increased ticket sales and spectators), (2) community response and behaviors (e.g., desire to promote health and safety and strategies to offset financial loss), and (3) COVID-19 related changes (e.g., increase in virtual spectating and need for crisis planning management). These key themes were central to shaping spectator behaviors in the minds of athletic directors.
5. After finalizing lower- and higher-order themes, the research team developed a theory to provide a holistic representation of the data related to positive spectator experiences and the stability of high school sport offerings. According to Creswell (2003), a grounded theory can “assume the form of a narrative statement, a visual picture, or a series of hypotheses or propositions” (p. 56). For this study, the research team created a diagram to illustrate the prompt responses of study participants. (See Figure 1.)

Figure 1. Spectating Decisions of High School Athletic Directors



### Trustworthiness of Findings

The research team followed protocols for grounded theory research and exceeded the requirement for at least 30 participants (Creswell, 2003). This result allowed for the development of a theory grounded in the experiences of a large sample of informants. The research team employed triangulation to ensure greater veracity of interpretations than would have been possible if a single coder had developed the theory alone (Omli & Wiese-Bjornstal, 2011). To establish greater trustworthiness of the findings, we engaged an additional individual with experience in qualitative methodology to review and validate the suggested themes.

### Results

This section expounds on various themes constructed from the analysis of the open-ended prompt. We intend for each participants' voice to be heard through examples used as illustrations for themes. We categorized statements into one of three themes: (1) a powerful desire for in-person attendance, (2) community response and behaviors, and (3) COVID-19 related challenges. Each of these larger themes included two subthemes. These themes emerged from initial coding/surface content analysis (first iteration of thematic analysis), identification of pattern variables (second iteration, subthemes), and application to the data set (third iteration, primary themes) (Anfara et al., 2002). We also reviewed the data to identify potential trends in groups defined by the characteristics of the athletic directors and their schools. Utilization of

crosstabs demonstrated the absence of such trends. Thus, it appears athletic director experiences remained consistent across characteristics.

### **A Powerful Desire for In-Person Attendance**

High school athletic communities across the Midwest state “craved in-person attendance.” While participants felt virtual spectating provided a “fine short-term solution,” athletic programs experienced “excitement as spectator attendance went from zero to full capacity.” One athletic director responded, “Managing spectators throughout the pandemic was exceedingly difficult for several reasons. Guidance was varied from the CDC, state, and local authorities, which made it difficult to hear one voice. Everyone had an opinion on the risks or severity of the pandemic, which made enforcement difficult. However, one voice remained consistent – the desire to watch our student-athletes in person.” This desire led to an increase in ticket sales when permitted and a commitment from community members to be socially responsible to ensure in-person attendance could continue as long as possible.

#### ***Increase in Ticket Sales***

Many athletic directors reported, “Our ticket sales have gone through the roof,” since allowing in-person attendance. One respondent shared, “When we returned the fan bases were great as they were happy to be able to see sports again, even if they had to follow crazy guidelines to do so. We saw a large spike in our attendance pre-COVID.” Another athletic director shared, “There were times early in the pandemic that our county was considered red, and we did not allow any spectators. While this was obviously easy to manage, it was very depressing and did not provide the same positive atmosphere for our student-athletes and families. As restrictions decreased, there was a powerful desire for in-person attendance, which spiked ticket sales. Multiple athletic directors noted how recent crowd sizes are the best in recent history. One athletic director stated, “Our fan base was starving for in-person sports after being without that opportunity for over a year. They showed up in full force.” In the process of showing up, spectators knew they had to “be compliant with rules so we could keep in-person events going. If they did not, we would end in-person watching right away.”

#### ***Social Responsibility***

The increase in ticket sales led to both positive and negative experiences for athletic directors as it relates to spectators fulfilling their civic duties. Athletic directors shared, “Managing spectators was better than I expected. We had a few issues with masks at first, but then our families became used to our policies,” and “Most of our fan behavior experiences were positive.” Another athletic director conveyed, “I am pleased overall with spectator behavior at our school over the past two years. On a rare occasion I may need to briefly remind a fan about appropriate game day behaviors. However, the positive fan experiences far outweighed the negative.” Numerous athletic directors reported “no difference in fan behavior before and after COVID.”

While many athletic directors experienced positive outcomes with the return to in-person spectating, this experience varied for other athletic leaders across the state. One athletic director

voiced, “There is a sharp rise in inappropriate fan behavior coming out of COVID. We say all the time we live in a world where people want to protest.” Another added, “Once we returned to full attendance, we saw an uptick in unsporting behaviors compared to events prior to COVID.” Several athletic directors communicated, “Managing spectators throughout the pandemic was difficult for several reasons. Everyone had an opinion on the risks or severity of the pandemic” and “Some parents and many fans had unreasonable expectations and at times refused to cooperate with policies.” Athletic directors also conveyed that they did not get “enough help from the school community.” One athletic director recounted, “I felt like the COVID police, trying to get everyone to adhere to the restrictions. Some people would cooperate, while others would not.” Another athletic director echoed this sentiment, “The only problem with spectators was getting them to wear their masks while seated and out in the communal areas. I did not like policing this and many spectators did not want to be told what to do.” A final athletic director shared, “many people did what they could do support in-person spectating, others made it a large challenge and did not respond the way we would expect from our school community.”

### **Community Response and Behaviors**

As evident with the social responsibility section above, athletic communities across the state varied in their spectator responses. Of particular concern to athletic directors was promoting the health and safety of all involved and finding ways to work through the budgetary impacts of revenue loss. All the respondents indicated, “COVID-19 was extremely challenging in maintaining health and safety measures for our athletes, fans and coaches.” Athletic directors relied on the “compliance of others to follow state and local guidelines consistently.” With these guidelines came financial hardships for many athletic programs. During COVID, there was a decrease in ticket sales, the need for exploring new revenue streams, and trying to be respectful of the impact COVID-19 had on the financial status of many student-athletes and their families. One athletic director shared, “It was really challenging to balance health and safety with the need to financially support our efforts. I would wish that challenge upon nobody.”

### ***Health and Safety***

All athletic directors shared similar thoughts about “ever changing protocols for the different sports, seasons, and venues making their job challenging.” Athletic directors reported, “overseeing capacity limits, mask wearing, and social distancing for spectators.” Various programs established attendance restrictions such as “two people per athlete, presale tickets only, and immediate family only.” Athletic directors referenced additional responsibilities to promote health and safety such as, “signage, marking off seats, adjusting entrances and exits, monitoring restroom use, separating home versus away fans, sending detailed COVID protocols for visiting schools and ensuring social distancing with fans.” Furthermore, athletic directors often “led contact tracing of student-athletes in multiple practice and competition scenarios.

While athletic programs worked to promote the health and safety of spectators, they did not always receive an appreciative response from community members. One athletic director shared, “Our population was very reluctant to wear masks and follow rules that were set. This led to much conflict.” Other athletic directors expressed how their oversight of COVID-19 protocols led to increased job stress, in ways above and beyond those noted by Hums & McLean (2013).

One athletic director mentioned, “Repeatedly asking spectators to comply with COVID-19 policies like masks and social distancing was stressful.” Another administrator added, “As we got into the year, mask fatigue, frustration, and other factors crept in and it became increasingly difficult to manage, especially as some communities lifted their mask requirements or did not enforce them.” A final athletic director voiced, “Parents were understanding, but we have had several issues where parents become vocal about us not doing enough or that we are doing too much. In the beginning spectators were very compliant with the rules and regulations, but as we got further in, they became more unruly. Health and safety became less important in the eyes of others.”

### ***Revenue Support***

Despite the mixed reactions to COVID-19 protocols, members of the community understood the fiscal impact of the pandemic on high school sports. Numerous athletic directors expressed appreciation for families who were willing to “pay for digital tickets or subscription fees for online viewing to help offset ticket sales.” One athletic director discussed, “teaming with a local cable service to broadcast sports and to generate revenue from advertisement.” A second athletic director shared a similar partner with a “local radio station with advertisement buys.” Additionally, several athletic directors reported, “many families and local businesses offered sponsorships to offset lost revenue.” Athletic directors also received “donations to the athletic office, which helped during the pandemic due to low crowds. These types of changes would not be needed if it were not for the pandemic.”

### **COVID-19 Related Changes**

The COVID-19 pandemic triggered multiple changes to the world of high school athletics. Two key changes were the need for alternate spectating options for students, families, and community members and the ability to plan in a crisis environment. The transition to virtual spectating and managing the crises associated with a global pandemic provided athletic directors with both teachable moments and significant challenges, as a rough equivalent to the challenges faced by school principals in transitioning to virtual instruction during this time (DeMatthews et al., 2023; Grooms & Childs, 2021; Hayes & Derrington, 2023).

### ***Virtual Spectating***

Athletic directors understood the need for digital ticket sales and virtual spectating options, but experienced mixed emotions with delivery. Many athletic directors reported virtual spectating was “frustrating at time with glitches and internet issues,” “underutilized by the community,” and “had such inadequate quality and customer service it was not worth the investment.”

On the reverse side, outside of the challenges noted above, athletic directors believed virtual spectating provided opportunities for community engagement and school spirit. One athletic director responded, “when we reduced spectator entry, we offered a free live stream to many of our events. We had incredible numbers tune in to watch.” Another athletic director added, “This was a fantastic way for our school corporation to engage grandparents and out-of-

town friends and family in the sporting events of their loved ones.” Several athletic directors noted, “It was nice to offer spectators the option of watching from home if they were not able to attend in person” and “Live streaming became a necessity to engage our families, community members, and student-athletes.” A final athletic director summarized, “virtual spectating was not perfect, but it provided fans the safety and comfort needed to not spread COVID-19 and still support their team.”

### ***Crisis Planning***

The COVID-19 pandemic presented an opportunity for athletic administrators to think critically about future crisis planning. One athletic director noted, “We had to adapt on the fly. We had to try innovative approaches to programming, and we learned along the way. For instance, we learned how to increase the number of sporting events we stream online. We learned about new software and strategies to keep individuals engaged.” A different athletic director shared, “We used COVID-19 as an opportunity to engage our students in a new way. We developed our media class to extend it into athletic home events. We used student-based groups to keep school spirit alive.” Some other athletic directors shared how they, “Developed a virtual plan for future sporting events,” “Created a crisis plan for future pandemics or community emergencies, and “found ways to use COVID-19 to bring the community closer together and find new purpose in sport.”

### **Discussion and Conclusions**

This study explored the experiences of high school athletic directors during the COVID-19 pandemic, who went to great lengths to reintroduce athletics and allow student-athletes to enjoy the benefits of participation (Easterlin et al., 2019; Eime et al., 2013; Marques et al., 2016). Through an open-ended qualitative prompt and grounded theory approach, participants were able to document varied experiences associated with both their role as leaders in a high school athletic department and interactions with various stakeholders. This study is among the first known to document these experiences. The authors found that despite the challenges associated with promoting health and safety, there was a strong demand for the continuity of high school sports, even amid environments filled with several risk factors. Additionally, community members had varied responses to the adaptations required to comply with local COVID-19 guidelines. Some of these practices were aided by technology (i.e., digital ticket sales, live streaming of events) and were welcomed changes, yet in other situations, there was resistance to change. Additionally, there were some noted changes deemed positive, as others stated the pandemic heightened concerns about inappropriate fan behavior.

The COVID-19 pandemic necessitated creative approaches (some successful, some unsuccessful) by athletic directors related to fostering a positive in-person environment, launching and facilitating a virtual spectator experience, crisis planning and safety measures, generating revenue, and enduring the emotional toll of it all. With all of these themes, there were strong elements of interconnectedness that supported the grounded theory model (Figure 1). There is a give and take response required in these types of situations (Reynolds et al., 2022). In-person spectating was reliant upon a community response and behavior that promoted the health and safety of student-athletes and others. The changes in spectating plans led to fiscal challenges

and need for new revenue streams to account for more virtual opportunities. The intertwining of these themes made it challenging for athletic directors to promote the physical, mental, and social health of student-athletes, their families, and the community (Bellibas & Liu, 2018; Capp et al., 2022; Reid, 2021).

These findings can be helpful to any school leader entrusted to foster a positive athletic environment, especially when operating in a crisis environment like that created by COVID-19. The challenges with making decisions about spectator management, budgeting, compliance, and how to host events (Hums & McLean, 2013; Ratts et al., 2022; Sullivan et al., 2014), came across in each of the themes. For example, while some athletic directors noted benefits of virtual attendance similar to those found in previous studies about in-person attendance in the United States (Dorsch et al., 2009; Knight & Holt, 2014; Wiersma & Fifer, 2008), it is unclear whether student-athletes and spectators benefit to the same extent from virtual attendance.

Regardless of whether a public health emergency of similar magnitude reemerges in the future, further research in the above areas is warranted. For example, some level of demand for virtual spectating experiences is likely to continue or increase in the future for various reasons: to cater to would-be attendees who cannot attend an event due to being out-of-town, or contending with injuries, illnesses, transportation issues, scheduling conflicts, or other factors.; to serve as a student-run action learning opportunity for a media program within the school; to generate advertising revenue for the school; etc. Further research can identify exemplary practices in these areas, and those exemplars can serve as a model to other schools and provide athletic directors with evidenced-based approaches to support their decision-making.

Follow-up interviews or further outreach to study participants could benefit study results. This study only collected information at one point in time from participants. While this approach is consistent with prior research (Author, 2022a; Author, 2022b), this lack of follow-up did not enable us to explore unanticipated responses and obtain nuanced answers (e.g., crosses based on participant responses) when the initial response might be too general or simplistic (Rubin & Rubin, 2005). Future studies will offer study participants the ability to opt in to a follow-up focus group.

## References

- Anfara, V. A., Brown, K. M., & Mangione, T. L. (2002). Qualitative analysis on state: Making the research process more public. *Educational Researcher, 31*(7), 28-38.
- Bellibas, M. S., & Liu, Y. (2018). The effects of principals' perceived instructional and distributed leadership practices on their perceptions of school climate. *International Journal of Leadership in Education, 21*(2), 226-244.
- Capp, G. P., Avi Astor, R., & Moore, H. (2022). Positive school climate for school staff? The roles of administrators, staff beliefs, and school organization in high and low resource school districts. *Journal of Community Psychology, 50*(2), 1060-1082.
- Creswell, J. W. (2003). *Research design*. Sage Publications.

- Curran, F. C., Fisher, B. W., & Viano, S. L. (2020). Mass school shootings and the short-run impacts on use of school security measures and practices: National evidence from the Columbine tragedy. *Journal of School Violence, 19*(1), 6–19.
- DeMatthews, D., Reyes, P., Solis Rodriguez, J., & Knight, D. (2023). Principal perceptions of the distance learning transition during the pandemic. *Educational Policy, 37*(3), 653–675.
- Dorsch, T. E., Smith, A. L., & McDonough, M. H. (2009). Parents' perceptions of child-to-parent socialization in organized youth sport. *Journal of Sport and Exercise Psychology, 31*, 444-468.
- Easterlin, M. C., Chung, P. J., Leng, M., & Dudovitz, R. (2019). Association of team sports participation with long-term mental health outcomes among individuals exposed to adverse childhood experiences. *JAMA Pediatrics, 173*(7), 673-681.
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity, 10*(98), 1-21.
- Ganzar, L. A., Salvo, D., Burford, K., Zhang, Y., Kohl III, H. W., & Hoelscher, D. M. (2022). Longitudinal changes in objectively measured physical activity and sedentary time among school-age children in Central Texas, US during the COVID-19 pandemic. *International Journal of Behavioral Nutrition & Physical Activity, 19*(1), 1–11.
- Grooms, A. A., & Childs, J. (2021). “We need to do better by kids”: Changing routines in U.S. schools in response to COVID-19 school closures. *Journal of Education for Students Placed at Risk, 26*(2), 135–156.
- Hayes, S. D., & Derrington, M. L. (2023). School leadership in uncertain times: Identifying dimensions of effective principal leadership. *School Leadership & Management, 43*(4), 1–18.
- Hums, M., & McLean, J. (2013). *Governance and policy in sport organizations* (3rd ed.). Holcomb Hathaway Publishers.
- Indiana High School Athletic Association. (2022). *School directory*. <https://www.ihsaa.org/schools/ihsaa-school-directory>.
- Knight, C. J., & Holt, N. L. (2014). Parenting in youth tennis: Understanding and enhancing children's experiences. *Psychology of Sport and Exercise, 15*(2), 155-164.
- Legg, E. (2021). The purpose of sport: Perspectives of players, coaches, parents, and administrators. *Managing Sport and Leisure, 26*(1-2), 80-92.

- Marques, A., Ekelund, U., & Sardinha, L. B. (2016). Associations between organized sports participation and objectively measured physical activity, sedentary time, and weight status in youth. *Journal of Science and Medicine in Sport, 19*(2), 154-157.
- McGuine, T. A., Biese, K. M., Petrovska, L., Hetzel, S. J., Reardon, C., Kliethermes, S., Bell, D. R., Brooks, A., & Watson, A. M. (2021). Mental health, physical activity, and quality of life of US adolescent athletes during COVID-19-related school closures and sport cancellations: A study of 13,000 athletes. *Journal of Athletic Training, 56*(1), 11–19.
- National Federation of High School Sports. (2022). *2018-19 high school athletics participation survey*. <https://www.nfhs.org/sports-resource-content/high-school-participation-survey-archive>.
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: Debates and Practical guidelines. *International Journal of Qualitative Methods, 19*, online.
- Omli, J., & LaVoi, N. M. (2009). Background anger in youth sport: A perfect storm. *Journal of Sport Behavior, 32*(2), 242-260.
- Omli, J., & LaVoi, N. M. (2012). Emotional experiences of youth sport parents I: Anger. *Journal of Applied Sport Psychology, 24*(1), 10-25.
- Omli, J., & Wiese-Bjornstal, D. (2011). Kids speak: Preferred parental behavior at youth sport events. *Research Quarterly for Exercise Science, 82*(4), 702-711.
- Pierce, D., Stas, J., Feller, K., & Knox, W. (2020). COVID-19: Return to youth sports. Preparing sports venues and events for the return of youth sports. *Sports Innovation Journal, 1*, 62-80.
- Pyo, J. (2020). School principals' perceptions of crime risk and academic climate: Links to school safety practices. *Journal of School Violence, 19*(4), 594–609.
- Ratts, T., Norris, B., & Mancuso, B. (2022). Evaluating the use of communication and technology by high school athletic directors to navigate the COVID-19 pandemic. *International Journal of Sport Communication, 1*, 1-7.
- Reid, D. B. (2021). US principals' sensemaking of the future roles and responsibilities of school principals. *Educational Management Administration & Leadership, 49*(2), 251–267.
- Reynolds, J. F., Bates, S., & **Moore, M. A.** (2022). Youth sport spectating among parents during the COVID-19 pandemic. *Journal of Amateur Sport, 8*(1), 72-100.
- Rubin, H., & Rubin, I. (2005). *Qualitative interviewing: The heart of hearing data*. Sage Publications.

- Stefansen, K., Smette, I., & Strandbu, Å. (2018). Understanding the increase in parents' involvement in organized youth sports. *Sport, Education and Society*, 23(2), 162-172.
- Sullivan, G. S., Lonsdale, C., & Taylor, I. (2014). Burnout in high school athletic directors: A self-determination perspective. *Journal of Applied Sport Psychology*, 26(3), 256–270.
- Weed, M. (2007). The pub as a virtual football fandom venue: An alternative to 'being there'? *Soccer & Society*, 8(2-3), 399-414.
- Weed, M. (2008). Exploring the sport spectator experience: Virtual football spectatorship in the pub. *Soccer & Society*, 9(2), 189-197.
- Weed, M. (2020). The role of the interface of sport and tourism in the response to the COVID-19 pandemic. *Journal of Sport and Tourism*, 24(2), 79-92.
- Wiersma, L. D., & Fifer, A. M. (2008). The schedule has been tough, but we think it's worth it: The joys, challenges, and recommendations of youth sport parents. *Journal of Leisure Research*, 40(4), 505-530.
- Zviedrite, N., Hodis, J. D., Jahan, F., Gao, H., & Uzicanin, A. (2021). COVID-19-associated school closures and related efforts to sustain education and subsidized meal programs, United States, February 18–June 30, 2020. *PLoS ONE*, 16(9), 1–18.



## **It's a thin line: Mental health and mental toughness within the context of Hughes and Coakley's Sport Ethic Model**

**M. Daniel Bennett, Jr.**

*School of Social Work, University of Arkansas*

---

*In recent years, the landscape of college athletics has become increasingly more competitive. This exacts a greater commitment and dedication from athletes. This dedication and commitment to a given sport(s) is often inextricably linked to mental toughness. However, within this phenomenon of commitment and dedication may lie risk for mental health challenges. That is, while mental toughness is generally seen as a positive trait that may help individuals cope with stress and adversity, there is some evidence to suggest that heavy reliance on mental toughness may increase the risk of developing a mental illness over time (Grobler et al., 2022). The current discussion utilizes the Sport Ethic Model developed by Hughes and Coakley (1991) to explore the sometimes-tedious differentiation between mental toughness for high level competitive athletics and mental illness among college / university student-athletes. Practice implications for sports social workers are also discussed.*

*Keywords: sport social work, mental toughness, mental health, student-athlete, sport ethic model*

Recent data from the Sports & Fitness Industry Association indicates that in the United States approximately 61% of children between the ages of 6 and 17 participate in team sports (State of Play Report, 2023). This perhaps contributes to the notion that in recent years, youth and amateur athletics have become increasingly competitive. Indeed, national sports organizations like MaxPreps, Perfect Game, and Rivals, produce local, state, and national rankings of young athletes (according to their skill level) as early as age 12 (Bennett, 2023). Some have argued that this has spawned the professionalization of youth sports (Gould, 2009). Further, the number of student-athletes competing in NCAA championship sports in 2021-22 increased to over 520,000. This represents a record high, according to the latest data from the NCAA Sports Sponsorship and Participation Rates Report (NCAA, 2022). The recent NCAA ruling permitting student-athletes to profit from their name, image, or likeness (NIL), and earn income from endorsements, sponsorships, and other financial opportunities is perhaps further

evidence of the widespread magnitude of youth and amateur sports (Caulfield et al., 2023; Kunkel et al., 2021).

The increased competitiveness of youth sports now demands greater commitment and dedication from athletes and requires them to do so at younger ages. Dedication and commitment to a given sport(s) is often inextricably linked to mental toughness. That is, endemic to the ever-increasing competitiveness of youth sport is not only dedication and commitment, but also a requisite measure of mental toughness. This is thought to provide the resilience, motivation, discipline, pressure management, persistence, focus, and self-confidence needed to overcome challenges, excel in competition, and continuously strive for improvement (Liew et al., 2019). Prior research has also referred to this phenomenon as a performance-centric outlook and argued that it may be detrimental to the student-athlete (Whitehead & Senecal (2020).

However, within this phenomenon of increased competitiveness may lie the risk for mental health challenges. That is, while mental toughness is generally seen as a positive trait that may help individuals cope with stress and adversity, there is some evidence to suggest that heavy reliance on mental toughness may increase the risk of developing a mental illness over time (Grobler et al., 2022). The current discussion explores the sometimes-tedious differentiation between what is considered the requisite mental toughness for high level competitive athletics and mental illness among college / university student-athletes. The Sport Ethic Model developed by Hughes and Coakley (1991) will serve as a framework for this discussion.

### **The Sport Ethic Model**

The Sport Ethic Model was introduced to examine the potentially harmful aspects of intense competitiveness and emphasis on winning in sports culture. The Sport Ethic Model highlights the extreme pursuit of victory and the associated attitudes, behaviors, and consequences that can arise within competitive sports (Hughes & Coakley, 1991).

Within the Sport Ethic Model, Hughes and Coakley (1991) developed a definition of positive deviance and applied that definition in an analysis of behavior among athletes. The concept of positive deviance posits that deviant behavior among athletes involves excessive over-conformity to the norms and values embodied within sport itself. That is, athletes may use the “*sport ethic*” - which emphasizes sacrifice for “*the game*”, to seek distinction, take risks, and challenge limits - as a sole guide for behavioral practices within a sport context (Shogan & Ford, 2000).

Hughes and Coakley (1991) argue that strict adherence to this ethic may cause athletes to become especially vulnerable to corruption (e.g., performance enhancing drugs) by transforming behaviors that conform to positive norms into deviant behaviors that are prohibited and negatively sanctioned within society and within sport organizations themselves. In the current discussion the Sport Ethic Model is used as a framework to explore the potential relationship between mental toughness and mental illness among student-athletes.

### **Mental Toughness through the Lens of the Sport Ethic Model**

While the Sport Ethic Model may focus primarily on the cultural norms and values within a sports context, it may also tacitly influence the development of mental toughness in athletes. The sport ethic model highlights cultural norms that are prevalent in most competitive sports

(Fournier et al., 2022). These norms emphasize the importance of rigorous training, sacrificing personal interests for their sport, and prioritizing success. That is, the “*sport ethic*” is thought to give credence to a host of psychological constructs that loom large for mental toughness.

The Sport Ethic Model posits that athletes may face external pressure to conform to the norms of the sport culture, which may include ignoring pain, injuries, or personal well-being (Budziszewski, 2019). This may relate to mental toughness by encouraging athletes to push through physical and mental barriers, demonstrate resilience, and display mental and emotional strength in the face of adversity (Fourie & Potgieter, 2001).

The Sport Ethic Model also emphasizes the pursuit of excellence and optimal performance. This pursuit may lead to internalized pressure to perform at a consistently high level. Athletes who embrace these expectations may cultivate mental toughness as they learn to cope with pressure, handle stress, and maintain focus and confidence under demanding circumstances (Caulfield et al., 2023).

Athletes who adhere to these “*sport ethic*” norms may also be more likely to develop some measure of mental toughness due to internalizing the values of perseverance, discipline, and a strong work ethic. In this regard, mental toughness may help athletes recover from setbacks, failures, and injuries (Johnson et al., 2023). Moreover, it may enable them to maintain focus and motivation despite encountering obstacles or experiencing disappointment. Further, sustaining a high level of dedication and commitment to a sport is thought to require intrinsic motivation (Liew et al., 2019). As such, mental toughness may help some athletes stay motivated even when the initial excitement wanes or external circumstances become challenging.

Mental toughness also has strong implications for self-discipline. That is, athletes must develop self-discipline to adhere to training regimens, follow nutrition plans, prioritize rest and recovery, and make sacrifices to achieve their goals. Mental toughness imbues athletes with the ability to resist temptations, overcome distractions, and stay focused on their long-term objectives (Weinberg et al., 2022).

The tacit influence of the “*sport ethic*” further extends to constructs like managing pressure, persistence, focus, concentration, and handling criticism; all of which have implications for mental toughness. Competing in college / university athletics often involves high-pressure situations. Developing mental toughness enables athletes to remain composed under said pressure, make calculated decisions, and perform optimally when it matters most (Calmeiro et al., 2014). It may also help them control their emotions, manage anxiety, and maintain confidence in their abilities.

Competitive athletes understand that progress is derived through persistence and consistent effort over time. As such, many athletes develop a sense of perseverance and a “never give up” attitude (Le Bars et al., 2009). Athletes who have curated mental toughness are more likely to keep pushing forward when faced with challenges, setbacks, or plateaus in their performance.

In order for athletes to be successful, it is imperative that they are able maintain focus and concentration during both training and competition. Doing so allows them minimize distractions, maintain attention to detail, and stay fully engaged in the athletic endeavor. Achieving focus and concentration allows athletes to make split-second decisions, execute techniques accurately, and seize opportunities during games (Antonini-Philippe et al., 2022; Zakrajsek et al., 2019).

## Ethical Complexity

Differentiating between mental toughness and mental illness in elite level competitive athletes can be challenging, as both can at times involve similar behaviors and symptoms (Souter et al., 2018). Further, mental toughness may sometimes mask underlying mental health issues. For example, an athlete experiencing symptoms of depression or anxiety may push themselves even harder in an effort to maintain optimal performance (Souter et al., 2018). While some may view this as mental toughness, this type of behavior may inevitably lead to burnout and ultimately become detrimental to an athlete's mental health over time.

Adding to the complexity of this issue is that currently there is no consensus as to how mental toughness is defined or developed. Stamatis et al. (2023) explored perspectives on the conceptualization, measurement and training of mental toughness. They found that while coaches may value mental toughness and believe it plays an important role in competitive sport, most were unclear on how mental toughness is actually achieved. In some instances, anecdotally based physical protocols were used to develop athlete's mental toughness. However, the effectiveness of these training approaches, using psychometrically sound instruments, was rarely assessed (Stamatis et al., 2023).

Adding even further complexity to the concept of mental toughness is the specter of mental illness. That is, in some instances athletes may push themselves too hard, neglect time for rest and recovery, and thus may place themselves at increased risk for developing symptoms of anxiety, depression, or burnout (Martin et al., 2022; Strand & Samuelson, 2021). At times mental toughness may become so extreme that it leads to self-destructive behaviors, such as disordered eating, substance abuse, or other risky behaviors that negatively impact mental health (Lynch, 2021).

Due to what may often be a complex presentation, coupled with the mental toughness ideal, and couched within the sport ethic model, mental illness among competitive athletes can be challenging to diagnose and effectively treat. Several barriers specific to the athletic context exists which may inadvertently delay or prevent access to the appropriate clinical interventions (Lynch, 2021). It's also important to acknowledge that mental toughness and mental illness may coexist. To be sure, it may not always be easy to discern between the two. In some instances, the context of sport or competitive athletics, along with over-conformity to the sport ethic, may provide a means by which to mask certain symptoms of mental illness (Parrott, 2023). Ultimately, it's important to understand that mental toughness and mental illness are not mutually exclusive, and it's possible for an athlete to exhibit both traits.

### What it is? What it isn't?

And so, it is at this point that the critical question becomes "*how does one differentiate between the presentation of mental toughness and the presentation of mental illness among competitive athletes?*" As stated previously, it may not always be easy to discern between mental toughness and mental illness in elite-level competitive athletes. At times both may manifest in similar ways. Yet, there may also be subtle areas of distinction. Practitioners in the athletic context must be aware of this and be able to make such a distinction.

Application of the ecological perspective may provide a means by which to determine where mental toughness ends, and mental illness potentially begins. The ecological perspective is

based on the premise that athletes are best understood in the context of the various systems in which they live (Bronfenbrenner, 1977; Moore & Gummelt, 2019). This framework acknowledges micro, mezzo, and macro level factors and examines person-in-environment transactions and how said transactions may impact student-athlete mental health and well-being (Bennett, 2023). This approach broadens understanding of the multiple factors that ultimately influence athlete behavior.

In an effort to offer some guidance in this area, there are several areas of examination that warrant consideration. Once again, it is important to understand the concept of mental toughness. So, while mental toughness broadly and somewhat abstractly refers to an athlete's ability to persevere, maintain focus, and perform well under pressure, even in adverse circumstances (Benjamin & John, 2021), it should also be regarded as a positive trait that enhances performance and well-being, and helps athletes push through difficulties and setbacks without experiencing significant distress (Gucciardi et al., 2017). That is, while athletes who exhibit mental toughness may invariably experience stress, anxiety, or negative emotions, they may also, because of their psychological disposition, effectively manage and channel those phenomena to maintain optimal performance (Kalinin et al., 2019).

Where symptomatology may be concerned, mental toughness typically involves the display of resilience, determination, and the ability to handle adversity. Various coping strategies, including positive self-talk, visualization, or seeking support from coaches or teammates may also be employed. Mental toughness may therefore be viewed as a contextually dependent character trait (Gucciardi et al., 2015). It may involve short-term stress or anxiety that subsides once the situation or circumstance improves.

While athletic performance is a key objective within the athletic context, it is imperative for practitioners to remain cognizant of the overall health and well-being of the student athlete. In this regard, it should be clear that while mental toughness is generally associated with positive outcomes and an athlete's ability to thrive in competitive situations, it should not result in long-term harm to an athlete's mental health or overall well-being.

Therefore, in contrast to mental toughness, the presentation of mental illness is likely to impair not only athletic performance, but adversely impact overall social functioning as well. The presentation of mental illness is typically characterized by chronic, persistent, and significant impairment in multiple aspects of life, including athletic performance, personal relationships, and social functioning (Chow et al., 2020). This may include intense feelings of sadness, anxiety, hopelessness, changes in eating or sleeping patterns, difficulty concentrating, social withdrawal, and mood swings (Castaldelli-Maia et al., 2019). Further, these phenomena may last for extended periods of time and ultimately require clinical intervention.

It's important to note that mental toughness and mental illness are not mutually exclusive. Athletes can possess mental toughness while also experiencing mental health challenges. The distinction lies in the context of a particular behavior, its duration, severity, persistence, and magnitude of functional impairment. Therefore, it is important to consider the context in which the behaviors or emotions are occurring. As stated previously, mental toughness encompasses pushing through temporary discomfort (Benjamin & John, 2021), while mental illness often presents persistent and distressing symptoms (Chow et al., 2020). It is also important to determine whether an athlete's mental state is causing functional impairment in various other areas of their life, such as academic performance, relationships, and training. This requires open

communication, promoting mental health awareness, and the provision of appropriate support systems to help athletes maintain their mental well-being while striving for elite performance.

### **Put me in Coach!**

It is essential to involve mental health professionals including sports social workers when attempting to differentiate between mental toughness and mental illness in student-athlete populations. These professionals have the proficiency to evaluate an athlete's psychological well-being, assess the severity and impact of symptoms, and provide appropriate recommendations or interventions if needed. To be sure, this is a proposition that is incumbent upon appropriate education and awareness to continue to de-stigmatize mental health in the athletic community.

Although education and awareness of athlete mental health has increased in recent years, it continues to compete with prevailing stigma and false misconceptions that athletes must have an indestructible psyche (Larsen et al., 2021). This represents a key obstacle. That is, mental toughness may lead some individuals to resist seeking help when they are struggling with mental health issues. Moreover, this can delay diagnosis and treatment and worsen the severity of the mental illness.

It's important to recognize that mental toughness is just one aspect of an individual's overall mental health. Attending to one's mental health and well-being involves a balance of challenges and self-care. Although mental toughness may be a valuable tool for coping with adversity, it's important to be mindful of potential risks and seek appropriate intervention when needed in order to prevent the further onset of mental illness (Bauman, 2018).

Once again, it should be noted that mental toughness and mental illness can coexist in athletes. Indeed, both are related to an individual's psychological well-being and can affect their behavior, emotions, and thoughts. An athlete may exhibit mental toughness in their ability to persevere through challenging situations and maintain a positive attitude, while also experiencing symptoms of mental illness. In such an instance, the challenge would be to not let the athlete's mental illness impact their ability to compete at their best.

It is at this point that sports social workers play a vital role in the process. Sports social workers can conduct thorough assessments and screenings to identify whether an athlete's experiences are indicative of mental toughness or potential mental health concerns. Sports social workers may then collaborate with other mental health professionals, such as psychologists or psychiatrists, to provide comprehensive care for athletes (Newman et al., 2019).

Once mental illness in an athlete has been identified, it is vital to collaborate with qualified mental health professionals, including sports social workers. This will allow for the proper monitoring and evaluation of performance, overall social functioning, and potential modification of training approaches (Bennett, 2022). To be sure, an attitude of mental toughness can be maintained despite the presentation of mental illness. However, it is important to have a support system in place, consisting of coaches, teammates, and family members to provide encouragement and support during difficult times (Sullivan et al., 2020). Ultimately, maintaining an attitude of mental toughness requires a balance of challenge and self-care. Athletes with mental illness may need to adjust their expectations and approach to training and competition. Yet, given the appropriate support and resources, they may still excel in their sport while effectively managing their mental health.

## Conclusion

The efficacious use of the aforementioned strategies and techniques are predicated on several key factors. It is vital to establish a means of open communication wherein a safe environment is created for student-athletes to discuss their well-being. Such an environment may also serve to educate student-athletes about mental health and encourage them to seek help when needed. It is also important to recognize that each student-athlete is unique and their responses to stress and challenge are likely to vary. Thus, those working with student-athlete populations should take an individualized approach to understanding their experiences.

Ongoing education about mental health and athlete specific concerns is essential. Sports social workers are knowledgeable and can play a vital role in this regard. They can be instrumental in promoting the overall health and wellness of the student-athlete, creating programming, and developing psychoeducational training tools/materials for all members of the athletic department community (athletes, coaches, support staff, administrators, etc.) on issues relating to the total health of student-athletes.

Lastly, it is important for sports social workers to build intentional relationships with all members of the athletic department. Establishing a rapport with all those involved in athletics may help to promote a culture that normalizes conversations about mental health and thereby reduces the stigma that may hinder athletes from seeking help. Once again, the line between mental toughness and mental illness can be precarious at times. A comprehensive and compassionate approach that considers the overall well-being of the student-athlete is vital for providing effective support.

## References

- Antonini-Philippe, R., Singer, S. M., Jaeger, J. E., Biasutti, M., & Sinnett, S. (2022). Achieving flow: An exploratory investigation of elite college athletes and musicians. *Frontiers in Psychology, 13*, 1292.
- Bauman, N. J. (2016). The stigma of mental health in athletes: are mental toughness and mental health seen as contradictory in elite sport? *British Journal of Sports Medicine, 50*(3), 135-136.
- Benjamin, L. J. M., & John, W. C. K. (2021). Examining the moderation and mediation effects of mental toughness on perceived stress and anxiety amongst athletes and non-athletes. *Asian Journal of Sport and Exercise Psychology, 1*(2-3), 89-97.
- Bennett, M. (2023). When the game stands tall: Social work in an athletic context. *Sport Social Work Journal, 3*(1), 32-49.
- Bennett, M. (2022). Adverse childhood experiences and student-athlete mental health: A social work in sports perspective. *Sport Social Work Journal, 2*(1), 77-85.
- Budziszewski, R. (2019). "Get Tough!": A Case Study on the Development of the Sport Ethic in Youth Lacrosse.

- Calmeiro, L., Tenenbaum, G., & Eccles, D. W. (2014). Managing pressure: patterns of appraisals and coping strategies of non-elite and elite athletes during competition. *Journal of Sports Sciences*, 32(19), 1813-1820.
- Castaldelli-Maia, J. M., e Gallinaro, J. G. D. M., Falcão, R. S., Gouttebarga, V., Hitchcock, M. E., Hainline, B., Reardon, C.L. & Stull, T. (2019). Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. *British Journal of Sports Medicine*, 53(11), 707-721.
- Caulfield, J. L., Lee, F. K., & Baird, C. A. (2023). Navigating the ethically complex and controversial world of college athletics: A humanistic leadership approach to student athlete well-being. *Journal of Business Ethics*, 183(2), 603-617.
- Chow, G. M., Bird, M. D., Gabana, N. T., Cooper, B. T., & Becker, M. A. S. (2020). A program to reduce stigma toward mental illness and promote mental health literacy and help-seeking in National Collegiate Athletic Association Division I student-athletes. *Journal of Clinical Sport Psychology*, 15(3), 185-205.
- Fourie, S., & Potgieter, J. R. (2001). The nature of mental toughness in sport. *South African Journal for Research in Sport, Physical Education and Recreation*, 23(2), 63-72.
- Fournier, C., Parent, S., & Paradis, H. (2022). The relationship between psychological violence by coaches and conformity of young athletes to the sport ethic norms. *European Journal for Sport and Society*, 19(1), 37-55.
- Gould, D. (2009). The professionalization of youth sports: it's time to act! *Clinical Journal of Sport Medicine*, 19(2), 81-82.
- Grobler, H., du Plooy, K., Kruger, P., & Ellis, S. (2022). The prevalence of common mental disorders and its relationship with mental toughness in professional South African rugby players. *South African Journal of Psychology*, 52(1), 61-72.
- Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2015). The concept of mental toughness: Tests of dimensionality, nomological network, and traitness. *Journal of personality*, 83(1), 26-44.
- Gucciardi, D. F., Hanton, S., & Fleming, S. (2017). Are mental toughness and mental health contradictory concepts in elite sport? A narrative review of theory and evidence. *Journal of science and medicine in sport*, 20(3), 307-311.
- Hughes, R., & Coakley, J. (1991). Positive deviance among athletes: The implications of overconformity to the sport ethic. *Sociology of sport journal*, 8(4), 307-325.

- Johnson, K. L., Cormier, D. L., Kowalski, K. C., & Mosewich, A. D. (2023). Exploring the Relationship Between Mental Toughness and Self-Compassion in the Context of Sport Injury. *Journal of Sport Rehabilitation, 32*(3), 256-264.
- Kalinin, R., Balázs, R., Péntek, I., Duică, Ș., & Hanțiu, I. (2019). Relationship between competitive anxiety and mental toughness: a latent regression analysis. *Health, Sports & Rehabilitation Medicine, 20*(2), 70-74.
- Larsen, C. H., Küttel, A., Moesch, K., Durand-Bush, N., & Henriksen, K. (2021). Setting the scene: Mental health in elite sport. In *Mental Health in Elite Sport* (pp. 1-21). Routledge.
- Le Bars, H., Gernigon, C., & Ninot, G. (2009). Personal and contextual determinants of elite young athletes' persistence or dropping out over time. *Scandinavian Journal of Medicine & Science in Sports, 19*(2), 274-285.
- Liew, G. C., Kuan, G., Chin, N. S., & Hashim, H. A. (2019). Mental toughness in sport. *German Journal of Exercise and Sport Research, 49*(4), 381-394.
- Lynch, J. H. (2021). Posttraumatic stress disorder in elite athletes. *Current Sports Medicine Reports, 20*(12), 645-650.
- Martin, J., Byrd, B., Hew-Butler, T., & Moore, E. W. G. (2022). A longitudinal study on the psychological and physiological predictors of burnout in NCAA collegiate swimmers. *Journal of Applied Sport Psychology, 34*(6), 1295-1311.
- NCAA Sports Sponsorship and Participation Rates Report (2022) National Collegiate Athletic Association.
- Newman, T. J., Okamoto, K., Kimiecik, C., Sohns, E., Burns, M., & Magier, E. (2019). The role of social workers in sport: Shared values, interprofessional collaborations, and unique contributions. *Journal of Sport Psychology in Action, 10*(3), 160-173.
- Parrott, S. (2023). "This Isn't a Sports Story... This Is a Life Story": Elite Athletes and Myths About Mental Illness in Sport. *International Journal of Sport Communication, 1*(aop), 1-12.
- Project Play (2023) State of Play Report 2023. The Aspen Institute
- Shogan, D., & Ford, M. (2000). A new sport ethics: Taking König seriously. *International Review for the Sociology of Sport, 35*(1), 49-58.
- Souter, G., Lewis, R., & Serrant, L. (2018). Men, mental health and elite sport: A narrative review. *Sports medicine-open, 4*, 1-8.

- Stamatis, A., Morgan, G. B., Cowden, R. G., & Koutakis, P. (2023). Conceptualizing, measuring, and training mental toughness in sport: Perspectives of master strength and conditioning coaches. *Journal for the Study of Sports and Athletes in Education*, 17(1), 1-28.
- Strand, B., & Samuelson, J. (2021). Physically and Mentally Exhausted: Overtraining and Burnout in Sports. *VAHPERD Journal*, 42(1), 13-18.
- Sullivan, M., Moore, M., Blom, L. C., & Slater, G. (2020). Relationship between social support and depressive symptoms in collegiate student athletes. *Journal for the Study of Sports and Athletes in Education*, 14(3), 192-209.
- Weinberg, R., Freysinger, V., Vealey, R., & Block, C. (2022). What does it mean to be “mentally tough” as a NCAA division I collegiate coach? *Journal of Applied Sport Psychology*, 34(2), 342-362.
- Whitehead, P. M., & Senecal, G. (2020). Balance and mental health in NCAA Division I student-athletes: An existential humanistic view. *The Humanistic Psychologist*, 48(2), 150.
- Zakrajsek, R. A., Raabe, J., & Blanton, J. E. (2019). Psychological characteristics of elite athletes. In M. H. Anshel, T. A. Petrie, & J. A. Steinfeldt (Eds.), *APA handbook of sport and exercise psychology, Vol. 1. Sport psychology* (pp. 129–148). American Psychological Association. <https://doi.org/10.1037/0000123-008>



## Mental Health Education and Self-Reported Depressive Symptoms Among College Athletes

**Matt Moore**

*Miami University*

**Lana Loken**

*Dakota Wesleyan University*

**Anne Kelly**

*Dakota Wesleyan University*

**Mastano Nambiro Woleson Dzimbiri**

*Miami University*

**Payton Bennett**

*Ball State University*

---

*Depression among collegiate student-athletes is a subject of growing research interest. The time demands and performance-related pressures that collegiate student-athletes face increase the risk for possible mental health diagnoses. It is recommended collegiate student-athletes receive training on mental health issues to learn about symptoms or identify early warning signs. This study investigated whether receiving or not receiving pre-sport mental health education influenced reported depressive symptoms of National Association of Intercollegiate Athletics (NAIA) collegiate student-athletes. This quantitative, cross-sectional study included voluntary collegiate student-athletes aged 18 years old or older ( $n = 361$ ). Descriptive statistics were utilized to describe the characteristics of the participants. An independent sample  $t$ -test compared the mean scores between two groups. Most participants ( $n = 229$ , 63.7%) indicated they did not receive mental health training from their college or university prior to sport participation. A web-based instrument that consisted of a demographic questionnaire and Patient Health Questionnaire (PHQ-9) was used to identify collegiate student-athletes who reported depressive symptoms. Collegiate-student athletes who did not receive pre-sport mental health training scored in a higher category of depression symptoms than their student-athlete peers who did receive mental health training. This study recommends that college athletic programs should explore the importance of as well as implement mental health training sessions*

*and practices to prepare collegiate student-athletes to recognize and respond promptly and appropriately to mental health challenges.*

*Keywords: mental health literacy, college athletes, depression, NAIA*

Collegiate student-athletes face many challenges such as balancing academics, social life, work, and family issues (Hagedorn et al., 2022). Over the past few years, uncertainty due to a global pandemic and loss of face-to-face learning opportunities added to these challenges (Hagedorn et al., 2022). With the increase in challenges, there has been a global increase in mental health conditions, especially depression. According to the National Institute of Mental Health (2023), approximately 8.3% of adults aged 18 or older experienced a depressive episode in the past year. When the data was limited to college-aged students ranging from 18-25 years old, the depression prevalence was 18.6%. The American College Health Association (2019) found 45.1% of college students reported significant signs of depression that affected their ability to function. A subsection of the college student population of focus in this study is collegiate student-athletes.

Collegiate student-athletes face the additional pressure and demands of competing in a high-level sporting event. Although exercise can serve as a protective factor for mental health issues like depression, the time demands and pressure to perform that collegiate student-athletes face increases their risk for depression (Cox et al., 2017; Moore, 2017; Moore et al., 2022). Various studies found the prevalence of depression in collegiate student-athletes ranges from 15.6% to 33.2% (Cox et al., 2017; Proctor & Boan-Lenzo, 2010; Weber et al., 2023; Wolanin et al., 2016).

The increased risk for mental health issues like depression has caused concern in the athletic ecosystem (Moreland et al., 2018). Historically, knowledge of depression in collegiate student-athletes and those surrounding them remained limited (Moreland et al., 2018; Weber et al., 2023). Mental health training is one approach to increase help-seeking behaviors as well as increase the recognition of conditions by coaches/trainers and the collegiate student-athletes themselves to expedite the referral process (Daltry et al., 2021).

Research into the effects of mental health training on collegiate student-athletes remains ongoing (Gorczyński et al., 2024; Moore et al., 2022). The purpose of this study is to examine how pre-participation mental health training that focuses on mental health literacy offered by NAIA programs might impact reported depressive symptoms. To date, there are no studies exploring the impact of pre-participation mental health training on reported depressive symptoms in NAIA college athletes.

## Literature Review

Mental health literacy is defined as the knowledge and beliefs about mental health disorders which aid one's recognition, management, or prevention (Jorm et al., 1997). Other scholars conceptualize mental health literacy as an individual's capacity to obtain, evaluate, and utilize health information autonomously in order to make informed decisions concerning their health and medical care (Chinn, 2011; Sorensen et al., 2012). Being mental health literate includes the following components: (1) ability to recognize specific disorders, (2) knowledge of how to seek

mental health-related information, (3) knowledge about risk factors and causes of mental health disorders, (4) knowledge about how to self-treat and of the availability of professional help, (5) attitudes that promote the recognition of mental health problems, and (6) attitudes that promote seeking appropriate help (Jorm et al., 1997; Moore et al., 2022).

A prior study showed that possessing sufficient mental health literacy at an individual level such as college students is correlated with improved health results, including suicide prevention (Pearce et al., 2003). Having knowledge about mental health literacy has also been associated with greater propensity to seek assistance and adhere to medication regimens, leading to enhanced mental well-being (Bonabi et al., 2016). Moreover, other research demonstrates that increasing mental health literacy through training decreases the risk of depression (Moore, 2017; Walker et al., 2010). For example, Walker et al. (2010) provided mental health education to 909 adults. As their data collection method, Walker et al. (2010) used the PHQ-9, which is a self-reported questionnaire that assessed the severity of depressive symptoms among the sampled participants. After six weeks, depressive symptoms were lower for those receiving the training when compared to the control group. Researchers found the same results in high school aged students. A study of 1,678 Chinese students found there was an increased odd of about 60% of moderate to severe depression for those students demonstrating inadequate levels of mental health literacy (Lam, 2014). Shim et al. (2022) investigated the effectiveness of psychoeducational tools in enhancing awareness and mitigating stigma associated with mental health. Their study revealed that completion of the Abnormal Psychology course was associated with a discernible decline in stigma among students as well as a significant positive change in beliefs and awareness about mental health. Their findings underscored the potential of mental health education in fostering awareness and comprehension, while reducing stigma surrounding mental health issues. By equipping students with education and training in mental health, the study highlights the importance of fostering understanding and empathy towards mental illness, thereby promoting overall well-being (Shim et al., 2022). Although research is showing increased mental health literacy decreases the risk for depression, there is a need for more research to determine the best method of improving mental health literacy. Specifically, there is a need to learn more about the availability of such mental health training to collegiate student-athletes and the impact mental health training has on a collegiate student-athletes self-reporting of depressive symptoms.

Collegiate student-athletes suffering from mental health conditions like depression need to seek help from an appropriate mental health provider. Unfortunately, there is hesitation to reach out and ask for help. The most often cited barrier to help-seeking by collegiate student-athletes is the stigma associated with mental health disorders (Moore, 2017; Moore et al., 2022). Other commonly cited barriers include: (1) feeling weak for seeking help, (2) belief that mental health providers do not understand demands placed on collegiate student-athletes, (3) fear that seeking help will impact sport performance, (4) concern about disappointing coaches and teammates, (5) concern about privacy and confidentiality, (6) lack of mental health literacy, and (7) negative past experiences when help-seeking (Gulliver et al., 2012; Moore, 2017).

While many barriers exist, ways to support collegiate student-athletes as well as increase help-seeking have also been identified. Increasing mental health training on literacy, having an established relationship with a mental health provider, and creating a supportive athletic environment that encourages self-care have been identified by collegiate student-athletes as approaches that facilitate help-seeking (Gorczynski et al., 2024; Moore et al., 2022). Ensuring

confidentiality is another key to encouraging help-seeking. Cutler and Dwyer (2020) found collegiate student-athletes were more likely to seek help from a mental health provider within the athletic department than to go to a university counseling center – as long as confidentiality is ensured.

Understanding the signs and symptoms of mental health, along with the realization that mental health symptoms can be a normal part of the collegiate student-athlete experience, increases the likelihood a collegiate student-athlete will recognize they are struggling and seek help earlier (Simons et al., 2023). Lack of mental health training could lead to delay in help-seeking and increased risk for development of more severe mental health reported symptoms (Paulus et al., 2015). The current study seeks to build on previous literature by looking at an understudied population – NAIA collegiate student-athletes. Specifically, the NAIA has invested time and resources in trying to bolster their mental health training offerings (Neal et al., 2015). Offering education on stress, stress-management techniques, and the resources accessible to collegiate student-athletes for enhancing stress management can be equally advantageous as guidance on hydration, nutrition, and sleep for enhancing performance (Neal et al., 2015). Neal et al. (2015) further states that this comprehensive approach addresses not only physical but also mental well-being, optimizing the athlete's capacity to excel both in their athletic pursuits and in their daily life activities. Additionally, mental health issues are at the forefront of the NAIA's (2024) commitment to collegiate student-athlete health and safety. Understanding and appreciating the complexity of topics related to these issues are key components of the NAIA's holistic approach to collegiate student-athlete development. Recognizing mental health issues are not only detrimental to performance, but disrupt the healthy function of college students, it is the desire of the NAIA to create a culture where collegiate student-athletes feel safe to reach out about mental health concerns in the same way one might reach out for care of an athletic injury. Identifying whether pre-sport mental health training decreases reported depressive symptoms can both illustrate the importance of such mental health training efforts and provide support for the NAIA in their ongoing efforts to promote collegiate student-athlete well-being and mental health literacy. Specifically, the study addresses the following research question: Does receiving mental health training prior to sport participation decrease reported depressive symptoms for NAIA collegiate student-athletes?

## Methods

### Research Design

This exploratory study received approval by a university's institutional review board. Researchers utilized a cross-sectional, web-based survey design to gather data from NAIA collegiate student-athletes. Web-based surveys are crucial strategies for collecting data from large sample groups quickly and with minimal cost. Furthermore, dissemination, data storage, and analysis are efficient and user-friendly (Greenlaw & Brown-Welty, 2009). Considering the size of the NAIA collegiate student-athlete population, alpha level (0.05) confidence intervals (95%), statistical test (one-tailed independent samples *t*-test), statistical power (0.8), and effect size (0.5) the minimum sample for this study was 102 collegiate student-athletes (Faul et al., 2007). The effect size used in this study was similar to other studies involving NAIA collegiate student-athletes (Moore & Abbe, 2021).

## Sampling

Researchers utilized a cluster sampling procedure to identify collegiate student-athlete participants. The clusters included each of the varsity sports offered by the NAIA in each gender, and then teams were randomly selected from these clusters (Nguyen, 2021). This approach ensured all member institutions participating in various sports had an equal opportunity for inclusion in the survey. In total, the survey was sent to 1,800 collegiate student-athletes from over 30 NAIA member institutions. The final response rate for this study was 20.1%.

## Participants

Voluntary collegiate student-athletes aged 18-years-old or older and attending an NAIA member institution participated in the study (n = 361). The data for all participants was used in the analysis. Most participants were 18-21 years old (53.5%, 46.5% indicated being over the age of 21). Survey participants were primarily juniors (30.7%, 23.8% sophomores, 23.1% first years, 22.1% seniors or graduate students). More women completed the survey (59.8%, 40.2% men). The largest percentage of participants were White/Caucasian (55.4%, 21.9% Hispanic or Latino, 14.9% Black or African American, 6.6% multiracial, 1.2% from other groups). Participants recorded which NAIA athletic team they were primarily affiliated with (20.2% baseball, 19.9% soccer, 12.5% track volleyball, 8.0% softball, 6.4% cross country, 6.1% basketball, with all other sports being under 5% each [e.g., football, bowling, cheer, dance, track and field, swimming and diving, golf, tennis, and lacrosse]). Participants were further examined regarding NAIA college/university demographics (See Table 1).

Table 1.  
*NAIA Institutional Demographic Information*

University Demographic	%
Private	20.2%
Public	79.8%
Suburban	33.3%
Urban	33.9%
Rural	32.8%
Faith Based	62.9%
Non-Faith Based	37.1%

Participants also responded to whether or not they received mental health training from their college or university before participating in their sporting season. The largest majority (n = 229, 63.7%) indicated they did not receive such training. The other 36.3% (n= 132) indicated they did receive some form of training.

## Measures and Instruments

Collegiate student-athletes completed a web-based instrument that consisted of the following: (1) demographic questionnaire (see above demographics) and (2) Patient Health Questionnaire (PHQ-9). The PHQ-9 is a self-administered version of the PRIME-MD diagnostic instrument for common mental disorders (Kroenke et al., 2001). It is used to make criteria-based diagnoses of depressive and other mental disorders commonly encountered in primary care. This is a nine-item depression module upon which the diagnosis of Diagnostic and Statistical Manual (DSM) depressive disorders is based. Reliability, predictive validity, and sensitivity of the tool have indicated it has sound psychometric properties. Internal consistency of the PHQ-9 has been shown to be high (American Psychological Association, 2023). The reliability and validity of the Chinese version of the PHQ-9 as a depression screening tool have been confirmed through extensive studies conducted in Hong Kong ( $n = 6028$ ) and Taiwan ( $n = 1954$ ) (Yu, 2012). In bolstering its efficacy, additional studies conducted in China (Chen, 2010; Laks, 2016) have provided further evidence supporting the effectiveness of the PHQ-9 in identifying and assessing depression. There is precedent for using the PHQ-9 in research with collegiate student-athletes (DaCosta et al., 2020; LoGalbo et al., 2020).

### **Data Collection**

Researchers identified athletic trainers through the NAIA database to establish contact information. Athletic trainers provided survey information to their assigned collegiate student-athletes. Athletic trainers did not receive incentives for their participation and were prompted to send reminder emails to their college athletes on three occasions throughout the data collection process. It is unsure if all athletic trainers provided the survey to their assigned collegiate student-athletes. Collegiate student-athletes were made aware that their datum was anonymous to try and encourage participation. This approach was successful in other NAIA research efforts (Moore & Abbe, 2021).

The research team believed the athletic training staff would provide consistent help with data collection across NAIA institutions. Athletic training staff received the list of teams from their institution for inclusion in data collection. Researchers provided athletic training staff detailed instructions for data collection and a copy of the informed consent. Athletic training staff were asked to distribute the electronic survey to their collegiate student-athletes. Collegiate student-athletes were able to opt-out of the survey at any time. Survey data were collected on a voluntary basis. The survey took approximately 10-15 minutes to complete. Once data was collected across NAIA institutions, researchers imported survey results into a statistical software program (SPSS 28) on a secure, private platform.

### **Data Analysis**

Researchers utilized descriptive statistics to provide details about the sample and overall survey results. Researchers used inferential statistics to infer information from the sample data to the overall NAIA college athlete population. For this study, the independent variable was the presence or absence of mental health training. The dependent variable was the composite score on the PHQ-9. Researchers used an independent sample *t*-test for this study. There was no missing data for this study.

## Results

Researchers conducted an independent sample *t*-test (assuming equal variances) to determine the impact of mental health training prior to sport participation on a collegiate student-athletes' self-reported depressive symptoms. The assumption checks for using a *t*-test were deemed tenable. The 230 collegiate student-athletes not receiving mental health training before participating in their sport ( $M = 16.21$ ,  $SD = 5.60$ ) compared to collegiate student-athletes receiving training ( $M = 14.31$ ,  $SD = 4.73$ ) demonstrated higher scores on the PHQ-9,  $t(359) = 3.28$ ,  $p < 0.001$ . This indicates those not receiving training reported more depressive symptoms than collegiate student-athletes receiving training. The effect size was medium, with a Cohen's  $d$  of 0.36.

The minimum clinically important difference (MCID) between collegiate student-athletes receiving mental health training versus those that did not receive mental health training was not clinically significant. The MCID for the PHQ-9 is 3.0 to 3.7 (American Psychological Association, 2023). The difference in clinical significance between collegiate student-athletes who underwent mental health training and those who did not was found to be minimal in terms of the minimum clinically important difference (MCID). This suggests that the observed disparities in mental health outcomes between trained and untrained collegiate student-athletes did not meet the threshold considered clinically meaningful according to established criteria for depression severity change. However, according to the PHQ-9 scoring scale collegiate student-athletes receiving mental health training had an average score in the moderate depressive category, while those not receiving mental health training had an average score in the moderately severe category.

## Discussion

This exploratory study investigated the reported depressive symptoms between two groups (group receiving mental health literacy training and a group that did not) of NAIA collegiate student-athletes using a web-based survey design. This outcome was of particular interest to researchers because awareness about mental health literacy can decrease self-stigma, including the negative attitudes and internalized shame collegiate student-athletes may have about living with a mental illness (Lam, 2014; Moore, 2017; Moore et al., 2022; Walker et al., 2010). The results of the independent sample *t*-test revealed a significant difference in self-reported depressive symptoms between collegiate student-athletes who received mental health training before participating in their sport and those who did not. As revealed in this study, the mean PHQ-9 score for collegiate student-athletes who did not receive mental health training ( $M = 16.21$ ,  $SD = 5.60$ ) was notably higher than for those who did receive training ( $M = 14.31$ ,  $SD = 4.73$ ). This suggests that, on average, collegiate student-athletes who did not undergo mental health training reported experiencing more severe depressive symptoms compared to their counterparts who received training. However, it is critical to note that the lower PHQ-9 scores among collegiate student-athletes who received training suggest that such interventions may play a crucial role in promoting mental well-being in this population. These findings are consistent with research conducted by Anderson et al. (2023), who examined the Sports Mental Health

Assessment Tool 1 (SMHAT-1) among Team USA athletes. Their study similarly emphasized the significance of integrating mental health interventions into collegiate sports programs to foster the overall well-being of student-athletes (Anderson et al., 2023).

Furthermore, results from  $t$ -value of 3.28 with 359 degrees of freedom indicated the magnitude of the difference between the two groups. In the context of this study, the  $p$ -value being less than 0.001 indicates that this difference is statistically significant, meaning that it was unlikely to have occurred by chance. These findings highlight the potential efficacy of mental health training in mitigating depressive symptoms among collegiate student-athletes. Existing studies revealed that mental health literacy improves help-seeking behavior (Gorczyński et al., 2024; Moore et al., 2022). Knowing when to seek help for mental health challenges and being willing to do so is important for recovery. Mental health training often addresses these issues as this is crucial for the well-being of collegiate students-athletes. In the present study, the researchers were curious about the percentage of collegiate student-athletes who participated in mental health training and the relationship between participation in training and self-reported depressive symptoms. Of the 361 NAIA college athletes surveyed, 63.7% reported they had not received mental health training before beginning their college sport. This was a surprisingly high percentage, leading researchers to wonder whether collegiate student-athletes had mental health training but did not recognize it as that or did not transfer what was learned to participation in athletics.

Student-athletes who participated in mental health training reported fewer depressive symptoms. This finding supports a prior study by Lam (2014). Lam found collegiate student-athletes that lacked mental health literacy were at an increased risk of depression. However, the relationship between mental health training and depression are still somewhat unclear and raise questions that may guide future research, such as the following:

Does mental health training provide collegiate student-athletes with feelings of control over depressive symptoms? Does the increased knowledge of mental health literacy that accompanies mental health training, make depressive feelings less urgent? What methods of instruction are most effective? Are people who are literate in mental health able to recognize signs and symptoms of depression sooner and seek help or engage in effective self-care strategies before symptoms escalate? These future studies are pivotal for helping the NAIA promote the safety and well-being of their collegiate student-athlete population. These studies also develop initial studies of this nature into studies that can impact practice at the micro and macro levels.

### Study Limitations

First, while efforts were made to decrease discomfort with the survey, it is possible collegiate student-athletes felt pressure to respond in particular ways out of personal and/or athletic concerns. This raises concerns about a halo effect. Second, this study relied upon self-reported data. Without having the ability to verify participant responses, there was no way of knowing the legitimacy or honesty of participants' responses. This brings into question recall bias. Third, the study was unable to control for the multiple covariates or confounding variables that influence a college athlete's mental health. Therefore, as a remedy towards addressing these limitations, the researchers propose the following suggestions for future research and these include: (1) conducting a comprehensive study to investigate the historical context of mental health, (2) analyzing the significance and implications of self-reported depressive symptoms

prior to mental health training (3) examining the extent of engagement in current mental health services and practices, and (4) exploring the variations in mental health training approaches across schools with regard to race, ethnicity, gender, sexuality, and religious factors

### **Conclusion**

The conclusion that collegiate student-athletes who participate in mental health training report fewer depressive symptoms underscores the potential value of mental health training. The result of this study indicates the need to provide mental health training to collegiate student-athletes, which really should include both pre-participation and consistent training throughout their college athletic career. We strongly recommend this ongoing training to ensure collegiate student-athletes recognize signs and symptoms of mental health issues and know how to respond appropriately, seeking help for themselves or teammates.

## References

- American College Health Association. (2019). *American College Health Association: National College Health Assessment*. [https://www.acha.org/documents/ncha/NCHA-II\\_SPRING\\_2019\\_US\\_REFERENCE\\_GROUP\\_EXECUTIVE\\_SUMMARY.pdf](https://www.acha.org/documents/ncha/NCHA-II_SPRING_2019_US_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf)
- American Psychological Association. (2023). *Patient Health Questionnaire*. <https://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/patienthealth#:~:text=PHQ%2D9%20scores%20%3E%2010%20had,been%20shown%20to%20be%20high.>
- Anderson, T., Adams, W. M., Bartley, J. D., Brutus, A. L., Donaldson, A. T., & Finnoff, J. T. (2023). Analysis of the Sport Mental Health Assessment Tool 1 (SMHAT-1) in Team USA athletes. *British Journal of Sports Medicine*, 57(18), 1187–1194.
- Bonabi, H., Muller, M., Ajdacic-Gross, V., Eisele, J., Rodgers, S., Seifritz, E., Rossler, W., & Rusch, N. (2016). Mental health literacy, attitudes to help seeking, and perceived need as predictors of mental health service use: A longitudinal study. *The Journal of Nervous and Mental Disease*, 204(4), 321–324.
- Cox, C. E., Ross-Stewart, L., & Foltz, B. D. (2017). Investigating the prevalence and risk factors of depression symptoms among NCAA Division I collegiate athletes. *Journal of Sports Science*, 5(1), 14-28.
- Chen, S., Chiu, H., Xu, B., Ma, Y., Jin, T., Wu, M., & Conwell, Y. (2010). Reliability and validity of the PHQ-9 for screening late-life depression in Chinese primary care. *International Journal of Geriatric Psychiatry*, 25(11), 1127–1133.
- Cutler B., & Dwyer, B. (2020). Student-athlete perceptions of stress, support, and seeking mental health services. *Journal of Issues in Intercollegiate Athletics*, 13, 206-226.
- DaCosta, A., Grueninger, K., Hurt, S., Crane, A., Webbe, F. M., & LoGalbo, A. (2020). A-11 comparison of the PHQ-9 and impact affective symptom cluster scores in measuring depression at baseline among college athletes. *Archives of Clinical Neuropsychology*, 35(5), 607.
- Daltry, R. M., Mehr, K. E., & Keenan, L. (2021). Student-athletes and counseling services: recommendations for identifying and developing referral sources. *Journal of College Student Psychotherapy*, 37(2), 196–207.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.

- Gorczyński, P., Miller-Aron, C., Moore, M. A., & Reardon, C. (2024). The epidemiology of mental health symptoms and disorders amongst elite athletes and the evolution of mental health literacy. *Mental Health Considerations in Athletes*, 43(1), 1-11.
- Greenlaw, C., & Brown-Welty, S. A. (2009). Comparison of web-based and paper-based survey methods. *Evaluation Review*, 33(5), 464-480.
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for young elite athletes: A qualitative study. *BMC Psychiatry*, 12(1), 157.
- Hagedorn, R. L., Wattick, R. A., & Olfert, M. D. (2022). "My entire world stopped": College students' psychosocial and academic frustrations during the COVID-19 pandemic. *Applied Research in Quality of Life*, 17(2), 1069–1090.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). Mental health literacy: A survey of the public's ability to recognize mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166(4), 182-186.
- Kroenke, K., Spitzer, R. L., & Williams, J.B. (2001). The PHQ-9. *Journal of General Internal Medicine*, 16(9), 606-613.
- Lam, L. T. (2014). Mental health literacy and mental health status in adolescents: A population based survey. *Child and Adolescent Psychiatry and Mental Health*, 8(1), 26.
- Liu, Z. W., Yu, Y., Hu, M., Liu, H. M., Zhou, L., & Xiao, S. Y. (2016). PHQ-9 and PHQ-2 for Screening Depression in Chinese Rural Elderly. *PloS one*, 11(3), e0151042.
- Liu, S. I., Yeh, Z. T., Huang, H. C., Sun, F. J., Tjung, J. J., Hwang, L. C., Shih, Y. H., & Yeh, A. W. (2011). Validation of Patient Health Questionnaire for depression screening among primary care patients in Taiwan. *Comprehensive Psychiatry*, 52(1), 96–101.
- LoGalbo, A., DaCosta, A., & Webbe, F. (2020). Comparison of the PHQ9 and impact symptom cluster scores in measuring depression among college athletes. *Applied Neuropsychology: Adult*, 29(4), 703-709.
- Moore, M. A. (2017). Stepping outside of their comfort zone: Perceptions of seeking behavioral health services amongst college athletes. *Journal of Issues in Intercollegiate Athletics*, Special Issue, 130-144.
- Moore, M. A., & Abbe, A. (2021). The National Association of Intercollegiate Athletics Substance Use and Abuse Survey. *Journal of Issues in Intercollegiate Athletics*, 14, 95-114.

- Moore, M. A., Gorczynski, P., & Miller Aron, C. (2022). Mental health literacy in sport: The role of the social work profession. *Social Work, 67*(3), 298-300.
- Moreland, J. J., Coxe, K. A., & Yang, J. (2018). Collegiate athletes' mental health services utilization: A systematic review of conceptualizations, operationalizations, facilitators, and barriers. *Journal of Sport and Health Science, 7*(1), 58–69.
- National Institute of Mental Health. (2023). *Major depression*.  
<https://www.nimh.nih.gov/health/statistics/major-depression>.
- Nguyen, T. D., Shih, M. H., Srivastava, D., Tirthapura, S., & Xu, B. (2020). Stratified random sampling from streaming and stored data. *Distributed and Parallel Databases, 39*(3), 665-710.
- Neal, T. L., Diamond, A. B., Goldman, S., Liedtka, K. D., Mathis, K., Morse, E. D., Putukian, M., Quandt, E., Ritter, S. J., Sullivan, J. P., & Welzant, V. (2015). Interassociation recommendations for developing a plan to recognize and refer student-athletes with psychological concerns at the secondary school level: A consensus statement. *Journal of Athletic Training, 50*(3), 231–249.
- Paulus, D. J., Wadsworth, L. P., & Hayes-Skelton, S. A. (2015). Mental health literacy for anxiety disorders: How perceptions of symptom severity might relate to recognition of psychological distress. *Journal of Public Mental Health, 14*(2), 94-106.
- Proctor, S. L., & Boan-Lenzo, C. (2010). Prevalence of depressive symptoms in male intercollegiate student-athletes and non-athletes. *Journal of Clinical Sport Psychology, 4*(3), 204-220.
- Pearce, K., Rickwood, D., & Beaton, S. (2003). Preliminary evaluation of a university-based suicide intervention project: Impact on participants. *Australian e-Journal for the Advancement of Mental Health, 2*(1), 25–35.
- Shim, Y. R., Eaker, R., & Park, J. (2022). Mental health education, awareness and stigma Regarding mental illness among college students. *Journal of Mental Health & Clinical Psychology, 6*(2), 6–15.
- Simons, E. E., & Bird, M. D. (2023) Coach-athlete relationship, social support, and sport-related psychological well-being in National Collegiate Athletic Association Division I student-athletes, *Journal for the Study of Sports and Athletes in Education, 17*(3), 191-210,
- Walker, J. G., Mackinnon, A. J., Batterham, P., Jorm, A. F., Hickie, I., McCarthy, A., Fenech, M., & Christensen, H. (2010). Mental health literacy, folic acid, and vitamin B12, and physical activity for the prevention of depression in older adults: Randomized controlled trial. *British Journal of Psychiatry, 197*(1), 45-54.

- Weber, S. R., Winkelmann, Z. K., Monsma, E. V., Arent, S. M., & Torres-McGehee, T. M. (2023). An examination of depression, anxiety, and self-esteem in collegiate student-athletes. *International journal of Environmental Research and Public Health*, *20*(2), 1211.
- Wolanin, A., Hong, E., Marks, D., Panchoo, K., & Gross, M. (2016). Prevalence of clinically elevated depressive symptoms in college athletes and differences by gender and sport. *British Journal of Sports Medicine*, *50*(3), 167-171.
- Yu, X., Tam, W. W., Wong, P. T., Lam, T. H., & Stewart, S. M. (2012). The Patient Health Questionnaire-9 for measuring depressive symptoms among the general population in Hong Kong. *Comprehensive Psychiatry*, *53*(1), 95–102.