



# Sport Psychology in Collegiate Athletics: A Review of Mental Health Service Models

Erin Alberta, Michelle Joshuab, and Ariane Smith Machinb

<sup>a</sup>Counseling and Psychological Services, University of North Carolina at Charlotte, Charlotte, NC, USA; <sup>b</sup>Athletic Department, North Carolina State University, Raleigh, NC, USA

#### **ABSTRACT**

In 2016, an NCAA multidisciplinary task force published a consensus document outlining best practices for addressing student-athletes mental wellness. However, despite their recommendations and the growing development of mental health services for college student-athletes, no published literature exists reviewing the existing models of collegiate sport psychology programs. This article serves to address that gap by providing a general overview of common models, followed by an in-depth description of a successful sport psychology model at a Power Five, Division I athletic program. Considerations and recommendations for other institutions, including barriers to student-athlete wellness, availability of university resources, and advantages and disadvantages of the models, will be discussed.

#### **KEYWORDS**

College athletes; mental health; sport psychology; college counseling; student athletes

Over the past decade, collegiate institutions have begun to recognize the importance of mental health services for student-athletes. Although the data is limited, research indicates that the prevalence of mental health concerns for student-athletes is largely commensurate with the prevalence for non-athlete college students (Greenleaf, Petrie, Carter, & Reel, 2009; Weigand, Cohen, & Merenstein, 2013; Yang et al., 2007), with estimates of about 1 in 5 adults between the ages of 18-25 meeting criteria for a mental health concern (Substance Abuse and Mental Health Services Administration, 2011). Moreover, research in the areas of eating disordered behavior (Martinsen & Sundgot-Borgen, 2013; Sundgot-Borgen & Torstveit, 2004), alcohol use (Lisha & Sussman, 2010; Martens, Dams-O'Connor, & Beck, 2006), and aggressive behaviors (Hainline, 2020), indicates that student-athletes are at greater risk for certain mental health concerns than their non-athlete peers. In response to these statistics, both the National Collegiate Athletic Association (NCAA) and the National Athletic Training Association (NATA), have convened task forces and published consensus statements on mental health best practices (NCAA Sport Science Institute, 2016; Neal et al., 2013). Furthermore,

a number of Division I athletic conferences have recently hosted conferences for student-athlete mental health initiatives and practices (e.g., Mid-American Conference, Pacific-12 Conference, Atlantic Coast Conference), demonstrating clear efforts to formalize more consistent care for student-athlete mental health and well-being.

In 2013, the NCAA convened a multidisciplinary task force which led to a consensus document highlighting best practices for understanding and supporting student-athlete mental wellness. The document was endorsed by 24 medical, mental health, and higher education organizations. It was organized into four primary components: access to clinically licensed mental health providers (LMHPs); policies for referring student-athletes to such providers; inclusion of a pre-participation mental health screening; and the creation of environments that promote well-being and resilience (NCAA Sport Science Institute, 2016). While clear recommendations for best practices are made, each institution has latitude regarding how to comply with directives, often dependent on the university's resources. For instance, LMHPs may be housed within an athletic department or university counseling center, or may be an outside consultant used on an as-needed basis. To date, a review of the literature reveals very few published manuscripts that review the prevalence (Hayden, Kornspan, Bruback, Parent, & Rodgers, 2013) or describe a model (Flowers, 2007) of university sport psychology services. Further, there have been no published manuscripts outlining multiple models of collegiate sport psychology or mental health service delivery frameworks for student-athletes since the NCAA published their best practices document.

Given the additional barriers and stressors faced by student-athletes, universities and mental health practitioners would benefit from being able to learn how different campuses have approached the demand for mental health and sport psychology services. Historically, student-athletes have faced a variety of internal and external barriers in seeking counseling and sport psychology services (Brewer, Van Raalte, Petitpas, Bachman, & Weinhold, 1998; Watson, 2005). Specifically, compared to their non-athlete peers, college student-athletes hold less positive attitudes regarding help-seeking (Watson, 2005). Student-athletes often hold stigmatized beliefs regarding the use of counseling services (Greenspan & Andersen, 1995; Leimer, Leon, & Shelley, 2014), including those related to their status on campus and on their team. For instance, in a sample of 258 college students and student-athletes, 42% of athletes reported that seeking professional mental health services is a poor way to cope with emotional conflicts. Athletes not only may believe that their social image on campus could be harmed, but also that their coaches and teammates could perceive them negatively, leading to loss of playing time and starting positions (Leimer et al., 2014). Further, student-athletes may not believe that LMHPs outside of the athletic department understand the unique context of college athletics (Greenspan & Andersen, 1995; Leimer et al., 2014). In the

same study, Leimer et al. (2014) found that 36.9% of student-athletes believed that issues should remain "in house" and 51.7% endorsed time and finances as notable barriers to seeking counseling services. Thus, athletes may be more likely to seek support from athletic personnel, such as coaches and athletic trainers, who are easily accessible given student-athletes' schedule and time constraints, and have a working knowledge of the athletic context (Leimer et al., 2014; Maniar, Curry, Sommers-Flanagan, & Walsh, 2001).

In addition to developmentally normative mental health concerns of college students (e.g., identity development, addictive behavior, eating and body image concerns), student-athletes may also experience unique factors that affect their mental health, including poor athletic performance, retirement from sport, and return from injuries. Moreover, LMHPs must be attuned to cultural considerations specific to athletics departments. For instance, male and female athletes experience unique eating and body image concerns, which may manifest differently across sport type. Furthermore, female studentathletes are more likely to participate in sports that are less funded, less likely to lead to ongoing careers in sport, and less socially supported than male athletes (Cogan & Petrie, 2002). In regard to racial considerations, studentathletes of color may face additional barriers with substance use policies, scholarships, and low representation in particular sports (Fletcher, Benschoff, & Richburg, 2003; Singer, 2005). And, in comparison to their heterosexual peers, lesbian, gay, and bisexual student-athletes encounter substantial challenges within their athletic participation, including stereotypes, harassment, and discrimination (DeFoor, Stepleman, & Mann, 2018). Thus, although student-athletes may experience similar mental health prevalence rates and attend to their academic responsibilities as all students do, they also operate within the larger NCAA and athletic department system, providing additional context and considerations.

When particular focus is directed specifically toward student-athlete mental health treatment, data support improved outcomes. For instance, when student-athletes have access to LMHPs who have knowledge of sports and their athletic contexts, they reported a better therapeutic relationship, as compared to LMHPs without such knowledge (Broughton & Neyer, 2001). Additionally, Beauchemin (2014) found that receiving psychoeducation related to mental health, sport psychology, and attitudes to mental health services increased student-athletes' awareness and openness to mental health and sport psychology concepts. Findings indicate that the presence of LMHPs within an athletic department system may reduce barriers to student-athletes accessing mental health and sport psychology services, however, LeViness, Bershad, and Gorman (2017) found that only 18 of 621 college counseling centers had practitioners embedded within the institution's athletic department. Thus, it makes sense that researchers (Fletcher et al., 2003; Leimer et al., 2014) have recommended the importance of collaboration between the athletic department and counseling center to better serve the needs of the athletes. Given that these collaborations may take various forms, understanding the ways in which athletic departments and counseling centers have modeled their sport psychology services could be instrumental in assisting those developing, evolving, and/or evaluating models of their own.

Because there are currently no published manuscripts outlining multiple models of collegiate athletics sport psychology services for universities interested in developing or evolving their service approach, the purpose of our paper is to offer an initial overview of existing models and describe in detail the model at North Carolina State University (NCSU), a large, Division I athletic program, to serve as an example for how other universities may choose to implement mental health services for their student-athlete population. Universities have implemented a variety of service models based on financial and space resources, as well as the relationships with campus counseling centers. Though we acknowledge that collegiate sport psychology models exist on a fluid spectrum based on available resources and needs and recognize that models may evolve over time and may even implement components of multiple categories simultaneously and models may even change within one university over time, we have identified three broad categories of models commonly represented on college campuses. Although not an exhaustive list, these categories of models are: the in-house model, the hybrid model, and the outside consultant model.

Each of these three models will be discussed, along with an examination of the pros, cons, and dialogue around future considerations and application of growth. These models reflect general categories and are not all-encompassing of how universities may choose to implement mental health services for their student-athlete body (Tebbe-Priebe, Commander, Scholefield, Eiring, & Golightly, 2020). Further, these categories are not designed to be ultimate demarcations of options, but rather serve to provide an initial lens through which we can review common approaches to mental health and sport psychology services. Moreover, some universities using similar models use different language and labels for the models, as will be referenced below. In addition to how and where LMHPs are physically accessed, universities must consider reporting lines (e.g., Counseling Center and/or Athletic Department) as well as funding sources (i.e., via Counseling Center, Athletic Department, and/or private donors), each of which can exist in different forms across the three general models. Even within the Athletic Department, for instance, reporting lines can vary, ranging from the Athletic Director to the Sports Medicine Director. Thus, the overview serves to outline broad options and emphasize the flexibility that institutions hold to best meet the needs of their studentathletes given the resources at hand. Following the overview, we will provide an in-depth review of the current model of mental health and sport psychology service provision in our institution.



## **General overview of common models**

## The in-house model

The in-house model represents one model of service delivery where the LMHP is fully embedded and functions as an employee of an athletic department. Within this role, the LMHP may or may not maintain some working relationship with the Counseling Center, despite working independently in the Athletic Department. However, this model is differentiated from the hybrid model discussed below in that the in-house LMHP is salaried by the Athletic Department and has responsibilities exclusive or primary to the Athletic Department. Student-athletes can access services easily as the in-house provider is often visible to coaches, teams, and athletic department staff because of their office space location within the Athletics Department itself or connected to student-athlete support services (Lopez & Levy, 2013). Because the in-house provider is familiar to those within Athletics, referrals from coaching staff and athletic trainers may be more consistent than LMHPs housed outside of the Athletics Department or even off campus. The in-house model also allows the provider to become familiar with the university-specific and sport-specific cultures. Thus, this model can help facilitate an innate understanding of the inner-workings and preferences of the student-athletes, increasing the likelihood of developing rapport and a solid therapeutic alliance (Lopez & Levy, 2013). Due to the close environmental proximity, there can be a collaborative approach between mental health and medical providers within sport medicine to better support student-athletes and ensure continuity and consistency of care within an integrated approach. Further, because the in-house LMHP is embedded within the athletics community, they may be seen as an invited part of this community and as such, student-athletes may be more willing to seek out services from this individual, further de-stigmatizing and normalizing mental health services (Lubker, Visek, Waston, & Singpurwalla, 2012). These relationships, which have been developed over time due to the dynamics of the in-house model, may also allow LMHPs easier access to work with and travel with teams.

Despite the aforementioned benefits to the in-house provider model, there are also challenges to consider. While some student-athletes may appreciate the immediate support, others may view the embedded provider as "too close" and may want greater distance from their sport and in accessing mental health services (Wrisberg, Loberg, Simpson, Withycombe, & Reed, 2010). Depending on where in-house providers are located (e.g., Sports Medicine offices, near locker rooms, in practice facilities), student-athletes may not feel like there is enough privacy from teammates and coaches. It is also possible that some student-athletes would perceive a close relationship between the LMHP and coaching staff as a threat to their confidentiality (Lopez & Levy, 2013). Due to the limited number of individuals who are LMHPs with sport-specific

expertise, athletic departments may only have one or two providers available. Thus, provider demographics and diversity may also be a factor affecting a decision to seek services (Lubker, Visek, Watson, & Wingpurwalla, 2012).

Additionally, in-house models may provide challenges for the LMHPs on a personal level, notably related to multiple role conflicts and environmental variables. Being an embedded clinician often includes opportunities to work with student-athletes on several levels: individually, with their teams, and as part of departmental education, workshops, and/or groups. LMHPs must learn to skillfully navigate the complexities related to confidentiality and the ways that student-athletes perceive safety and trust (Lopez & Levy, 2013). Further, providers may see clients on multiple occasions and in formal and informal meetings during their day (e.g., in athletic training rooms, hallways/ bathrooms, and other shared spaces), each of which may require a unique style and intentional way of interacting. Finally, in-house LMHPs may be encouraged or required to attend games and competitions, many of which occur after normal business hours and on weekends. LMHPs and athletic departments must therefore take into consideration general expectations of non-traditional work hours that may interfere with personal or family time.

Essentially, though there are inherent challenges that exist in the in-house model, athletic departments with the resources to implement this model of sport psychology and mental health service delivery may see a reduction in physical and time-related barriers, as well as a reduction in stigma related to seeking services due to increased visibility and trust (Lopez & Levy, 2013). Examples of universities with well-established in-house models include the University of Oklahoma, the University of Virginia, and the University of Michigan. Different universities with similar models may use varying labels or descriptors, as evidenced by the fact that UVA refers to their model as "embedded" and UMich refers to their model as an "embedded, integrated sports medicine model," though they both align with the in-house category.

## The hybrid model

A second model for sport psychology and mental health service delivery within universities is the hybrid model. In this model, the LMHP may serve as a liaison between the Counseling Center and Athletics Department, sharing responsibilities and consultation roles in both departments on campus. In other hybrid models, the LMHP may exclusively serve student-athletes and the Athletic Department while being partially or fully salaried by the Counseling Center and holding administrative responsibilities to the Counseling Center, including serving on Counseling Center committees or participating in regular case consultation or professional development with other Counseling Center staff. The hybrid model may also look differently in smaller universities or universities with fewer resources available from the Counseling Center and

Athletic Department. For instance, Counseling Center LMHPs may serve as a "point person" for student-athletes interested in receiving accessible mental health support or may be invited by the Athletic Department to provide outreach programming to student-athletes or teams while still serving the broader student body in their roles. Regardless of the specific logistics at a given university, the hybrid model especially relies on ongoing commitment and collaboration to ensure athletes are appropriately supported.

As such, the LMHP may have physical offices in either or both the Athletics Department and the Counseling Center, potentially offering student-athletes more flexibility and choice in where to meet for private sessions. Further, there are dual reporting lines between the Counseling Center and Athletics Department, thus, this clinician is likely to have access to case consultations and can collaborate with Counseling Center staff, as well as maintain a connection to the broader campus and Student Affairs. This working relationship may allow several benefits, including coordinating care for student-athletes presenting with high risk, consulting on best practices for care, and collaborating on treatment planning and resources. In this model, the LMHP's position may be a jointly funded position between the Athletic Department and Counseling Center or funded exclusively by either department.

The LMHPs housed solely within the Counseling Center may be more connected to broader campus resources and Student Affairs than in-house LMHPs. However, though the clinician works to some extent with the studentathlete population, they may also share responsibilities at the Counseling Center. Thus, there can be some variability in student-athlete service delivery within this model. For example, at some universities, there may be less time to devote toward specific student-athlete needs and the ability to foster relationships with teams, coaches, and athletic department staff, as counseling center duties might be prioritized. In other universities, this hybrid model does allow equitable time spent between counseling center and sport psychology responsibilities. Additionally, challenges may result from reporting to two different campus departments and result in a potential lack of flexibility or support to prioritize needs when issues are presented (Tebbe-Priebe et al., 2020), or the possibility of having a broader range of responsibilities to both the Counseling Center and the Athletic Department.

Overall, the hybrid model allows for similar access, availability, and flexibility as the in-house model. Within this model, embedded LMHPs may experience more ease in scheduling time to travel with teams than liaison LMHPs, and can offer individual services without the same session limits that their Counseling Center colleagues may follow. However, navigating roles and expectations in different offices and cultures requires that LMHPs be attuned to strategic boundaries to manage multiple roles and confidentiality concerns. Embedded LMHPs may also have different caseload and hours expectations

than their colleagues, due to travel, competition, and being the sole (or one of few) providers to the student-athlete population on campus.

In summary, the hybrid model may allow universities to more efficiently utilize resources, including funding and space, when sport psychology services may not otherwise be supported by the Counseling Center or Athletic Department alone. Examples of universities utilizing some variations of the hybrid model include Brigham Young University, University of Southern California (USC refers to their model as embedded, with reporting lines to the Athletic Director and Counseling Center Director), and Northwestern University (although NW agree their model fits the hybrid description, they refer to their model as embedded given they have a formal sport psychology team within their Counseling Center).

# **Contracting services model**

Lastly, the contracting services model illustrates the use of non-university employees to maintain mental health and sport psychology service delivery for student-athletes. LMHPs who are in private practice may be either contracted out by the university campus or Athletics Department to provide a set number of service hours (either on or off campus) or serve as the preferred private practice community resource to whom athletes are referred. Access to contracted LMHPs may provide better accessibility than the counseling center, especially if contracted relationship has been established for some time (Tebbe-Priebe, Commander, Sholefield, & Golightly, 2020). Student-athletes may also perceive a greater sense of confidentiality from coaches and athletic department personnel, and may have more flexibility to choose providers with different specialized training (e.g., eating disorders) or particular cultural identities if multiple LMHPs are available for referrals (Lubker, Visek, Watsonm & Singpurwalla, 2012). The contracting services model likely offers the most choice in this domain compared to the other models because most universities do not employ more than one to two sport psychology LMHPs in their Counseling Center or Athletics Department.

However, there may also be some challenges to this type of service delivery. Student-athletes are often overbooked throughout the week, leaving very little time to seek out additional services in an off-campus setting (Lopez & Levy, 2013). Traveling to an appointment off-campus, whether requiring access to transportation or additional travel time, may present as barriers to accessing treatment (Lopez & Levy, 2013). Additionally, the off-campus providers may not be well-known to student-athletes and may be less familiar to team dynamics, thus creating more hesitancy to seek services since they do not have visibility or previously established comfort and trust (Lubker et al., 2012). Lastly, the off-campus providers may also not be as familiar with on-campus services and resources and may not have an established relationship with the



sport medicine personnel, potentially impacting communication and comprehensive care for student-athletes who may benefit from collaboration. An example of an institution utilizing the contracting services model includes the University of Florida.

Some university's service models will not fit neatly into these three broad categories, such as the University of Minnesota, who refer to their model as inhouse but are contracted and not employees of the university. Thus, although they are fully embedded in the Athletic Department, they are also considered independent providers. Additionally, the University of North Texas relies on sport psychology graduate students being supervised by a LMHP to act as a robust team of service providers for their teams and athletes. These are strong examples of the intricacies and nuances involved in developing mental health and sport psychology service models. These brief descriptions serve to review strengths and limitations of commonly implemented mental health service models, though it should be noted that there can be a lot of variations in service delivery despite meeting criteria for any specific model, and considerations need to be applied to each unique situation in order to best provide support the student-athlete population. In order to provide a more in-depth example of how universities may establish and grow their own mental health service provisions, we will now focus on reviewing an existing and successful model as a template. Below, we discuss the evolution of our program's model, the structure and roles of LMHPs, efficacy and usage data, program evaluation, limitations to consider, and recommendations for other universities.

## In-depth example: evolution from contracted services to in-house model

Prior to 2013, student-athletes at NCSU were mostly directed to utilize the services of the university Counseling Center (CC). Though student-athlete utilization was not specifically tracked, it was estimated by CC personnel that yearly utilization rates were consistently lower than the general student body (~10%). In addition, Athletics Department personnel, including Sports Medicine providers, reported that information regarding treatment was routinely not provided, even when referrals were made directly by Athletics and releases of information were requested. On a limited basis, mental health and mental skills/sport performance services for some athletes were provided to the Athletics Department through contracts with off-campus providers, typically when needs rose to a level of heightened concern and/or there was a perceived high need for discretion. These providers were not well-known in the Athletics Department and had limited information regarding campus resources.

During the 2013–2014 academic year, a strong relationship between Sports Medicine and an outside provider was built and the contract request for services became large enough to warrant consideration of a permanent staff position, in house. Budget constraints for the following year allowed for only a half-time position. Given the outside provider's expertise with integrated care as well as a desire to improve trust between Athletics and the CC, Athletics asked the CC to partner by creating a half-time position for the contracted clinician, for one year. During that year, the clinician split time between the two departments, learned about the CC's structure and policies, and was able to build a bridge between the CC and Athletics. The leadership of each department also built a trusting relationship and has continued to strengthen to this day. The following year, the Athletics Department fully funded a full-time, in-house position for a Counseling and Sport Psychologist. The position reports to the Director of Sports Medicine. The LMHP is part of the integrated care model in Sports Medicine, making consultation and communication a daily part of student-athlete comprehensive healthcare. The LMHP's office is located just across the hall from the main Sports Medicine hub of the department, balancing co-location benefits and privacy needs for student-athletes.

Given the multiple benefits related to remaining connected to the CC, the LMHP has an indirect reporting line to the Director of the CC. In large part, it is this connection and partnership with the CC that has contributed to the success of the position. The sport psychology provider is also considered a staff member of the CC, which allows for collaboration and consultation with a larger and culturally diverse CC staff, participation on weekly case consultation teams, ongoing continuing education, and access to electronic medical record (EMR) software and related safeguards to protect mental health records. The latter benefit keeps records housed outside of the Athletics Department and together with all the mental health records of university students. Student-athletes are encouraged to seek services from either the Sport Psychology department or the CC, so access to the mental health records by CC providers and the LMHP further allows for seamless consultation or transfer of care when appropriate. The informed consent form for studentathletes through Sport Psychology clearly articulates the above-mentioned relationships with the CC and Sports Medicine staffs for integrated healthcare purposes, as well as the ability for the LMHP to consult directly with Sports Medicine staff, including athletic trainers, physical therapists, medical doctors, and registered dieticians.

This partnership has been integral in growing the Sport Psychology department within Athletics. After the first few years since establishing the position, it became clear that one provider was unable to meet the growing demand for services from student-athletes and coaches, and funding was procured to expand the department. For the first year of expansion, the Athletics Department again reached out to the CC, who contributed 25% of the cost to create two post-doctoral positions. These two providers each spent one day a week working at the CC to establish an understanding of CC policies,



procedures, and resources; foster strong working alliances with CC practitioners; and learn more about campus resources available to all students. Within the year following the creation of the post-doc positions, additional funding was secured from the Athletics Department to upgrade the two positions, which expanded personnel from one to three full-time LMHP providers. The CC no longer contributes to these salaries.

Since tracking utilization rates in AYs 2014–2019, individual service utilization has risen from 17% to 41% of the approximately 550 student-athletes in the department. Growth of the department has also enhanced service delivery in the areas of staff, coach, and administrator consultations; outreach delivery to teams; and collaboration on other Athletics Department initiatives. The LMHPs also now have more time to foster working alliances with campus partners to continue increasing integration and thereby reducing redundancy in service provision.

While our current model of service provision appears to be an effective one, it is not without challenges and limitations. Most notably, the more our LMHPs are visible and working with teams, the greater the demand for services. Our relatively well-staffed department takes pride in our short wait times and accessibility and it is likely that those may be compromised as demands for services grow without additional staff. Another challenge involves the location of our office suite, which may be a barrier for some student-athletes to access services. While our location outside the main hub of Sports Medicine is efficient for our providers, it is less accessible for all student-athletes. Our decentralized Athletics Department has three Sports Medicine hubs and it would be ideal to expand our office locations to each of those hubs to further embed and reduce barriers to those student-athletes who do not typically frequent our office/building location. Lastly, our commitment to the values of diversity and inclusion warrants greater emphasis on LMHP demographics, socio-cultural factors, and areas of expertise. Noting an obvious need in terms of gender and race, Athletics and the CC partnered again for the 2019-2020 academic year. For the first time in the seven-year history of partnership, Athletics paid the CC for 30% of a counselor's salary during that year to provide in-house services to better meet the needs of our diverse student-athlete population. Because we were able to diversify our Athletics Department staff the following year, this particular partnership was no longer needed and therefore did not continue to the 2020-2021 academic year.

The development of the Sport Psychology Department at NCSU has been relatively swift and effective, but not without lessons along the way. Those considering the creation or expansion of athlete-specific mental health provision may benefit from our reflection on our keys to success. Notably, none of our progress would have been possible without the willingness of departmental leaders from across campus to build trust, collaborate on ideas, adapt to

changing needs, and work toward mutually beneficial goals. At the outset, student-athletes were underutilizing the services of the CC, and Athletics was not fully supporting the mental health needs of student-athletes, resulting in a void of services and potentially amplifying mental health stigma in an Athletics world. Hence, priority one in creating an embedded position in Athletics was (and still is) to break down stigma and reduce barriers for services. Part of our continual task includes outreach education efforts, for not only students but all Athletics Department staff, on student-athlete mental health and wellness.

Another key to success worth highlighting is adaptability and openness to change. Each year, we have reflected on utilization rates of staff and teams, listened to feedback from student-athletes and staff, and adjusted our offering of services. We have tried to anticipate needs, growth strengths, and work to improve our vulnerabilities. None of this would have been possible without the commitment of energy and resources from Athletics and Counseling Center leaders to prioritize the mental health and well-being of our student-athletes. Because of these adjustments and support from the Athletic Department and Counseling Center, our model was able to evolve over time across the spectrum of possible models, originating with a contracted services model to a hybrid model as funding became more available, and then ultimately to an in-house model as the Athletic Department moved to fully fund the LMHP salaries.

## Conclusion

This paper reviewed several common models of sport psychology services utilized at college campuses throughout the country. Further, we provided an in-depth description of the model implemented at a large, Division I athletic program, which evolved over time from a consulting services model to a hybrid model and ultimately, to an in-house model. Given the growth and evolution of the sport psychology field and the increasing prevalence of university athletic departments hiring sport psychology and mental health providers, it seems necessary that universities have a clear understanding of what these models can look like in practice. Despite the different models of student-athlete mental health and performance psychology service delivery, each of the models we reviewed provide access to licensed clinicians with sport-specific clinical expertise, thus, meeting the needs of student-athletes and adhering to the NCAA's recommended best practices. It is our hope that as more collegiate athletic programs institute service delivery models, further research can more specifically review and delineate possible options based on the university's resources and needs.

Our institution has the appropriate resources to support an in-house model with multiple LMHPs, and based on the size of our athletic

department and needs of the student-athletes, we believe this model best fits our needs. We recognize that the in-house model may not be the most effective or realistic approach, and were intentional about providing background information about other models and structures. However, for universities building a sport psychology program for the first time or for those looking to expand their current services, more articles such as this one are important to understand the advantages, limitations, and realities of available options. Although research exists on embedded models of other counseling positions, including those within housing, colleges, and behavioral health, there have been no published articles to date outlining various sport psychology models at the collegiate level. With the NCAA's recent best practices publication and the increased focus on addressing student-athlete mental health, universities would benefit from sharing and learning from one another how best to meet the needs of their athletes and teams. We invite other established sport psychology service programs to publish and share their models and what has worked best for their campuses.

## **Disclosure statement**

No potential conflict of interest was reported by the author(s).

#### References

Beauchemin, J. (2014). College student-athlete wellness: An integrative outreach model. College Student Journal, 48(2), 268-280.

Brewer, B. W., Van Raalte, J. L., Petitpas, A. J., Bachman, A. D., & Weinhold, R. A. (1998). Newspaper portrayals of sport psychology in the United States, 1985-1993. The Sport Psychologist, 12(1), 89-94. doi:10.1123/tsp.12.1.89

Broughton, E., & Neyer, M. (2001). Advising and counseling student athletes. New Directions for Student Services, 93(93), 47-53. doi:10.1002/ss.4

Cogan, K. D., & Petrie, T. A. (2002). Diversity in sport. In J. L. Van Raalte & B. W. Brewer (Eds.), Exploring sport and exercise psychology (2nd ed., pp. 417-436). Washington, D.C.: American Psychological Association.

DeFoor, M. K., Stepleman, L., & Mann, P. C. (2018). Improving wellness for LGB collegiate student-athletes through sports medicine: A narrative review. Sports Medicine Open, 4(1), 48. doi:10.1186/s40798-018-0163-y

Fletcher, T. B., Benshoff, J. M., & Richburg, M. J. (2003). A systems approach to understanding and counseling college student-athletes. Journal of College Counseling, 6(1), 35-45. doi:10. 1002/j.2161-1882.2003.tb00225.x

Flowers, R. (2007). Psychologist-sport psychologist liaison between counseling and psychological services and intercollegiate athletics. Journal of Clinical Sport Psychology, 1(3), 223-246. doi:10.1123/jcsp.1.3.223

Greenleaf, C., Petrie, T. A., Carter, J., & Reel, J. J. (2009). Female collegiate athletes: Prevalence of eating disorders and disordered eating behaviors. Journal of American College Health, 57 (5), 489-495. doi:10.3200/JACH.57.5.489-496



- Greenspan, M., & Andersen, M. B. (1995). Providing psychological services to student athletes: A developmental psychology model. In S. M. Murphy (Ed.), Sports psychology interventions (pp. 177–191). Champaign, IL: Human Kinetics.
- Hainline, B. (2020, January 16-17). NCAA Overview and Updates: Mental health and the student-athlete [Conference session]. Student-Athlete Mental Health Summit, Los Angeles, CA. https://www.cme.ucla.edu/courses/cme-download?registration\_id=460286
- Hayden, E. W., Kornspan, A. S., Bruback, Z. T., Parent, M. C., & Rodgers, M. (2013). The existence of sport psychology services among NCAA Division I FBS university athletic departments and counseling centers. The Sport Psychologist, 27(3), 296-304. doi:10.1123/ tsp.27.3.296
- Leimer, A. D., Leon, R. A., & Shelley, K. (2014). Stigmas and stereotypes: Counseling services for student-athletes. Journal for the Study of Sports and Athletes in Education, 8(2), 121-135. doi:10.1179/1935739714Z.00000000022
- LeViness, P., Bershad, C., & Gorman, K. (2017). The association for university and colleg counseling center directors annual survey. Retrieved from http://www.aucccd.org
- Lisha, N. E., & Sussman, S. (2010). Relationship of high school and college sports participation with alcohol, tobacco, and illicit drug use: A review. Addictive Behaviors, 35(5), 399-407. doi:10.1016/j.addbeh.2009.12.032
- Lopez, R. L., & Levy, J. J. (2013). Student athletes' perceived barriers to and preferences for seeking counseling. Journal of College Counseling, 16(1), 19-31. doi:10.1002/j.2161-1882. 2013.00024.x
- Lubker, J. R., Visek, A. J., Watson, J. C., & Singpurwalla, D. (2012). Athletes' preferred characteristics and qualifications of sport psychology practitioners: A consumer market analysis. Journal of Applied Sport Psychology, 24, 465–480.
- Maniar, S. D., Curry, L. A., Sommers-Flanagan, J., & Walsh, J. A. (2001). Student-athlete preferences in seeking help when confronted with sport performance problems. The Sport Psychologist, 15(2), 205-223. doi:10.1123/tsp.15.2.205
- Martens, M. P., Dams-O'Connor, K., & Beck, N. C. (2006). A systematic review of college student-athlete drinking: Prevalence rates, sport-related factors, and interventions. Journal of Substance Abuse Treatment, 31(3), 305-316. doi:10.1016/j.jsat.2006.05.004
- Martinsen, M., & Sundgot-Borgen, J. (2013). Higher prevalence of eating disorders among adolescent elite athletes than controls. Medicine & Science in Sports & Exercise, 45(6), 1188-1197. doi:10.1249/MSS.0b013e318281a939
- National Collegiate Athletic Association Sport Science Institute. (2016). Interassociation consensus document: Mental health best practices: Understanding and supporting student-athlete mental wellness. Retrieved from http://www.ncaa.org/sites/default/files/SSI\_ MentalHealthBestPractices\_Web\_20170921.pdf
- Neal, T. L., Diamond, A. B., Goldman, S., Klossner, D., Morse, E. D., Pajak, D. E., ... Welzant, V. (2013). Inter-association recommendations for developing a plan to recognize and refer student-athletes with psychological concerns at the collegiate level: An executive summary of a consensus statement. Journal of Athletic Training, 48(5), 716-720. doi:10. 4085/1062-6050-48.4.13
- Singer, J. N. (2005). Understanding racism through the eyes of African American male studentathletes. Race Ethnicity and Education, 8(4), 365-386. doi:10.1080/13613320500323963
- Substance Abuse and Mental Health Services Administration. (2011). Results from the 2010 national survey on drug use and health: mental health findings. Retrieved from https://www. samhsa.gov/data/sites/default/files/NSDUHNationalFindingsResults2010-web /2k10ResultsRev/NSDUHresultsRev2010.pdf



- Sundgot-Borgen, J., & Torstveit, M. K. (2004). Prevalence of eating disorders in elite athletes is higher than in the general population. Clinical Journal of Sport Medicine, 14(1), 25-32. doi:10.1097/00042752-200401000-00005
- Tebbe-Priebe, C., Commander, C., Scholefield, R., Eiring, K., & Golightly, T. (2020, January 16-18). Showcase of model of care. [Conference presentation]. Pac12 NCAA Mental Health. Summit, UCLA, CA, United States. https://uclabruins.com/news/2020/1/16/bruin-athleticsucla-to-host-student-athlete-mental-health-summit.aspx
- Watson, J. C. (2005). College student-athletes' attitudes toward help-seeking behavior and expectations of counseling services. Journal of College Student Development, 46(4), 442-449. doi:10.1353/csd.2005.0044
- Weigand, S., Cohen, J., & Merenstein, D. (2013). Susceptibility for depression in current and retired student athletes. Sports Health, 5(3), 263-266. doi:10.1177/1941738113480464
- Wrisberg, C. A., Loberg, L. A., Simpson, D., Withycombe, A. R., & Reed, A. (2010). An exploratory investigation of NCAA division-1: Coaches' support of sport psychology consultants and willingness to seek mental training services. Sport Psychologist, 24(4), 489-503. doi:10.1123/tsp.24.4.489
- Yang, J., Peek-Asa, C., Corlette, J. D., Cheng, G., Foster, D. T., & Albright, J. (2007). Prevalence of and risk factors associated with symptoms of depression in competitive collegiate student athletes. Clinical Journal of Sport Medicine, 17(6), 481-487. doi:10.1097/JSM. 0b013e31815aed6b

Copyright of Journal of College Student Mental Health is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.