



## **Adverse Childhood Experiences and Student-Athlete Mental Health: A Social Work in Sports Perspective**

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*The present discussion reviews the current literature on the impact of adverse childhood experiences on college student-athlete mental health and advocates for the inclusion of trauma informed mental health social work practice in addressing the needs of this uniquely at-risk, and vulnerable population. The sport ethic model is presented as a cognitive lens through which social workers may better understand the athletic context. Sports social work practitioners, skilled in trauma-informed mental health practice, focus on the personal and contextual influences that potentially affect athlete mental health and well-being. In this way, sports social workers are uniquely qualified to address challenges of the athletic experience and provide athletes with the resources and support needed to successfully thrive in the athletic context.*

*Keywords: adverse childhood experiences, athlete mental health, trauma, social work, sport ethic model*

Adverse Childhood Experiences (ACEs) have been defined as traumatic incidents that occur during childhood (Petruccelli, Davis, & Berman, 2019). ACEs can include violent victimization, exposure to violence, psychological and/or emotional abuse, and family mental health or substance use challenges (Centers for Disease Control and Prevention, 2022). Chronic exposure to stressors related to ACEs may potentially alter brain development and affect the ways in which the body responds to stress (Ridout, Khan, & Ridout, 2018). Further, ACEs may impact life course trajectories as they are linked to chronic health problems, mental illness, and substance misuse in adulthood (Hajat, Nurius, & Song, 2020).

Although the association between adverse childhood experiences (ACEs) and adult life-course outcomes is becoming well established, far less is known about the complex and multiple ways in which ACEs may exert a negative influence on the mental health of student-athletes at the college or university level. The current discussion aims to explore the impact of ACEs within an athletic context and serve as a prospective guide for practice and intervention with student-athletes who may have been affected by such.

### **Invisible Injury: Adverse Childhood Experiences**

Once again, ACEs are those traumatic incidents that occur during childhood. These incidents can include violence, various forms of abuse, as well family issues and challenges. The Centers for Disease Control and Prevention (2022) have grouped such events into three categories consisting of *Abuse*, *Household challenges*, and *Neglect*. Each of these categories is further divided into several sub-categories. Briefly, the *Abuse* category is sub-divided into *emotional abuse*, *physical abuse*, and *sexual abuse*. The emotional abuse and physical abuse sub-categories are limited to abusive acts committed by adults living in the household. The sexual abuse sub-category spans abusive acts committed by family members, relatives, friends, or strangers. The *Household challenges* category consists of substance abuse inside the household, mental illness in the household, an incarcerated family member, parental separation or divorce, and domestic or intimate partner violence. The *Neglect* category consists of physical and emotional neglect within the family context. Recent investigations suggest that community-level factors including neighborhood violence, poverty and racial discrimination may too be a potential source of ACEs (Bernard et al., 2021, Bruner, 2017).

### **What Lies Beneath**

While a substantive body of literature on ACEs exists, there continues to be issues related to the full understanding and diagnosis of children who may have been subjected to such experiences (D'Andrea, Ford, Stolbach, Spinazzola, & Van der Kolk, 2012; Spinazzola, Van der Kolk, & Ford, 2018). That is, while some children may be subject to adverse experiences, they may not meet diagnostic criteria for certain psychological disorders despite chronic exposure to such (Croft et al., 2019; Denton, Frogley, Jackson, John, & Querstret, 2017). Prior studies suggest that adverse and/or traumatic experiences, regardless of meeting diagnostic criteria may significantly impact athletes' psychosocial behavior and athletic performance (Lynch, 2021; Aron, Harvey, Hainline, Hitchcock, & Reardon, 2019).

The impact of adverse and/or traumatic experiences may present in the form of avoidance, hypervigilance, and dissociative behaviors (Aron, Harvey, Hainline, Hitchcock, & Reardon, 2019). This phenomenon may be further complicated as student-athletes may conceal symptoms of PTSD and other trauma-related disorders including ACEs (Miller-Aron & LeFay, 2021). This may present a dilemma in the athletic context as athletic administrators, coaches, and trainers may not recognize the residual and potentially long-term effects of chronic exposure to trauma and ACEs in student-athlete populations.

The residual and potentially long-term effects of chronic exposure to ACEs in student-athletes navigating the college or university sports environment may present in several ways. This includes but may not be limited to lack of focus, poor motivation, violation of team rules, interpersonal conflict with coaches and players, and general misconduct. To be sure, ACEs are pervasive and affect an estimated two-thirds of the general U.S. population (Felitti, 2019). Several studies have explored how ACEs may impact adult life-course trajectories. Prolonged exposure to adverse experiences in childhood has been linked to poor outcomes in adulthood including increased risk for chronic disease, mental illness, and risky health behaviors (Boullier & Blair, 2018). However, much less is known about the ways in which ACEs may impact the health and well-being of student-athletes.

Recent studies suggest that the prevalence of ACEs among college and university student-athletes may be similar to that of the general population (Brown, 2019). In a systematic review of the relevant research literature published between 1989 and 2017, Brown (2019), utilizing a research synthesis and meta-analytic approach as set for by Cooper (2010) found that over two thirds of NCAA athletes across divisions I, II, and III reported at least one ACE. Further, the study found that the most commonly reported ACEs were physical abuse, household mental illness, parental separation, and household substance abuse. This suggests that the incidence and prevalence of ACEs among student-athletes may indeed be similar to that of the general U.S. population.

### **Counting up the Cost**

The risk and protection literature has long since concluded that the presence of multiple risk factors may have a cumulative impact on a host of social and developmental outcomes (Greenberg et al., 1999). Prior research has linked the presence of multiple risk factors to low academic achievement (Gubbels, van der Put, & Assink, 2019), mental illness (Sameroff & Seifer, 2021), and chronic disease (Anderson & Durstine, 2019). The same may be said of ACEs. That is, multiple ACEs may increase the likelihood for poor social and developmental outcomes for student-athletes. Recent studies have shown that chronic exposure to multiple ACEs is strongly associated with alcohol use, anxiety, poor emotional regulation, physical injury, and substance use (Thomson, & Jaque, 2020; Kaier, Cromer, Davis, & Strunk, 2015). The impact of ACEs on student-athletes may be further amplified by the strenuous rigors, demands, and expectations of college and university athletics.

The behavioral consequences associated with ACEs can threaten one's general health and well-being and adult life-course trajectories. These threats are perhaps more pronounced within the athletic context given its confined social space (Brown, 2019). College student-athletes have a four-year window of opportunity to transition from high school, manage an academic course load, and meet the demands of athletic competition at a level never before experienced (Miranda-Comas, Zaman, Ramin, & Gluck, 2022). This is a tall order in and of itself, but in the absence of therapeutic intervention, the acquisition of requisite coping skills, and ongoing support, the opportunities to succeed for student-athletes affected by ACEs are severely truncated.

This is not to suggest that college athletic programs are ill-equipped to support student-athletes and help them succeed. Many college and university athletic programs are staffed with tutors and counselors to assist in the areas previously mentioned. However, the impact of trauma, including ACEs, on student-athletes can be an unknown quantity and beyond the scope of what tutors and counselors have been trained to do. To effectively address the impact of ACEs on student-athletes requires specialized knowledge and training.

### **Social Work in Athletic Contexts**

Sport social work is a burgeoning area of practice that harbors great potential for college athletic programs. Social work is well equipped to promote the health and well-being of student-athletes through direct practice, advocacy, policy development, constituent education and research (Moore & Gummelt, 2019). College student-athletes are a distinct yet vulnerable population. Mental health and physical challenges including but not limited to ACEs, may be amplified, and uniquely situated within the confined social space of the

athletic context. As such, sport social work and trauma-informed mental health practice represent complements to the athletic context and has the potential to improve the overall well-being of student-athlete populations (Aron, Harvey, Hainline, Hitchcock, & Reardon, 2019).

Given the pervasiveness of ACEs and how they may be uniquely situated among the population of college student-athletes, individuals with specialized knowledge and training in the area of trauma-informed mental health practice can serve as a valuable asset to college athletic programs. As such, social work education programs should strongly consider offering specialized training and instruction in this area of practice with consideration for multiple social contexts. This may be particularly salient in athletic contexts when one considers that mental health status can greatly influence athletic performance (Eganov, Romanova, Nikiforova, Korneeva, & Tselishcheva, 2021).

Social workers skilled and experienced in trauma-informed mental health practice are ideally suited to address the needs and challenges that student-athletes affected by ACEs may encounter. Therefore, social workers skilled in trauma-informed mental health practice, as part of a multidisciplinary effort, could be effectively utilized to help athletes develop the requisite skills to cope with the challenges of college athletics despite ACEs (Bennett, 2022). To be sure, student-athletes may develop psychological and physiological adaptations that mask common symptoms of psychological distress. Therefore, social workers may also be useful in consulting with, and educating coaches, sports medicine, and other support staff to recognize and appropriately respond to concerns of student-athlete mental health.

A multidisciplinary approach that includes trauma-informed mental health practice may increase the likelihood that student-athletes, including those affected by ACEs, receive needed intervention and support. Doing so would be beneficial in augmenting the athletic culture and context, acknowledging that student-athlete mental health is as important as athletic performance, and improving opportunities for success for those student-athletes who may be disadvantaged by the impact of ACEs (Bennett, 2022). Social workers may also be instrumental in creating and coordinating trauma-informed environments within athletic programs with an emphasis on treatment / intervention for symptomatic athletes. This may include a multidisciplinary team equipped to provide counseling and medications where appropriate (Bennett, 2022).

### **Social Workers Beware!**

Social work practice in athletic contexts presents unique challenges – particularly given the highly competitive nature of college athletics. Traditional models of practice and intervention may require modification or adjustment. Moreover, the theoretical perspectives typically used to inform models of practice and intervention may have to be adapted in consideration for the circumstances and conditions of the athletic environment.

With modification, some theoretical perspectives are relevant and applicable to student-athletes and the college athletic environment. The ecological perspective can provide context for understanding the dynamics of the athletic context and how student-athletes are situated within such a context. The levels of analysis (*micro*, *mezzo*, and *macro*) may be modified or re-defined so that the micro level represents the individual student-athlete and their inter-personal relationships. The mezzo level may represent coaches and other departmental staff. Finally, the macro level may represent college administrators. As such, the ecological perspective may be

used to examine athlete-in-environment transactions and the ways such transactions may affect student-athletes.

On balance, athletic departments operate as a system. As such, the systems perspective is applicable to the athletic context. This perspective may be used to examine the role(s) of individuals within that system and assess balance and system function (Lopez-Felip, Davis, Frank, & Dixon, 2018). The systems perspective may be used to explore how individual characteristics and behaviors may influence interaction with others. When behavioral and psychosocial risks are present, some student-athletes may require support from the system (i.e., the athletic milieu) to re-establish stasis. This is more likely to occur when there is a well-functioning, interdependent, and stable system (Bennett, 2022).

Lastly, much of human behavior can be understood through the lens of the social learning perspective. This perspective posits that new behaviors may be acquired by observing and imitating others. When a particular behavior is rewarded regularly, it will most likely persist; conversely, if a particular behavior is constantly punished, it will most likely desist (Bandura & Walters, 1977). As it pertains to the athletic context, the social learning perspective is key to understanding both individual and collective behavior dynamics. Sports social work practitioners may utilize the social learning perspective to understand the presence, role, and function of student-athlete behaviors and also how to facilitate positive behavior and attitude change in service of mental health and well-being.

### **The Sport Ethic Model: Uncharted Territory for Social Workers?**

Hughes and Coakley (1991) proposed the sport ethic model wherein they asserted the sport ethic was rooted in the development of a form of deviance in the athletic context (Fournier, Parent & Paradis, 2022). Hughes and Coakley (1991) counterintuitively hypothesized that deviance in the athletic context was driven by an acceptance of, and deep commitment to, a system of sport-related goals and values. Further, Hughes and Coakley (1991) expanded on this idea and introduced the concept of positive deviance. They defined positive deviance, as over-conformity to sport-related goals and values.

The sport ethic is a set of norms accepted as the defining criteria for what it means to be an athlete in the world of competitive athletics (Coakley, 2021). According to Hughes and Coakley (1991) the sport ethic consists of four norms; *sacrifice*, *perfection*, *pain/risk*, and *refusal to accept limits*. According to these norms, an athlete must be willing to sacrifice for their sport, strive for perfection in training and competition, accept pain and risk, and refuse to accept any limitations that may be placed on them (Hughes & Coakley, 1991). It should be noted that ACEs in some instances may serve as a catalyst for over-conformity to the sport ethic. That is, for some student-athletes participation in athletics represent an avenue of escape from the impact of adverse circumstances and conditions (Aron et al., 2019). As such, sport social workers are advised to take these factors into consideration when intervening with student-athletes.

Given the highly competitive nature of college athletics, many student-athletes may indeed over-conform to the sport ethic as proposed by Hughes and Coakley (1991). This over-conformity or positive deviance as it is now referred to in the research literature, has been normalized through the use of nomenclature such as “*no days off*”, “*go hard or go home*” etc. Further, positive deviance has strong implications for over-training syndrome (OTS), substance use including performance enhancing drugs (PEDs), and psychological distress (Carreathers, 2020; Turner, Aspin, & Gillman, 2019; Weakley, Halson, & Mujika, 2022). It should be noted

that within the sport ethic model, the resort to PEDs is considered negative deviance as such use may place both athletes and athletic programs in jeopardy.

Positive deviance may also have implications for student-athletes affected by ACEs. Student-athletes affected by ACEs in some instances may be further traumatized by harsh athletic environments where the culture is one of positive deviance. Fournier, Parent, and Paradis (2022) assert that while several actors within the athletic environment may play a role in establishing and maintaining a culture of positive deviance, coaches are largely identified as being primarily responsible for establishing such a culture.

Fortier et al. (2020) posit that coaches who communicate with abusive or violent language, exact harsh penalties for failure to meet certain training or competition milestones, and who otherwise communicate with dispassionate objectivity, are more likely to spawn a culture of positive deviance. Student-athletes affected by ACEs who are a part of such athletic environments may experience additional trauma as a function of past adverse experiences. That is, student-athletes with childhoods characterized by physical and verbal abuse, neglect, and violence may experience further psychological trauma in harsh athletic environments. They may over-conform to the sport ethic in a quasi-adaptive effort to forestall any further punitive measures.

In order for social workers to be effective in the athletic context, it is essential they possess substantive knowledge and understanding of sport and athletic culture. The sport ethic model provides a cognitive lens through which to more fully understand the rigors, demands, and expectations that are placed upon college student-athletes. The sport ethic model may also help guide trauma-informed mental health practice and intervention with student-athletes as it may assist social workers in understanding how best to adapt traditional models of practice to fit within the athletic context.

### **Barriers to Treatment**

There may be characteristics specific to the athletic environment that serve as barriers to efficacious or effective treatment for student-athletes affected ACEs or other trauma. Despite greater attention to athlete mental health in recent years, historically the culture of sports has given little consideration to non-physical injuries. This is due in part to prevailing stigma and misconceptions that athletes are somehow immune to psychological or emotional trauma. Eschewing labels and perceptions of weakness, and to conceal psychological distress and functional impairment, student-athletes may over-conform to rigid training programs and totally immerse themselves in their sport (Lynch, 2021).

This type of behavioral response makes treatment and intervention difficult. Student-athletes may not self-report psychological distress or functional impairment. However, less readily identifiable symptoms may arise and then be attributed to other issues (e.g., burnout, OTS) instead of acknowledging distress or trauma. This includes a sudden reluctance to train with full intensity, avoidance of extra-curricular activities, or sleep disturbances (Lynch, 2021) Once again, this is a complex dynamic and one that requires ongoing monitoring and assessment from competent social work professionals with substantive knowledge and understanding of athletic culture, the sport ethic model, and trauma-informed mental health approaches.

### Conclusion

In recent years there has been increased awareness of the role ACEs and psychological trauma may play in the lives of student-athletes. In order to effectively address the needs of student-athletes impacted by adverse childhood experiences and other forms of trauma, athletic programs must develop a practical means by which to identify trauma survivors who may have ongoing psychopathology, reduce stigma attached to mental health intervention, and provide an evidence-based, contextually relevant standard of care.

An estimated one in eight student-athletes are affected by invisible injuries due to trauma and other adverse experiences. In order to maximize athletic performance while also providing optimal mental health treatment, sport social workers with core competencies in trauma-informed mental health practice and intervention must be fully integrated into college and university athletic programs. The role(s) of the sports social worker should be clearly articulated for both athletes and coaching staff. It should be noted that sport social work differs from sport psychology and other modalities in that it does not locate the problem as residing only within the individual. Rather, sport social work considers multiple factors that may contribute to the student-athlete's presenting problem.

Given the complex presentation of ACEs and trauma related disorders in the athletic context, diagnosis and treatment present a unique challenge. It is only through the coordinated and concerted efforts of a multidisciplinary team that includes sport social workers can student-athletes receive the care and resources needed to make best use of the opportunity that college athletics can provide.

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