

# Commentary: When the Game Stands Tall: Social Work in an Athletic Context

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The current discussion reviews the extant literature on student-athlete mental and advocates for a social work perspective in addressing the needs of this uniquely at-risk, and vulnerable population. Sports social work practitioners focus on the personal and contextual influences that potentially affect athlete mental health and well-being. In this way, social work is uniquely qualified to address challenges of the athletic experience and provide athletes with the resources and support needed both on and off the field to thrive in all areas of life.

Keywords: sport social work, athletes, mental health, well-being

In recent years, the specialty of sports social work has emerged to address and meet the needs of athletes and their wellbeing, both on and off the field. The core values of social work are clearly aligned with the needs of athletes and the athletic community. That is, *dignity and worth of the person*, and *the importance of human relationships* are core social values that lend themselves to improving social and developmental outcomes for the athlete. Historically, athletics have generally sought to improve the development, character, and resilience of the individual (Ghildiyal, 2015). However, more recently, with greater emphasis on high level performance, and increased competitiveness, athletes are more likely to be exploited and potentially over-burdened at all levels of sport.

Disciplines like sports psychology serve as a complement to the athletic context by assisting athletes with the development of "*in-game*" mental acuity and focus which is believed to enhance athletic performance. Sports social work is concerned primarily with athlete mental health and overall well-being. As such, social workers and the social work profession are well positioned to serve as complements to the athletic context through advocacy, case coordination, counseling, and program and policy change to better serve this uniquely vulnerable population.

An athletic career can provide a host of lifetime benefits. Prior research suggests that former collegiate athletes tend to earn higher incomes than their non-athlete peers (Curtis, McTeer & White, 2003; Henderson, Olbrecht, & Polachek, 2006). Other benefits of an athletic career include positive health behaviors (Pate, Trost, Levin, & Dowda, 2000). Yet, many current and former athletes may suffer from debilitating conditions resulting from their experiences on the playing field (Simon & Docherty, 2017). Some may carry with them mental and physical conditions specific to the experience of athletics. The physical toll of an athletic career, along with the psychological stress that comes with it, may increase likelihood for a host of conditions including but not limited to, depression, anxiety, substance abuse, cognitive issues, and chronic pain (Gil, de Andrade, & Castaldelli-Maia, 2016; Webner & Iverson, 2016; Schwenk, Gorenflo, Dopp, & Hipple, 2007).

The current discussion reviews the extant literature on student-athlete mental and comorbid conditions in an effort to provide greater understanding of how the athletic context presents an exceptional set of stressors that places student-athletes at risk for poor mental health outcomes. This discussion advocates for a social work perspective in addressing the needs of this at-risk, and vulnerable population. Sports social work practitioners focus on the reciprocal personal and contextual influences that potentially affect athlete mental health and well-being. In this way, social work is uniquely qualified to address challenges of the athletic experience and provide athletes with the resources and support needed both on and off the field to thrive in all areas of life.

## **College Athletics: Coin of the Realm**

College athletics programs represent a multi-billion-dollar industry. As such, college athletic programs are inextricably linked to school branding and reputation. Further, college athletics have been found to play an integral role in student enrollment and increase college / university profiles (Goff, 2000; Eggers, Groothuis, Redding, Rotthoff, & Solimini, 2020). This in turn often results in financial windfalls in the form of corporate partnerships and donations that ultimately contribute to the financial solvency of the institutions.

As it pertains to the athletes themselves, participation is generally thought develop good habits of fitness, competitiveness, drive, and discipline (Ghildiyal, 2015). The principles of teamwork, individual responsibility, determination, and task completion are thought to serve them long after their athletic careers have ended. However, embedded in these processes are unique stressors that the general student population does not encounter. Student-athletes may experience stress and anxiety over their performance, push physical limits, and feel pressure to maintain good academic standing in order to compete (Kreig, 2013). These and other such stressors may pose a significant threat to the mental health and well-being of some student-athletes.

#### Get Your Head in the Game

Mental health is often an overlooked aspect of student-athlete development. Anxiety, depression, suicidality, sleep disorders, alcohol misuse, substance misuse, and eating disorders represent mental health challenges that are highly prevalent among this population. Student-athletes appear to experience mental health symptoms and disorders in similar proportion to the general population, yet mental health treatment-seeking behaviors among student-athletes is low (Castaldelli-Maia et. al., 2019) Recent discussions suggest that this may be particularly so for student-athletes of color (Wilkerson, Stokowski, Fridley, Dittmore & Bell, 2020). A recent survey conducted by the National Collegiate Athletic Association (NCAA) indicates that African

American athletes are disproportionately and negatively affected by mental health issues (Peter, 2020). A full examination of disparate mental health outcomes among African American college athletes is beyond the scope of the current discussion. Yet, future research should more fully explore this phenomenon.

To be sure, the COVID-19 pandemic presented additional mental health challenges unique to the student-athlete population (Grubic, Jain, Mihajlovic, Thornton, & Johri, 2021). Some student-athletes struggled with social identity issues and may have experienced some degree of separation anxiety due to being away from campus and/or teammates. They may have also experienced feelings of isolation as normal routines were significantly disrupted (Graupensperger, Benson, Kilmer, & Evans, 2020). Lastly, some may have experienced financial strain, as some student-athletes may enjoy a better a standard of living on campus compared to their home environments. Nonetheless, it seems as though the COVID-19 pandemic brought greater attention to the mental health needs of college athletes (Grubic et al., 2021).

#### **Student-Athlete Mental Health**

While the mental health and well-being of student-athletes is as important as physical health, it rarely receives the same level of attention (Moore & Gummelt, 2019). Recent studies indicate that college athletics significantly increases levels of stress for the participating individual (Garinger, Chow, & Luzzeri, 2018; Asztalos et al., 2012; Pritchard & Wilson, 2005). The dual demands of academics and athletics at the college / university level, extensive time demands, overtraining, injuries, the possibility of being benched, and conflicts with coaches, are among some of the stressors that may pose significant risks to student-athlete mental health and well-being.

# **Invincible?**

College athletics, and sports in general, occupy hallowed territory in the American landscape. As such, college athletics represent idealized notions of strength, speed, power, toughness, and the ability to overcome adversity. In many ways, athletes are the prototypical embodiment of these idealized notions. Struggling with mental health related challenges therefore runs counter to such notions and has been, heretofore, interpreted as a sign of weakness and vulnerability. This kind of perverse interpretation is indicative of the lack of understanding and awareness of mental health and well-being and underscores the common tendency to value physical attributes over mental health.

The stigma commonly associated with mental illness among the general population takes on somewhat of a more pronounced tenor in an athletic context. Recent studies suggest stigma is the most prevalent factor preventing athletes with mental health issues from seeking intervention (Reardon et. al., 2019). Once again, the belief persists among athletes that mental illness is a sign of weakness and is closely followed by the justifiable fear that peers, coaches, and the public fanbase will view them as such. These attitudes and beliefs may be part and parcel of an athletic socialization process that extols the virtues of over-coming adversity, playing through pain, and winning. Some athletes may be apprehensive about disclosing mental health symptoms, as doing so could potentially have a negative impact on future opportunities (Reardon et. al., 2019). This may be further exacerbated by limited knowledge and awareness of the signs of mental disorders, fear of losing a scholarship, and compromised relationships with teammates (Watson, 2005; Steinfeldt, Steinfeldt, England, & Speight, 2009).

# **Clear and Present Danger.**

Prior research suggests that for some, the rigorous demands of being a student-athlete presents a significant threat to mental health and well-being. The athlete mindset, which may consist of obsessive-compulsive tendencies associated with the drive to improve performance may further exacerbate this threat (Cromer, Kaier, Davis, Stunk, & Stewart, 2017). Briefly, competitive athletes' traits, including over-responsibility, perfectionism, and secrecy, often mask obsessive compulsive disorder (OCD) identification and diagnosis. In a study of Division 1 college athletes, Cromer et al. (2017) found that while most denied OCD diagnosis, they nonetheless exhibited behaviors related to OCD and reported moderate to severe distress. OCD may affect as much as five percent of college athletes (Cromer et al., 2017).

Student-athletes, in some instances, may be exposed to several risk factors that increase vulnerability to mental illness. One area of risk that is easily overlooked is the status of being an elite athlete and the process of gaining such an identity. Personal attributes such as determination, focus and commitment, along with the pressure to consistently perform at a high level may lead some to over invest in a singular personal identity (i.e. athlete) (Martin, Fogarty & Albion, 2014).

# Who am I?

Briefly, a well-established body of research suggests that crafting multiple positive identities is a common protective factor against mental illness (i.e., investing in more than one aspect of the self, such as being a successful student, professional, parent, and/or friend) (Thoits, 1991). Conversely, the fewer identities one possesses, and the greater investment in those few identities, the greater the threat to mental health in the event one of those identities are compromised (Hoetler, 1983). Once again, in this regard, the COVID-19 pandemic represents an additional threat to a population that is already uniquely at risk for poor mental health outcomes. Many college athletic programs have since cancelled their seasons in the wake of the pandemic, leaving many athletes without the very vehicle through which they define themselves. Yet, to be sure, student-athletes have been subject to this identity-based threat to mental health and well-being long before the COVID-19 pandemic.

Athletic identity refers to the extent to which one identifies with the role of being an athlete (Ronkainen, Kavoura, & Ryba, 2016; Brewer, Van Raalte, & Linder, 1993). Athletes, particularly elite athletes, are thought to develop a self-concept in relation to their chosen sport. Recent investigations suggest that athletic identity is highly important to the vast majority of collegiate athletes and has strong implications for mental health and well-being (Di Lu, Heinze, & Soderstrom, 2018; NCAA, 2013). According to a 2013 study conducted by the National Collegiate Athletic Association (NCAA), approximately two-thirds of both male and female student-athletes possess a strong athletic identity. However, females were found more likely to also have a strong student identity as well.

In some instances, student-athletes may experience conflict between their identity as a student versus their identity as an athlete (Cooper & Cooper, 2015). This identity conflict may have consequences for the mental health and well-being of some student-athletes (Miller &

Hoffman, 2009). That is, over-identification with athletic identity may lead an athlete to neglect other areas of life including family, friends, school, and social roles. Further, the strong identity of the athlete may also increase the risk of injury (Heird & Steinfeldt, 2013). Moreover, disproportionate emphasis on athlete identity may pose significant difficulties in the transition to civilian life when the athletic career ends (Beamon, 2012). Ultimately, many college athletes have a strong athlete identity. This may be due in part to student identity becoming less salient over time, as athletes experience more demanding expectations, peer subcultures, and a lack of reinforcement around academic accomplishments (Di Lu, Heinze, & Soderstrom, 2018).

In addition, psychological factors, such as adjustment and satisfaction have been cited in this identity conflict (Killeya-Jones, 2005). Some individuals may more easily adjust to, and therefore embrace the athlete role. That is, some individuals may derive greater satisfaction as athletic accomplishments are reinforced in greater magnitude than academic accomplishments. In such instances, student-athletes are likely to "over identify" with the athlete role (Lally & Kerr, 2005; Miller & Kerr, 2003).

To be sure, especially in the case of elite athletes, this identity crisis begins long before an athlete reaches college (Howe, 2022). The increasingly competitive nature of youth sports has spawned national sports organizations like MaxPreps, Perfect Game, and Rivals. These entities produce local, state, and national rankings of athletes (according to their skill level) as early as age 12. This potentially contributes significantly to the developing self-concept as primarily an athlete (Camiré & Santos, 2019. Without question, a strong athlete identity is a prerequisite for being a college athlete. However, over-emphasis on such may be a precursor to a myriad of mental health challenges (Gould, 2019; Moore & Gunmelt, 2019; Poucher & Tamminen, 2017). Depression, anxiety, and other psychosocial impediments may be a function of over-identifying as an athlete (Di Lu, Heinze, & Soderstrom, 2018).

# **Mental Health and Comorbidity**

# Are you hurt or are you injured?

Prior research suggests that one in five college athletes may be struggling with depression (Wolanin, Gross, & Hong, 2015; Proctor & Boan-Lenzo, 2010; Yang, Peek-Asa, & Corlette, 2007). Several factors have been noted in the etiology of depression among college athletes. According to Putukian (2016), physical injury can trigger depression. In a prior study of Division-1 football players, 33% of injured athletes reported high levels of depressive symptoms, compared with 27% of non-injured athletes. Depressed athletes are thought to be at increased risk for injury, as athletic performance may be adversely affected by emotional disturbances. The severity of the injury may further exacerbate this dilemma. Rao and Hong (2016) assert that injured athletes with a prolonged period of non-participation are at increased risk for depressive symptoms.

Concussion in particular is strongly linked to depression (Wolanin, Gross, & Hong, 2014). Concussions may impair function in areas of the brain that are also commonly affected among individuals with major depressive disorder (Roiger, Weidauer, & Kern, 2015). Prior investigations have found elevated levels of depression and mood disturbances in athletes with concussion compared to non-injured athletes, and non-athletes (Mainwaring, Hutchison, Bisschop, Comper, & Richards, 2010; Hutchison, Mainwaring, Comper, Richards, & Bisschop, 2009; Mainwaring et al., 2004). Once again, athletic identity may influence depression outcomes

in student athletes. The inability to participate in their chosen sport due to injury may threaten one's sense of identity and increase likelihood for depressive episodes (Giva & Hovda, 2001; Green & Weinberg, 2001). Prior research suggests that while a concussed individual may feel physically able to return to practice or competition, certain cognitive, emotional, or social deficits may preclude safe return. As such, feelings of anxiety, anger, and fear may arise, all of which have been linked to depression (Yang, et al., 2007).

# No Days Off

Overtraining syndrome (OTS) has also been cited as a potential risk factor for depression in athletes. Historically, OTS was characterized as a physical performance issue. More recently, it has been reconceptualized. The overtrained state is now thought to be more easily identified if considered from a biopsychosocial perspective. According to Jones and Tenenbaum (2008), by shifting focus away from only excessive training loads and inadequate recovery schedules to a comprehensive model of maladjustment, the full scope of the phenomenon becomes clearer. OTS is now characterized as psychological and physiological disturbances, coupled with decreased performance that may result in clinically significant symptoms, potentially triggered by a stressor of any magnitude (Meehan, Bull, Wood, & James, 2004). Recent investigations have found that the same biological markers exist for both OTS and depression. This in some ways would seem to suggest that depression may be part and parcel of OTS (Chang et al., 2020; Frank, Nixdorf, & Beckmann, 2017).

In addition to concerns about depression, student athletes also experience other behavioral and mental health challenges. Recent studies suggest that anxiety may be a prominent issue among student athletes (Drew & Matthews, 2019; Ryan, Gayles, & Bell 2018; Goldman, 2014). While occasional anxiety is generally not uncommon, athletes struggling with an anxiety disorder may experience signs and symptoms frequently and severely enough that it adversely affects their ability to function (Drew & Matthews, 2019; Goldman, 2014). Anxiety is a distinct emotional response induced by future-oriented thoughts and emotions. This future-oriented thought pattern perceives upcoming tasks or events as potential threats to one's (athlete) identity. This includes dealing with the specter of getting injured or not performing well and being perceived as a loser.

## Gamechangers

In some instances, student-athletes may mask psychological disturbances with certain behavioral (mal)adaptations. This includes the excessive use of alcohol and illicit substances as a means of self-medicating to allay psychological symptoms. Often times, this mal-adaptive response exacerbates the challenges presented by the psychological disturbance resulting in co-morbid conditions. Prior research suggests that self-medicating behaviors may be influence by the intensity and rigor of the athletic experience as well as self-imposed social pressures to perform well (Locquet et al., 2016). Ultimately however, these behavioral mal-adaptations may have an adverse effect on athletic performance and impede social functioning.

## Hold My Beer

Alcohol is commonly used recreational substance. The consumption of alcohol is deeply embedded in many aspects of Western society. Athletes are not exempt from the influence alcohol has on society. Moreover, athletes are thought to consume greater volumes of alcohol in comparison to the general population (Barry, Howell, Riplinger, & Piazza-Gardner, 2015; Barnes, 2014). This despite conventional wisdom which suggests that athletes should abstain from alcohol to avoid the negative effects on athletic performance. Briefly, acute alcohol consumption may negatively impact normal immunoendocrine function, blood flow and protein synthesis thereby inhibiting optimal recovery from skeletal muscle injury (Barnes, 2014).

According to a recent study by the NCAA, between 33% and 44% of college athletes surveyed reported excessive alcohol consumption (NCAA, 2014). Male athletes are significantly more likely to engage in binge drinking than female athletes (Mastroleo, Barnett, & Bowers 2019; Yusko et al., 2008). Athletes exhibiting chronic patterns of excessive alcohol consumption are believed to be at greater risk for unintentional alcohol related injuries, and more likely to carry out actions that may threaten athletic performance (Parisi, Bugbee, Vincent, Soong, & Arria, 2019; Wahesh, Milroy, Lewis, Orsini, & Wirick, 2013).

Prior research has established that student-athletes consume more alcohol than the general non-athlete student population (Mastroleo, Barnett, & Bowers, 2019). However, it remains unclear as to why this is so. Once again, this seems to fly in the face of conventional wisdom which suggests that athletes should abstain from alcohol use. Barry, Howell, Riplinger and Piazza-Gardner (2015) assert that as intercollegiate athletic involvement increases, so too does alcohol consumption. While research has yet to fully elucidate the relationship between athletic participation and alcohol consumption, Yusko, Buckman, White, & Pandina, (2008), suggest that sensation seeking behaviors among student-athletes may be a critical factor in alcohol consumption outcomes. Further, some athletes may use alcohol as a means by which to allay symptoms of anxiety associated with competition (Gil, de Andrade, & Castaldelli-Maia, 2016).

To be sure, student-athletes represent a special population among college students. The dual roles of student and athlete create a unique set of challenges that some have argued places them at greater risk for substance use (Egan, 2019; Ford, 2007). Student-athletes have reported perceived pressure from others to be successful in multiple areas of life, especially athletic participation, and performance (Ryan, Gayles, & Bell, 2018; Coakley, 2006; Evans, Weinberg, & Jackson, 1992). These stressors are thought to inhibit appropriate social, occupational, and/or academic functioning in athletes (Watson, 2005; Nattiv & Puffer, 1991). Further, these stressors may lead to significant levels of anxiety and compel some student-athletes to self-medicate with alcohol and controlled substances (Reardon & Creado, 2014; Lisha & Sussman, 2010).

#### **Highs and Lows**

With heavy emphasis on success and optimal performance, substance use / abuse, like alcohol consumption, among student-athletes seems counter-intuitive. Yet substance use / abuse among this population has become a key area of concern (Erickson, Stanger, Patterson, & Backhouse, 2019). A recent self-report survey of substance use among collegiate student-athletes conducted by the NCAA found that approximately 25 % reported using marijuana, 6% reported using pain medication without a prescription, and 3.8 % used cocaine (NCAA, 2014; see also Moore & Gunmelt, 2019; Cook, Radford, & Durham, 2018).

The research literature has yet to thoroughly elucidate the causes and consequences of substance use for the student-athlete. As such, clear assessment of substance use disorders among college student-athletes is incomplete. Research as to the prevalence of substance use / abuse among this population is equivocal at best. Several studies have reported that collegiate student-athletes have higher rates of substance use than non-athlete college students (Yusko, Buckman, White, & Pandina, 2008; Ford, 2007; Meilman, Leichliter, & Presley, 1999). While still others suggest that rates of substance use among college athletes is lower compared to the general student population (Kwan, Bobko, Faulkner, Donnelly, & Cairney, 2014). Gender has been identified as an important consideration in student-athlete substance use / abuse (Grossbard, Geisner et al., 2009). According to Cook et al., 2018, males report greater use of illicit substances compared to females. This may be explained in part by male athletes generally reporting attitudes that may endorse illicit substance use to a greater extent than their female counterparts.

Prior research conducted by the NCAA suggests that substance use/misuse may vary as a function of the level of athletic competition (i.e., NCAA athletic divisions). Alcohol consumption has been found to be prevalent among student-athletes across all three athletic divisions. However, cocaine use has been found to be significantly higher among student-athletes competing at the Division III level compared to those competing at the Division I or Division II level. Divisional variation has also been observed with marijuana use. Once again, marijuana use was more prevalent among Division III student-athletes, followed by those in Division II and Division I (NCAA, 2018) So, while there appears to be notable variation of substance use/misuse across NCAA divisions, research has yet to determine why such variation patterns exist.

# What's Cookin'?

For student-athletes, proper nutrition is an integral part of achieving and maintaining peak performance. However, for some student-athletes, nutrition in the form of eating disorders may pose a significant threat to health and well-being. Briefly, eating disorders are behavioral conditions characterized by severe and persistent disturbance in eating behaviors (Cheng, Perko, Fuller-Marashi, Gau, & Stice, 2019). Eating disorders may affect physical, psychological, and social function including heightened risk for suicide, osteoporosis, gastrointestinal, cardiovascular, and endocrine system pathologies (Franko & Keel, 2006; Klein & Walsh, 2004; Mehler & Krantz, 2003). Often associated with preoccupations with societal pressures and cultural aesthetics, eating disorders occur primarily in females and most often develops in adolescence and young adulthood (Cheng, Perko, Fuller-Marashi, Gau, & Stice, 2019). Behaviors associated with eating disorders include but may not be limited to, restrictive eating, food avoidance, binge eating, purging by vomiting or laxative misuse, and compulsive exercise.

The prevalence of eating disorders has been found to be higher among athletes than nonathletes (Mancine, Kennedy, Stephan & Ley, 2020). Prior reports indicate that non-athletes hold a lifetime prevalence rate of approximately 5%. In comparison, the lifetime prevalence rate of eating disorders among athletes has been shown to be as high as 13.5% (Sundgot-Borgen & Torstveit, 2004; Sundgot-Borgen, 1993). More recent data suggest college athletes continue to be 2-3 times more likely to suffer from an eating disorder (Blair et al., 2017). The comparatively high rates of eating disorders among athletes in some ways suggests that athletic participation may actually increase risk for developing an eating disorder (Gritti et al., 2016).

Research also suggests that the prevalence of eating disorders among student-athletes is greater among those who participate in sports where there is a weight requirement or where weight is emphasized (e.g., cheerleading, distance running, wrestling) (Moore & Gunmelt, 2019; Baum, 2006). Additionally, student-athletes who compete is sports that use judges as opposed to referees are at greater risk for developing an eating disorder (Moore & Gunmelt, 2019). While female athletes are more commonly affected by this pathology, recent studies have revealed that while less prominent, male athletes may be affected by eating disorders as well (Baum, 2006). This represents a quiet danger in that symptoms and risk factors for pathological eating behaviors may be overlooked among male athletes.

To be sure, additional research is needed to more firmly establish the epidemiology of eating disorders and eating-disordered behaviors. Research efforts must explore and delineate sex differences in eating disorders among athletes. This is essential in terms of developing optimally effective prevention and intervention strategies for the student-athlete population. Doing so will assist those working within the athletic context to identify at-risk behaviors. Finally, research must also encompass those associating with alternative gender roles to help prevent physical and mental health consequences associated with eating disorders.

# Social Work in an Athletic Context

As stated previously, college athletics occupy hallowed territory in the American landscape. Given the symbolic importance of competitive sports, along with tangible indicators of success such as wins and losses, and revenue generated from sporting events, athletes face multiple pressures and demands at various stages of their development. These pressures and demands may affect not only athletic performance, but the civilian lives of athletes as well. Where athlete mental health is concerned, it is imperative to acknowledge and understand the ramifications of the athletic context. While the casual observer may look upon sport as a leisurely past-time or a form of entertainment, athletes themselves are immersed in a cultural reality with specific pressures, demands and expectations. A significant portion of these individuals' personal identity is inextricably linked to this reality (i.e., athletic context).

#### What can social workers do?

Areas of research like kinesiology and sport science have greatly advanced athletic performance. However, it is important to recognize that athletes' mental health status can greatly influence their athletic performance as well. Social work is ideally suited to address the mental health needs and challenges that student-athletes may encounter and ultimately serve as a means to address such needs beyond the athletic context as well (Moore, Ballesteros, & Hansen, 2018).

At present, efforts to support athlete mental health and wellbeing have centered primarily on de-stigmatizing mental illness and increasing mental health literacy. While greater awareness is most certainly necessary, it still falls short in terms of competently addressing the varied mental health needs of athletes. Practice methods and intervention models must be designed specifically to address mental health challenges and promote mental health and wellbeing within and across social contexts including the athletic context. Social workers, as part of a multidisciplinary effort, could be effectively utilized to assist athletes develop self-management skills to cope with psychological distress. To be sure, special consideration should be given to the athletic context as a potential source of said distress. Moreover, understanding of "*athlete in environment*" dynamics is important as it is a major facet of this population's identity as an athlete. Social workers may also be useful in educating coaches, sports medicine, and high-performance support staff to better recognize and respond to concerns regarding athlete mental health. Collectively, such efforts increase the likelihood that student-athletes receive needed intervention and support. Such an approach would be beneficial in augmenting athletic culture and acknowledging that athlete mental health is as important as athletic performance. Proper attention to both mental health and physical health is likely to contribute to the optimization of well-being and athletic performance.

## **Sport Social Work Theory**

Theory serves as a prospective guide for efficacious social work practice and intervention. In order to be effective, social work must transfer the theoretical components used to assist individuals in other areas of practice to the athletic context and the lived experiences of student athletes. Several social work theories and behavioral models may be particularly relevant to improved understanding of the mental health related issues and challenges facing many student-athletes. The ecological perspective, systems perspective, and social learning perspective, each provide a critical lens through which to view the needs of student-athletes and explain the ways in which athletes may attempt to manage psychosocial challenges.

#### **Ecological Framework.**

The ecological perspective is based on the premise that athletes are best understood in the context of the various systems in which they live (Moore & Gunmelt, 2019; Bronfenbrenner, 1977). 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. This approach broadens understanding of the multiple factors that may influence athlete behavior. The ecological perspective allows social workers to explore the student-athletes thoughts and feelings regarding social and environmental dynamics that may have or continue to have an impact on their lived experiences.

## Systems Theory.

Similar to many institutional and organizational entities, athletics operates as a system. Due to the rigors, demands, and expectations of many college athletic programs, those systems are somewhat closed off from the broader campus community. As such, athletes typically come to regard individuals within these systems as "*family*". To be sure, given the time and energy invested in pursuit of athletics, student-athletes are certain to develop individual, group, and organizational relationships (Moor, 2019; Lopez-Felip, Davis, Frank, & Dixon, 2018). The culture of athletics, particularly the dynamics of team sports, evolves into a surrogate family. The athletic context, like a family, may be characterized by a series of interrelated factors including but not limited to collective goals and objectives (e.g. a winning season) coherent behaviors, regular social interaction, and interdependence.

Systems theory has long served as a prospective guide for efficacious social work practice and intervention with various client systems. This utility can be expanded to include sport social work. Systems theory in an athletic context may be used to explore how an individual's characteristics and behaviors may influence interaction with others. Given the boundaries of many college athletic programs, it is imperative to have sport social workers who understand the athletic context, and who can assess and apply the principles of systems theory in this specific context. In those instances where behavioral and psychosocial risks may be present, some athletes may require support from "family" (i.e., the athletic milieu) to re-establish stasis. This is more likely to occur when there is well functioning interaction, interdependence and stability within the system facilitated by sport social work practitioners.

## Social Learning Theory.

Much of human behavior can be understood through the lens of social learning theory. Briefly, social learning theory is a theory of learning and social behavior which proposes that new behaviors may be acquired by observing and imitating others. Learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement. In addition to the observation of behavior, learning may also occur through the observation of rewards and punishments. This process has been referred to as vicarious reinforcement. 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 model is a key component for understanding both individual and collective behavior dynamics. Certain attitudes, beliefs and behaviors of the athlete may be a function of lived experiences within the family of origin. Other behaviors may be influenced, if not dictated by the demands and expectations of the athletic milieu. 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 change in service of mental health and well-being.

# Social Work Practice and Intervention with Athletes

As stated previously, student-athletes are uniquely at risk for a number of mental health concerns. Recent studies have begun to explore the impact of adverse childhood experiences (ACEs) on student-athlete populations (Bennett, 2022; Brown, 2019). Indeed, it is likely that many student-athletes may be coping with catastrophic / traumatic experiences, chronic stressors, and other challenges stemming from adverse childhood events. Despite a well-established body of literature linking ACEs to poor social outcomes later in life for the general population, less is known about the impact of ACEs on the mental health and well-being of student-athletes.

Nonetheless, an increasing number of college athletic programs have begun to recognize that athlete mental health and well-being is critical to individual as well as program success. Social work practitioners are uniquely qualified to assist in this regard., A social work perspective may be useful in exploring critical events (e.g., family disruption, trauma, catastrophic events, loss) as well as chronic stressors experienced by student-athletes. As such, social work practitioners may be instrumental in helping athletic programs to develop practices that ultimately benefit student-athletes affected by ACEs.

# Trauma Informed Practice.

These efforts, undergirded by a social work perspective and guided by theory, may be framed as trauma informed practice (TIP) for athlete mental health. This method of practice is strength-based and designed to enhance well-being and avoid re-traumatization. As such, this practice method acknowledges the prevalence of trauma and/or ACEs among student-athletes and examines how these phenomena may impact the student-athlete's ability to function within the system (SAMSHA, 2014). TIP advocates for mental health and well-being as an integral part of athletic development.

# Conclusion

Sport social work is a burgeoning area of practice that potentially looms large for athletic programs as well as student-athlete populations. Depression, anxiety, post-traumatic stress disorder (PTSD) and other psychological disorders may be more commonly found in athletic populations compared to the general population. As such, sport social work and trauma informed practice represent complements to the athletic context that may improve the mental health and well-being of student-athlete populations (see Aron, Harvey, Hainline, Hitchcock, & Reardon, 2019).

To be sure, student-athletes may develop psychological and physiological adaptations that mask common symptoms of psychological distress. Therefore, a multidisciplinary approach that includes sport social work for the management of trauma must be developed. This includes creating trauma-informed environments within athletic programs with an emphasis on treatment / intervention for symptomatic athletes including social work counseling and medications where appropriate. Social workers possess the skills and knowledge to work in various capacities within athletic contexts. This includes academic advising, support services, and program compliance. In sum, sport social work is uniquely equipped to enhance the athletic context and assist student-athletes navigate the challenges of the athletic experience by providing them with the resources and support to excel athletically and academically.

# References

- Aron, C. M., Harvey, S., Hainline, B., Hitchcock, M. E., & Reardon, C. L. (2019). Post-Traumatic stress disorder (PTSD) and other trauma-related mental disorders in elite athletes: a narrative review. *British journal of sports medicine*, 53(12), 779-784.
- Asztalos, M., Wijndaele, K., De Bourdeaudhuij, I., Philippaerts, R., Matton, L., Duvigneaud, N., ... & Cardon, G. (2012). Sport participation and stress among women and men. *Psychology of Sport and Exercise*, 13(4), 466-483.

Bandura, A., & Walters, R. H. (1977). Social learning theory (Vol. 1). Prentice Hall.

- Barnes, M. J. (2014). Alcohol: Impact on sports performance and recovery in male athletes. *Sports Medicine*, 44(7), 909-919.
- Barry, A. E., Howell, S. M., Riplinger, A., & Piazza-Gardner, A. K. (2015). Alcohol use among college athletes: Do intercollegiate, club, or intramural student athletes drink differently? *Substance Use & Misuse*, 50(3), 302-307.
- Baum, A. (2006). Eating disorders in the male athlete. Sports Medicine, 36(1), 1-6.

- Beamon, K. (2012). "I'm a baller": Athletic identity foreclosure among African-American former student-athletes. *Journal of African American Studies*, *16*(2), 195-208.
- Bennett, M. D. (2022) Adverse childhood experiences and student-athlete mental health: A social work in sports perspective. *Sport Social Work Journal* 2(1) 77-85.
- Blair, L., Aloia, C. R., Valliant, M. W., Knight, K. B., Garner, J. C., & Nahar, V. K. (2017). Association between athletic participation and the risk of eating disorder and body dissatisfaction in college students. *International journal of health sciences*, 11(4), 8–12.
- Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology*, 24, 237-254.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*(7), 513.
- Brown, B. J. (2019). Beyond the lines: Exploring the impact of adverse childhood experiences on NCAA student-athlete health. *East Carolina University*.
- Camiré, M., & Santos, F. (2019). Promoting positive youth development and life skills in youth sport: Challenges and opportunities amidst increased professionalization. *Journal of Sport Pedagogy and Research*, 5(1), 27-34.
- Castaldelli-Maia, J. M., e Gallinaro, J. G. D. M., Falcão, R. S., Gouttebarge, 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.
- Chang, C., Putukian, M., Aerni, G., Diamond, A., Hong, G., Ingram, Y., & Wolanin, A. (2020). Mental health issues and psychological factors in athletes: Detection, management, effect on performance and prevention: American Medical Society for Sports Medicine Position Statement—Executive Summary. *British Journal of Sports Medicine*, 54(4), 216-220.
- Cheng, Z. H., Perko, V. L., Fuller-Marashi, L., Gau, J. M., & Stice, E. (2019). Ethnic differences in eating disorder prevalence, risk factors, and predictive effects of risk factors among young women. *Eating behaviors*, 32, 23-30.
- Coakley, S. C. (2006). A phenomenological exploration of the sport-career transition experiences that affect subjective well-being of former National Football League players. The University of North Carolina at Greensboro.
- Cook, M., Radford, C., & Durham, M. (2018). NCAA national study on substance use habits of college student-athletes. http://www.ncaa.org/sites/default/files/2018RES\_Substance\_Use\_Final\_Report\_FINAL\_ 20180611
- Cooper, J. N., & Cooper, J. E. (2015). "I'm running so you can be happy, and I can keep my scholarship": A comparative study of Black male college athletes' experiences with role conflict. *Journal of Intercollegiate Sport*, 8(2), 131-152.
- Cromer, L., Kaier, E., Davis, J., Stunk, K., & Stewart, S. E. (2017). OCD in college athletes. *American Journal of Psychiatry*, 174(6), 595-597.
- Curtis, J., McTeer, W., & White, P. (2003). Do high school athletes earn more pay? Youth sport participation and earnings as an adult. *Sociology of Sport Journal*, 20(1), 60-76.
- Di Lu, L., Heinze, K. L., & Soderstrom, S. (2018). Playing multiple positions: Student-athlete identity salience and conflict. *Journal of Intercollegiate Sport*, 11(2), 214-241.
- Drew, B., & Matthews, J. (2019). The prevalence of depressive and anxiety symptoms in student-athletes and the relationship with resilience and help-seeking behavior. *Journal of Clinical Sport Psychology*, 13(3), 421-439.

- Egan, K. P. (2019). Supporting mental health and well-being among student-athletes. *Clinics in Sports Medicine*, *38*(4), 537-544.
- Eggers, A. F., Groothuis, P. A., Redding, P., Rotthoff, K. W., & Solimini, M. (2020). Universities behaving badly: The impact of athletic malfeasance on student quality and enrollment. *Journal of Sports Economics*, 21(1), 87-100.
- Erickson, K., Stanger, N., Patterson, L., & Backhouse, S. H. (2019). Substance use in university sport: A cross-national study of student-athlete substance use behaviors and perceived responses to witnessing substance use. *Performance Enhancement & Health*, 7(1-2), 100-151.
- Evans, M., Weinberg, R., & Jackson, A. (1992). Psychological factors related to drug use in college athletes. *The Sport Psychologist*, 6(1), 24-41.
- Ford, J. A. (2007). Substance use among college athletes: A comparison based on sport/team affiliation. *Journal of American College Health*, 55(6), 367-373.
- Frank, R., Nixdorf, I., & Beckmann, J. (2017). Analyzing the relationship between burnout and depression in junior elite athletes. *Journal of Clinical Sport Psychology*, 11(4), 287-303.
- Franko, D. L., & Keel, P. K. (2006). Suicidality in eating disorders: Occurrence, correlates, and clinical implications. *Clinical psychology review*, *26*(6), 769-782.
- Garinger, L. M., Chow, G. M., & Luzzeri, M. (2018). The effect of perceived stress and specialization on the relationship between perfectionism and burnout in collegiate athletes. *Anxiety, Stress, & Coping, 31*(6), 714-727.
- Gil, F., de Andrade, A. G., & Castaldelli-Maia, J. M. (2016). Discussing prevalence, impacts, and treatment of substance use disorders in athletes. *International Review of Psychiatry*, 28(6), 572-578.
- Giza, C. C., & Hovda, D. A. (2001). The neurometabolic cascade of concussion. *Journal of Athletic Training*, *36*(3), 228.
- Ghildiyal R. (2015). Role of sports in the development of an individual and role of psychology in sports. *Mens sana monographs*, *13*(1), 165–170.
- Goff, B. (2000). Effects of university athletics on the university: A review and extension of empirical assessment. *Journal of Sport Management*, 14(2), 85-104.
- Goldman, S. (2014). Mind, body, and sport: Anxiety disorders. NCAA Sport Science Institute.
- Gould, D. (2019). The current youth sport landscape: Identifying critical research issues. *Kinesiology Review*, 8(3), 150-161.
- Graupensperger, S., Benson, A. J., Kilmer, J. R., & Evans, M. B. (2020). Social (un) distancing: Teammate interactions, athletic identity, and mental health of student-athletes during the COVID-19 pandemic. *Journal of Adolescent Health*, 67(5), 662-670.
- Green, S. L., & Weinberg, R. S. (2001). Relationships among athletic identity, coping skills, social support, and the psychological impact of injury in recreational participants. *Journal of Applied Sport Psychology*, 13(1), 40-59.
- Gritti, A., Salvati, T., Catone, G., Pisano, S., & Salerno, F. (2016). Subject at risk for eating disorders: Study of a population of children aged between 8 and 13 years. *Journal of Food Nutritional Disorders 5(3)*.
- Grossbard, J. R., Geisner, I. M., Mastroleo, N. R., Kilmer, J. R., Turrisi, R., & Larimer, M. E. (2009). Athletic identity, descriptive norms, and drinking among athletes transitioning to college. *Addictive Behaviors*, 34(4), 352-359.

- Grubic, N., Jain, S., Mihajlovic, V., Thornton, J. S., & Johri, A. M. (2021). Competing against COVID-19: Have we forgotten about student-athletes' mental health? *British Journal of Sports Medicine*, 55(17), 950-951.
- Henderson, D. J., Olbrecht, A., & Polachek, S. W. (2006). Do former college athletes earn more at work? A nonparametric assessment. *Journal of Human Resources*, *41*(3), 558-577.
- Heird, E. B., & Steinfeldt, J. A. (2013). An interpersonal psychotherapy approach to counseling student athletes: Clinical implications of athletic identity. *Journal of College Counseling*, 16(2), 143-157.
- Hoelter, J. W. (1983). The effects of role evaluation and commitment on identity salience. *Social Psychology quarterly*, 140-147.
- Howe, J. E. (2022). Black male college athlete identity: A scoping review. *International Review* for the Sociology of Sport, 10126902221082042.
- Hutchison, M., Mainwaring, L. M., Comper, P., Richards, D. W., & Bisschop, S. M. (2009). Differential emotional responses of varsity athletes to concussion and musculoskeletal injuries. *Clinical Journal of Sport Medicine*, 19(1), 13-19.
- Jones C. M., Tenenbaum G. (2009): Adjustment disorder: A new way of conceptualizing the overtraining syndrome. *International Review of Sport and Exercise Psychology*. 2, 181–197.
- Killeya-Jones, L. A. (2005). Identity structure, role discrepancy and psychological adjustment in male college student-athletes. *Journal of Sport Behavior*, 28(2).
- Klein, D. A., & Walsh, B. T. (2004). Eating disorders: Clinical features and pathophysiology. *Physiology & behavior*, *81*(2), 359-374.
- Krieg, D. B. (2013). High expectations for higher education? Perceptions of college and experiences of stress prior to and through the college career. *College Student Journal*, 47(4), 635–643.
- Kwan, M., Bobko, S., Faulkner, G., Donnelly, P., & Cairney, J. (2014). Sport participation and alcohol and illicit drug use in adolescents and young adults: A systematic review of longitudinal studies. *Addictive Behaviors, 39*, 497-506.
- 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.
- 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.
- López-Felip, M. A., Davis, T. J., Frank, T. D., & Dixon, J. A. (2018). A cluster phase analysis for collective behavior in team sports. *Human movement science*, *59*, 96-111.
- Locquet, M., Beaudart, C., Larbuisson, R., Buckinx, F., Kaux, J. F., Reginster, J. Y., & Bruyère, O. (2016). Self-medication practice among amateur runners: Prevalence and associated factors. *Journal of Sports Science and Medicine*, *15*(2), 387-388.
- Mainwaring, L. M., Hutchison, M., Bisschop, S. M., Comper, P., & Richards, D. W. (2010). Emotional response to sport concussion compared to ACL injury. *Brain injury*, 24(4), 589-597.
- Mainwaring, L. M., Bisschop, S. M., Green, R. E., Antoniazzi, M., Comper, P., Kristman, V., & Richards, D. W. (2004). Emotional reaction of varsity athletes to sport-related concussion. *Journal of Sport and Exercise Psychology*, 26(1), 119-135.

- Mancine, R., Kennedy, S., Stephan, P., & Ley, A. (2020). Disordered eating and eating disorders in adolescent athletes. *Spartan Medical Research Journal*, 4(2).
- Martin, L. A., Fogarty, G. J., & Albion, M. J. (2014). Changes in athletic identity and life satisfaction of elite athletes as a function of retirement status. *Journal of Applied Sport Psychology*, *26*(1), 96-110.
- Mastroleo, N. R., Barnett, N. P., & Bowers, K. M. (2019). Association between sex, race/ethnicity, season, day of week, and alcohol use and related risks in college student athletes and nonathletes. *Journal of American College Health*, 67(5), 422-432.
- Meehan, H. L., Bull, S. J., Wood, D. M., & James, D. V. (2004). The overtraining syndrome: A multi-contextual assessment. *The Sport Psychologist*, 18(2), 154-171.
- Mehler, P. S., & Krantz, M. (2003). Anorexia nervosa medical issues. *Journal of Women's Health*, *12*(4), 331-340.
- Meilman, P. W., Leichliter, J. S., & Presley, C. A. (1999). Greeks and athletes: Who drinks more? *Journal of American College Health*, 47(4), 187-190.
- Miller, K. E., & Hoffman, J. H. (2009). Mental well-being and sport-related identities in college students. *Sociology of Sport Journal*, *26*(2), 335–356.
- Miller, P. S., & Kerr, G. A. (2003). The role experimentation of intercollegiate student athletes. *The Sport Psychologist*, 17(2), 196-219.
- Moore, M., Ballesteros, J., & Hansen, C. J. (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.
- Moore, M., & Gummelt, G. (2019). Sport social work: Promoting the functioning and well-being of college and professional athletes. Cognella Academic Publishing.
- National Collegiate Athletic Association. (2018). NCAA study on substance use habits of college student-athletes. chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://ncaaorg.s3.amazonaws.com/resear ch/substance/2018RES\_SubstanceUseFinalReport.pdf
- National Collegiate Athletic Association. (2013). Do NCAA student-athletes view themselves as students or athletes? http://www.ncaa.org/about/resources/research/do-ncaa-athles-view-themselves-students-or-athletes.
- Nattiv, A., & Puffer, J. C. (1991). Lifestyles and health risks of collegiate athletes. *Journal of Family Practice*, 33(6), 585-590.
- Parisi, C. E., Bugbee, B. A., Vincent, K. B., Soong, A. M., & Arria, A. M. (2019). Risks associated with alcohol and marijuana use among college student athletes: The case for involving athletic personnel in prevention and intervention. *Journal of Issues in Intercollegiate Athletics*, 12, 343.
- Pate, R. R., Trost, S. G., Levin, S., & Dowda, M. (2000). Sports participation and health-related behaviors among US youth. Archives of Pediatrics & Adolescent Medicine, 154(9), 904-911.
- Peter, J. (2020, Aug 26). "Medical experts warn that mental health of college athletes, and especially Black athletes, is being overlooked." USA Today. https://www.usatoday.com/story/sports/college/2020/08/26/ncaa-study-college-athletesmental-health-overlooked-medical-experts/5636122002/
- Poucher, Z. A., & Tamminen, K. A. (2017). Maintaining and managing athletic identity among elite athletes. *Revista de Psicología del Deporte*, *26*(4), 63-67.

- Pritchard, M., & Wilson, G. (2005). Comparing sources of stress in college student athletes and non-athletes. *Athletic Insight: The Online Journal of Sports Psychology*, 5(1), 1-8.
- Proctor, S. L., & Boan-Lenzo, C. (2010). Prevalence of depressive symptoms in male intercollegiate student-athletes and nonathletes. *Journal of Clinical Sport Psychology*, *4*(3), 204-220.
- Putukian, M. (2016). The psychological response to injury in student athletes: A narrative review with a focus on mental health. *British Journal of Sports Medicine*, *50*(3), 145-148.
- Rao, A. L., & Hong, E. S. (2016). Understanding depression and suicide in college athletes: Emerging concepts and future directions.
- Reardon, C. L., & Creado, S. (2014). Drug abuse in athletes. *Substance abuse and rehabilitation*, 5(95).
- Reardon, C. L., Hainline, B., Aron, C. M., Baron, D., Baum, A. L., Bindra, A., ... & Engebretsen, L. (2019). Mental health in elite athletes: International Olympic Committee consensus statement (2019). *British journal of sports medicine*, 53(11), 667-699.
- Roiger, T., Weidauer, L., & Kern, B. (2015). A longitudinal pilot study of depressive symptoms in concussed and injured/non-concussed National Collegiate Athletic Association Division I student-athletes. *Journal of Athletic Training*, 50(3), 256-261.
- Ronkainen, N., Kavoura, A., & Ryba, T. V. (2016). A meta-study of athletic identity research in sport psychology: Current status and future directions. *International Review of Sport and Exercise Psychology*, 9, 45-64.
- Ryan, H., Gayles, J. G., & Bell, L. (2018). Student-athletes and mental health experiences. *New Directions for Student Services*, 2018(163), 67-79.
- Schwenk, T. L., Gorenflo, D. W., Dopp, R. R., & Hipple, E. (2007). Depression and pain in retired professional football players. *Medicine and science in sports and exercise*, 39(4), 599-605.
- Simon, J. E., & Docherty, C. L. (2017). The impact of previous athletic experience on current physical fitness in former collegiate athletes and noncollegiate athletes. *Sports health*, *9*(5), 462-468.
- Steinfeldt, J. A., Steinfeldt, M. C., England, B., & Speight, Q. L. (2009). Gender role conflict and stigma toward help-seeking among college football players. *Psychology of Men & Masculinity*, 10(4), 261-272.
- Substance Abuse and Mental Health Services Administration. (2014). *Trauma-informed care in behavioral health services*. *Treatment Improvement Protocol (TIP) Series 57*. *HHS Publication No. (SMA) 13-4801*. Author.
- Sundgot-Borgen, J. (1993). Prevalence of eating disorders in elite female athletes. *International Journal of Sport Nutrition and Exercise Metabolism*, 3(1), 29-40.
- 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.
- Thoits, P. A. (1991). On merging identity theory and stress research. *Social psychology Quarterly*, 101-112.
- Wahesh, E., Milroy, J. J., Lewis, T. F., Orsini, M. M., & Wyrick, D. L. (2013). Hazardous drinking by first-year college-athletes: The differential roles of drinking motives, alcohol consequences, and season status. *Journal of Alcohol and Drug Education*, 57(2), 66-84.
- 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.

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- Webner, D., & Iverson, G. L. (2016). Suicide in professional American football players in the past 95 years. *Brain injury*, *30*(13-14), 1718-1721.
- Wilkerson, T. A., Stokowski, S., Fridley, A., Dittmore, S. W., & Bell, C. A. (2020). Black football student-athletes' perceived barriers to seeking mental health services. *Journal of Issues in Intercollegiate Athletics*.
- Wolanin, A., Gross, M., & Hong, E. (2015). Depression in athletes: Prevalence and risk factors. *Current Sports Medicine Reports*, 14(1), 56-60.
- 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.
- Yusko, D. A., Buckman, J. F., White, H. R., & Pandina, R. J. (2008). Risk for excessive alcohol use and drinking-related problems in college student athletes. *Addictive Behaviors*, 33(12), 1546-1556.