Proceedings of the 6th International Conference on Educational Innovation and Psychological Insights
DOI: 10.54254/2753-7048/2025.BO34278

The Relationships Between the Psychological Well-Being and Athletic Performance in Student Athletes

Yixuan Zhang

Cambridge School of Weston, Weston, USA
2917456176@qq.com

Abstract. When analyzing an athlete's performance, it is fundamentally impossible to isolate their mental and physical condition; a profound and intrinsic connection exists between mind and body. This interplay is most vividly demonstrated in how athletes confront and manage pressure throughout their careers. They routinely navigate intense, short-term pressures inherent in competitive matches – moments demanding split-second decisions, peak execution under scrutiny, and resilience against setbacks. Simultaneously, they face long-term pressures stemming from injuries and the arduous, often uncertain, recovery process, which tests patience, motivation, and identity. This literature review specifically adopts the lens of student athletes, recognizing their unique and amplified challenges. For these individuals, the typical athletic stressors are compounded by the significant demands of academic life. They must juggle rigorous training schedules, competition travel, and physical exhaustion with academic deadlines, exams, and the pursuit of educational goals. This dual role creates distinct stressors, including chronic time constraints, potential role conflict, academic performance anxiety, social life limitations, and concerns about future careers in both sport and academia. Consequently, the support systems surrounding student athletes become critically important. This review will explore how external supporters – encompassing coaches, academic advisors, athletic department staff, mental health professionals, peers, and family – can provide effective assistance. Potential methods include proactive stress management training, flexible academic accommodations, integrated mental skills coaching, fostering a supportive team and institutional culture, and facilitating access to counseling resources specifically attuned to their dual-role experience.

Keywords: stress, performance, acute, chronic

1. The role of stress in elite athletes

Timothy Gallwey was once a great tennis player and he have written that "Every game is composed of two parts, an outer game, and an inner game," in his book *The Inner Game of Tennis.* Indeed, there is a deep connection between human's mental and physical state, meaning that any peak performances of elite athletes are composed of a resilient mindset and strong body conditioning. Either of these two is vitally important throughout the whole athletic career. In this review article, the negative impact of stress on the mental health of athletes is discussed, since stress is very commonly seen and crucial to athletic performances.

© 2026 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

DOI: 10.54254/2753-7048/2025.BO34278

Stress can easily affect people's overall health in many aspects, and they are closely related to their body conditions. Specifically, there is likely to be consequences comes with the overload of stress, such as anxiety and depression. Those consequences are often shown through the signals from the body, such as fatigue, eating disorders, and sleep disturbances [1]. These little distractions in their body might be ignored due to people's carelessness on their body conditions, but it is a totally different story for athletes, that they are a very special group that they closely monitor their body conditions consistently, which allows them to largely magnify the effect of stress on their body. This literature review is to analyze the stress of student athletes and how it affects athletes' health and performance, since most student athletes are young adults and minors, that they are likely to be not as mature as elders to cope with stressed circumstances, and thus are at a higher risk suffering from health problems.

Stressors acting on athletes can be classified as two types: acute and chronic. Acute stressor can be described as short-term stressors triggering immediate physiological arousal among athletes' body [2]. Disturbances in adrenaline, heartrate, and muscle conditions before and during the game is a representative example of response to the acute stressors acting on athletes' body. On the other hand, chronic stressor has long term effect on athletes' body conditions that athletes could have stress respond toward accumulated stressors from multiple aspects for an extended period. For example, financial, academic, physical, and emotional burden could all contributes to their stress level chronically.

2. Student athletes: academic success

Stress aside from athletes' athletic life could cause extra burden to their health. The biggest burden of being a student athlete is to be an athlete while they still are students, which means that they must invest a significant amount of time on academics like regular students while maintaining their body conditions in peak performance by enduring a training load equivalent to a professional adult athlete. The National Collegiate Athletic Association is a non-profit organization that organizes a wide range of sports league specialized for college athletes, which covered over a thousand undergraduate schools [3]. NCAA is the most influential sports league for student athletes in America, that it helped plenty of elite athletes' careers by offering them exposure, opportunities, and experiences in high level competitions. These are all precious resources that potentially contributes to their future career. However, colleges and universities associated with NCAA league requires student athletes consistently reaching a certain grade point average to participate in sport events, which is no doubt an obstacle to their career, since in most cases, student athletes view their academic career as a side mission of their athletic career [2]. An investigation conducted by Maloney and McCormick [4] at Clemson University on 594 selected NCAA division one athletes who are required to take part in academic support, athletes' academic grade points are generally worse than regular students [4]. The result of the investigation has shown that athletes have generally lower grades than regular students among all kinds of sports.

Hardship in academic is a potential cause of mental health issues, which has already been proven by plenty of students suffering from it, which is an issue not only addressed in athletes but all students in general. Research conducted by the University of Michigan includes a series of statistics, which is based on a recent survey covered 133 campuses of college and universities shows that 44% of respondents reported issues of depression, 37% of anxiety and 15% of suicide tendency, and one of the main causes is academic stress [5]. Even though that we can't determine the severity of respondents' mental health issues through a single survey, it is enough to show the influence of overloaded pressure and prevalence mental health issues among college students. Therefore, we can

DOI: 10.54254/2753-7048/2025.BO34278

conclude that consistent failure and hardship in academic is a significant stressor to student athletes and a threat to their health.

3. Student athletes: athletic career

The major challenge of student athletes is still making achievements on their athletic career, and there are two major phycological stressors that could negatively affect their mental health: performance pressure and injuries.

3.1. Performance pressure

Primarily, performance pressure refers to the situation where people being stressed out when they assume a high expectation that they need to meet. This sense of carrying expectations is most commonly seen where athletes are observed by a lot of people such as playing a game with presence of audience as well as being monitored by coaches and teammates throughout daily training. Confronting those stress is impacting their mental health and thus negatively affect their athletic performance. A study named Psychological Pressure on Athletes during Matches and Practices conducted by Asian Journal Sports and Exercise Psychology acknowledges the difference during game and practices of athletes' performances [6]. They investigate the psychological pressure experienced by athletes and identified that unintentional psychological pressure during matches such as significance of the match, change in match situations and high-performance expectations can either be a catalyst of a great decline in performance like chocking or improved performance under pressure [6]. Through this investigation, the study has concluded that it is possible to intentionally generate pressure during athletes' training so that they can adapt to stressful circumstances to achieve improved performance under pressure during game situation.

3.2. Injury

On the other hand, injury act as a chronic stressor which could possibly permanently impact on athletes' mental health, that it is the most threatening enemy to all athletes, which is due to its high incidence and great danger, that many athletes' career and even their life have been permanently changed or ended by injuries. Taking Derick Rose's basketball career as an example, that he was the youngest MVP in the NBA history but continuously get injured three times throughout his time playing in Chicago. His body condition got worse each time he injured and finally teared his ACL, that he had to accept the surgery on his knee and stop training for over eight months [7]. This is definitely a turning point of his career, that he lost his position in Chicago and experienced a dramatic drop in competitive level. The huge discrepancy was no doubt a shock to his mindset as well as his mental health chronically. According to a most recent statistic conducted by Gitnux, that 25% of college athletes experience overuse injuries, 60% of athletes reported hiding their injuries from coaches and 40% of athletes kept playing with injuries [8]. Firstly, overuse injury applies to all kinds of athletes, which caused by intense training accumulated overtime and triggers vast depletion in joints. Secondly, such a large group of athletes reported hiding their injuries from coaches and keep playing with injury, which reflects injuries' impact on athletes mentally. Since coach is the only factor that determine their opportunities on the court, they refuse to rest and not accepting the fact of their decline in athletic ability, which potentially worsening the previous injury. This situation matched the previously mentioned example of Derick Rose's injury.

DOI: 10.54254/2753-7048/2025.BO34278

As we can see that injuries are very common and hurtful to athletes physically. Furthermore, it destroys an athlete's mindset through accumulating pressure. A review article "phycological impact of injuries" written by Ansley M. Smith from sports medicine center of Mayo clinic analyzes the mental stage of injured athletes and possible methods to help athletes' mental health during the recovery process [9]. It focuses on athletes' emotional response of the post injury stage and points out that maintaining a positive mindset throughout the recovery process is vital for athlete's physical rehabilitation. However, in most cases, severely injured athletes find it hard to recover because of the mood disturbances, depression, and low self-esteem, which cause athletes to not adhere the rehabilitation program [9]. To deal with mental health issues over the post injury stage, psychological strategies are vitally important. For instance, the investigation found that injured athletes who have done positive self-talk, relaxation, goal setting and healing imagery gained better outcome of recovery [9]. Therefore, it is vitally important for injured athletes to maintain a positive mindset throughout the recovery process. External supporters such as coaches and team physician could act as a catalyst offering them motivation and social support.

4. Conclusion

It is not hard to see that student athletes must maintain a very high-performance level while confronting stressors from two major aspects: academics and athletics. The potential solution to help them is to both offering external supporters and letting them to accept being supported. As discussed previously that student athletes rarely willing to accept help no matter in academic support or post-injury recovery. Further evidence from Duke University points out that the statistic shows that only 10% of student athletes with mental health problem seek help from external supporters (*The Unseen Struggles of Being a Student Athlete*, n.d.). In conclusion, external supporters such as coach, team physicians and teaching assistant is vitally important for student athletes to deal with mental health issues and thus leads to stress relief and improved performances.

References

[1] Stress symptoms: Effects on your body and behavior. (2023, August 10). Mayo Clinic. https: //www.mayoclinic.org/healthy-lifestyle/stress-management/in-depth/stress-symptoms/art-20050987

[2] Santos, M. L. D., Uftring, M., Stahl, C. A., Lockie, R. G., Alvar, B., Mann, J. B., & Dawes, J. J. (2020). Stress in academic and Athletic performance in Collegiate Athletes: A narrative review of sources and monitoring strategies. Frontiers in Sports and Active Living, 2. https: //doi.org/10.3389/fspor.2020.00042

[3] Wikipedia contributors. (2024, August 14). National Collegiate Athletic Association. Wikipedia. https: //en.wikipedia.org/wiki/National_Collegiate_Athletic_Association

[4] Maloney, M. T., & McCormick, R. E. (1993). An examination of the role that intercollegiate athletic participation plays in academic achievement: athletes' feats in the classroom. The Journal of Human Resources, 28(3), 555. https: //doi.org/10.2307/146160

[5] , Heinze, N. R. F. J. (2023, March 9). College students' anxiety, depression higher than ever, but so are efforts to receive care. Copyright 2022 the Regents of the University of Michigan. https: //sph.umich.edu/news/2023posts/college-students-anxiety-depression-higher-than-ever-but-so-are-efforts-to-receive-care.html

[6] Endo, T., Sekiya, H., & Raima, C. (2023). Psychological pressure on athletes during matches and practices. Asian Journal of Sport and Exercise Psychology, 3(3), 161–170. https: //doi.org/10.1016/j.ajsep.2023.07.002

[7] Rondeau, A. (2017, September 26). An Inside Look at the Mental Side of an NBA Star Returning from Serious Injury. Bleacher Report. https: //bleacherreport.com/articles/1567193-an-inside-look-at-the-mental-side-of-an-nba-star-returning-from-serious-injury

[8] Lindner, J. (2024, July 17). College sports Injuries statistics: Impactful data revealed in study. Gitnux. Retrieved August 22, 2024, from https: //gitnux.org/college-sports-injuries-statistics/

DOI: 10.54254/2753-7048/2025.BO34278

[9] Smith, A. M. (1996). Psychological impact of injuries in athletes. Sports Medicine, 22(6), 391–405. https://doi.org/10.2165/00007256-199622060-00006