

Study on Joint Disease on Working Women Athlete

Dr. Vinod Chahal

Associate Professor of Physical Education, Pt.CLS. Govt. College, Karnal, Haryana, India

ABSTRACT

Rising interest in studying the psyches of female athletes is a direct result of the 50-year upsurge in female sports activity. In this summary, we look at how mental and emotional toughness, awareness of the present moment, and adequate rest all play a role in athletes' performance. Those who have a vested interest in an athlete's training must also be able to identify and address the role that anxiety and depression may play in the development of sport-related injuries. Moreover, females are disproportionately affected by both disordered eating and the negative outcomes of social media use. Finally, if we can have a better grasp of how female athletes think about injury and rehabilitation, we may have a better chance of getting them back into competition. The purpose of this article is to offer a broad overview of the ways in which a female athlete's mental and emotional health impact her athletic performance, injury risk, and recovery from injury.

KEYWORDS: *Psychology; female athlete; resilience; anxiety and depression; burnout; kinesiophobia*

INTRODUCTION

With the passage of Title IX legislation half a century ago, women's athletic involvement has increased in popularity, prevalence, and stature, and as a result, more and more research has been devoted to better understanding the physiological effects of women's athletics. Therefore, there is a large body of literature on topics like improving athletic performance with weight and high-intensity interval training, avoiding musculoskeletal injuries like ACL tears with targeted neuromuscular training programmes, and recovering from orthopaedic trauma like a broken bone or a dislocated joint with the help of cutting-edge physical and occupational therapy. The inherited and taught psychological features and behaviours that influence a female athlete's experience in sport, however, have typically received less attention. Here, we'll take a look at what we know about the female athlete's mind specifically with an eye on identifying characteristics and habits that prove useful (or harmful) in the competitive arena. "The function of mental processes and behaviour in boosting personal assets and safeguarding an individual from the potential negative influence of stresses" is how psychologists have described psychological resilience. (1). Some people use the term "grit" to describe those who are resilient,

whereas the term "coper" is used to describe athletes who show the ability to improve and perform well despite adversity.

This year's research by Sorkkila et al. analysed data gathered over three years from 491 Finnish female high school athletes on resilience, burnout, and dropping out of sports (2). Female athletes who reported higher levels of burnout were less resilient and more likely to quit competing compared to their counterparts who did not experience any burnout. The athletes who showed the fewest signs of burnout also performed best on validated resilience questionnaires. These surveys asked participants to assess their agreement with statements such "I tend to bounce back fast during stressful situations" (3). The results of this research highlight the significance of resilience in preventing overtraining, burnout, and the eventual retirement of an athlete. Adolescent female athletes may benefit more from this discovery than their male counterparts since they are more vulnerable to burnout and its negative effects (such as sports-related injury and dropout) (4).

Three hundred and seventy-four Japanese collegiate athletes participated in a recent research that

How to cite this paper: Dr. Vinod Chahal "Study on Joint Disease on Working Women Athlete" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-7 | Issue-1, February 2023, pp.1364-1367, URL: www.ijtsrd.com/papers/ijtsrd53872.pdf



Copyright © 2023 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



examined the connection between resilience and stress coping strategies. Statistically significant links were observed between resilience and coping strategies for stress by the authors. Highly resilient people, according to these studies, are more likely to utilise problem-focused coping strategies including getting more knowledge about or help with a difficult issue, eliminating the cause of the stress, or removing themselves from the unpleasant circumstance. The authors also point out that resilient athletes are less prone to resort to emotion-focused coping methods like emotional outbursts and avoidance when facing adversity (5). Trainers, coaches, and health care professionals who work with female athletes would benefit greatly from the ability to recognise protective and harmful coping behaviours because it would allow them to both identify those who may be at increased risk of experiencing stress and its associated negative effects and develop behavioural interventions for female athletes with maladaptive stress coping patterns.

In a 2013 paper, Tamminen et al. drew on interviews with female athletes from across the globe to better define the athletes' experiences with hardship and subsequent personal development, highlighting the relevance of personal resilience for female athletes (6). Athletes spoke out to researchers about issues including bullying, eating disorders, and sports-related injuries they had faced as participants or as victims. Athletes discussed how they had learned to use their struggles as building blocks for their future success. Each athlete's feeling of self-confidence and personal efficacy grew as she overcame adversity and realised she was up to the challenge, becoming resilient as a result.

Mindfulness

Mindfulness has been shown to have significant beneficial impacts on athletic performance and well-being, both via natural and taught practises. A group of researchers led by Baltzell et al. (2014) published their findings on the implementation of a mindfulness meditation training programme with a Division I women's soccer team (7). Participants reported a "...increased capacity to accept and experience a new connection with their emotions, both on and off the field (7)" after 12 weeks of mindfulness training. This indicates the connection between mindfulness and resilience as a potentially beneficial stress coping habit, and suggests that mindfulness may be a good skill for athletes to use when facing hardship.

Sleep habits

The quality and quantity of sleep a female athlete gets has a significant impact on both her physical and mental performance. In reality, a large body of

research shows that getting enough sleep improves performance on the field and reduces the risk of injury (10). A 2018 research by Dumortier et al. looked at the sleeping patterns of 26 professional female gymnasts (11). These researchers found that there were statistically significant correlations between less hours of sleep, more time spent exercising, and worse athletic performance. These results provide credence to the idea that getting enough sleep is crucial for optimising an athlete's performance during competition.

Moreover, sleep-deprived athletes report more mood disorders and worse performance (12). Coaches and medical personnel must be aware of danger indicators to watch out for, such as weariness, since athletes often fail to mention their psychological concerns. De Souza et al. found that both male and female athletes had a statistically significant increase in psychological discomfort and stress symptoms when tiredness was a factor (14). Although the precise correlations between sleep deprivation, mood instability, and poor performance remain unknown, it is obvious that all three are interconnected..

Anxiety and depression

A female athlete's state of mind is crucial to her performance. Here, we investigate the problem of anxiety and depression among female athletes, including its prevalence, causes, and consequences.

Studies on the prevalence of anxiety and depression in the general population consistently reveal that women are more likely to be affected than men are. Altemus et al. is only one of several study groups that has discovered greater rates of psychological illnesses in female patients (15). High rates of anxiety and sadness have also been repeatedly documented when studying the sports population as a whole. According to a 2018 literature study by Wolanin et al., reported rates of depression in athletes varied from 15.6% to 21.0%. (16). Performance expectations, overtraining, sports-related injury, and abrupt career termination were all named as potential triggers for anxiety and depression among athletes.

Male athletes had lower rates of anxiety and depression than female athletes, yet both sexes suffer from these mental health issues at alarming rates. As a result, maybe it shouldn't come as a surprise that anxiety and depression are more common among female athletes than among their male counterparts. Recently, Rice et al. conducted a comprehensive review and meta-analysis of the current literature, and they discovered that female athletes were considerably more likely to express anxiety than male athletes (P0.001) (17). Yang et al. looked examined the prevalence of depression among college athletes

and found that women were 1.32 times more likely to suffer from depression than men (18). Weber et al 2018.'s research on anxiety and depression among athletes revealed that women were more likely than men to suffer from these conditions, and, surprisingly, they discovered no association between age and anxiety or sadness (19). This is significant because it shows that middle school athletes are just as vulnerable to the mental health issues that have previously been associated with much older players. Overall, athletes have a higher risk of mental health issues than the general population, and within the athletic community, women are more likely than men to experience anxiety and depression.

Female single-sport athletes have a higher risk of anxiety and depression than the general population (20,21). Several studies that have discovered elevated incidence of mental health issues among athletes have drawn the same conclusion: that being part of a team provides protection against things like anxiety and sadness. Athletes who practise and compete together have someone to lean on at all times, which research suggests aids in the therapeutic process of dealing with adversity. Being on a sports team also improves the rehabilitation process after an injury. The beneficial buffering effect of a social support network on how athletes deal and recover from injuries was a fundamental point made by Junge et al. in their 2000 assessment of the impact of psychological variables on sports injuries (22). Athletes' physical and mental recoveries, especially after injuries, may be greatly aided by having a supportive team around them.

As anxiety and depression are associated with a higher injury risk among female athletes, their prevalence is of special concern. In 2017, Li et al. discovered a startling fact: female athletes who reported experiencing anxiety were 1.9 times more likely to experience an injury while competing than their nervous counterparts (23). To make matters worse, research shows that injured athletes have a higher propensity to struggle emotionally throughout their rehabilitation. In addition to physical ailments, Wolanin et al. observed that 80% of athletes seeking medical attention for a sports-related problem also had psychological difficulties (16). Lastly, it's important to note that anxiety and sadness may be precursors of athlete burnout due to overuse and overtraining.

Conclusions

This paper is intended to provide team doctors who are responsible for the medical treatment of female athletes an up-to-date summary of a few musculoskeletal and medical difficulties. Do not use it as a guideline for proper medical treatment; that is

not what it's for. To that end, this paper serves merely as a guide and is thus of a generic character, falling in line with the reasonable, objective practise of the healthcare professional. Each patient's care will be based on their unique set of symptoms and medical history. It is essential that proper insurance be in place to safeguard the interests of the team doctor, the player, and the sponsoring company.

References

- [1] Fletcher D, Sarkar M. A grounded theory of psychological resilience in Olympic champions. *Psychology of Sport and Exercise* 2012; 13:669-78.
- [2] Sorkkila M, Tolvanen A, Aunola K. et al. The role of resilience in student-athletes' sport and school burnout and dropout: A longitudinal person-oriented study. *Scand J Med Sci Sports* 2019; 29:1059-67.
- [3] Smith BW, Dalen J, Wiggins K, et al. The brief resilience scale: assessing the ability to bounce back. *Int J Behav Med* 2008; 15:194-200.
- [4] Heidari S. Gender differences in burnout in individual athletes. *Journal of Experimental Biology* 2013; 3:583-8.
- [5] Kawata Y, Kamimura A, Yamada K, et al. Relationship between resilience and stress coping among Japanese university athletes. *Triennial Congress of the IEA*; 2015; Melbourne.
- [6] Tamminen K, Holt N, Neely K. Exploring adversity and the potential for growth among elite female athletes. *Psychol Sport Exerc* 2013; 14:28-36.
- [7] Baltzell A, Caraballo N, Chipman K, et al. A Qualitative Study of the Mindfulness Meditation Training for Sport: Division I Female Soccer Players' Experience. *J Clin Sport Psychol* 2014; 8:221-44.
- [8] Jones MI, Parker JK. Mindfulness mediates the relationship between mental toughness and pain catastrophizing in cyclists. *Eur J Sport Sci* 2018; 18:872-81.
- [9] Kabat-Zinn J. *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life*. Hachette Books; 1994.
- [10] Dwivedi S, Boduch A, Gao B, et al. Sleep and Injury in the Young Athlete. *JBJS Rev* 2019; 7:e1
- [11] Dumortier J, Mariman A, Boone J, et al. Sleep, training load and performance in elite female gymnasts. *Eur J Sport Sci* 2018; 18:151-61.

- [12] von Rosen P, Frohm A, Kottorp A, et al. Too little sleep and an unhealthy diet could increase the risk of sustaining a new injury in adolescent elite athletes. *Scand J Med Sci Sports* 2017; 27:1364-71.
- [13] Hayes LE, Boulos A, Cruz AI. Risk factors for in-season injury in varsity collegiate cross-country athletes: an analysis of one season in 97 athletes. *J Sports Med Phys Fitness* 2019; 59:1536-43.
- [14] De Souza NL, Esopenko C, Conway FN, et al. Patterns of health behaviors affecting mental health in collegiate athletes. *J Am Coll Health* 2021; 69:495-502.
- [15] Altemus M. Sex differences in depression and anxiety disorders: potential biological determinants. *Horm Behav* 2006; 50:534-8.
- [16] Wolanin A, Gross M, Hong E. Depression in athletes: prevalence and risk factors. *Curr Sports Med Rep* 2015; 14:56-60.
- [17] Rice SM, Gwyther K, Santesteban-Echarri O, et al. Determinants of anxiety in elite athletes: a systematic review and meta-analysis. *Br J Sports Med* 2019; 53:722-30.
- [18] Yang J, Peek-Asa C, Corlette JD, et al. Prevalence of and risk factors associated with symptoms of depression in competitive collegiate student athletes. *Clin J Sport Med* 2007; 17:481-7.
- [19] Weber S, Puta C, Lesinski M, et al. Symptoms of Anxiety and Depression in Young Athletes Using the Hospital Anxiety and Depression Scale. *Front Physiol* 2018; 9:182.
- [20] Pluhar E, McCracker C. Team Sport Athletes May Be Less Likely To Suffer Anxiety or Depression than Individual Sport Athletes. *J Sports Sci Med* 2019; 18:490-6.
- [21] Levit M, Weinstein A, Weinstein Y, et al. A study on the relationship between exercise addiction, abnormal eating attitudes, anxiety and depression among athletes in Israel. *J Behav Addict* 2018; 7:800-5.

