

Mental health in golf

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### Brief Introduction

Mental health in elite sport has received considerable attention as of late. Elite athletes are not immune to experiencing mental health symptoms and disorders which can greatly affect the performance and overall lives of athletes. To date, the mental health of elite golfers has not been robustly explored and has not been a research priority. This chapter will explore various definitions pertaining to mental health, including wellbeing and mental health symptoms and disorders. Elements of epidemiology related to mental health symptoms and disorders amongst elite golfers will be examined, along with their risk factors. Epidemiology explores the distribution, patterns, and causes of health and disease or illness conditions that are specific to a particular population. The need for future rigorous epidemiological research will be discussed, alongside suggestions for strategies, including both individual and environmental considerations, that can prevent and address mental health symptoms and disorders in golfers. The chapter will conclude with practical applications, rooted mostly in mental health literacy, for golfers, coaches, and parents.

### Context

#### *Mental and Social Health*

High performance in elite sport requires athletes to be in a state of peak health, be it physical, mental, or social. Elite sport can exist on a continuum from semi-elite (e.g., high-performance youth sport) to world-class elite (e.g., international competitions) (Swann et al.,

2015). Although aspects of physical health and physical injuries amongst athletes have received the greatest share of research attention, especially amongst golfers (see: Cabri et al., 2009; Robinson et al., 2019; Sorbie et al., 2022), recently, mental and social health have begun to be explored thoroughly for elite athletes (Reardon et al., 2019).

Mental health is defined by the World Health Organization (WHO) as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (WHO, 2001, p.1). Mental health is a resource, one that allows individuals to identify, pursue, and fulfil their key athletic goals in a productive and rewarding manner as well as identify and manage various challenges that come up in life. Mental health also allows individuals to connect meaningfully with others and contribute to their communities, be it directly through sport or in everyday life. Here, the World Health Organization has unified mental health with social health (Keyes, 1998). Social health can be defined as “the appraisal of one’s circumstances and functioning in society” (Keyes, 1998, p. 122). Social health includes various elements, such as: 1) social integration (i.e., the quality of relationships within our communities), 2) social acceptance (i.e., the ability to accept and trust others), 3) social contribution (i.e., evaluating and understanding another person’s social value and worth), 4) social actualization (i.e., evaluating and understanding the future of our communities), and 5) social coherence (i.e., evaluating and understanding the quality and organization of our communities) (Keyes, 1998). Lacking or experiencing diminished elements of social health have been associated with poor overall health, including mental health amongst athletes (Gorczyński & Miller Aron, 2020). Like mental health, social health is included in the World Health Organization Constitution and is an important component of overall health (WHO, 2020).

## *Wellbeing*

Over time, components of the definition of mental health have evolved, including the term “well-being” (or “wellbeing”) (Dodge et al, 2012). Initially, the definition of wellbeing was rooted in positive and negative affect, (i.e., happy or sad respectively). A state of wellbeing was one where an individual experienced a greater degree of positive affect over negative affect. Experiencing a state of low wellbeing was understood to be the inverse state, where an individual experienced a greater degree of negative affect over positive affect. As the definition of wellbeing evolved, different components were added to the definition. This included elements of life satisfaction, quality of life, autonomy, skill mastery, relationship quality, life purpose, self-actualization, life potential, and self-acceptance (Diener & Suh, 1997; Dodge et al., 2012; Ryff, 1989; Shin & Johnson, 1978). Currently, the definition of wellbeing includes these elements, but has also incorporated a dynamic nature to them where they are in constant flux.

The definition of wellbeing is now considered the balance point between physical, mental, and social resources and physical, mental, and social challenges (Dodge et al., 2012). Here, there is a constant balancing act between ever shifting resources an individual has and the challenges they encounter. An athlete must recognize and appraise the current resources they possess, be they physical ability and talent, elements of mental health, and social capital and weigh them carefully against various challenges that will have an impact on, and potentially threaten, their physical, mental, and social health. This ability for an athlete to be aware of one’s needs, or engage in a process of self-actualization, is vital as it allows them to better understand how they may move toward athletic success or enhance other areas of their lives. This awareness provides an opportunity for an individual to find, sustain, or where necessary, restore flow, or an optimal psychological experience in the pursuit of one’s activities (Csikszentmihalyi, 1990; Norsworthy, Gorczynski, & Jackson, 2017). A careful

balance is required between one's resources and challenges. Experiencing a state of excess resources may lead an athlete to feel unchallenged and demotivated or feel they may need to take unnecessary risks which may result in injury. A state of excess challenges may lead someone to feel incompetent or unable to cope or progress, potentially leading to ending one's career in sport. Such states may have negative consequences on the individual with respect to their emotions, cognitions, and behaviours, which may impact their social and occupational functioning as well as activities of daily living. Here, an individual would experience mental health symptoms. If such symptoms persist over a period, and meet specific criteria for frequency and severity, they may contribute to a diagnosis of a disorder (American Psychiatric Association, 2013; WHO, 2018).

### *The Epidemiology of Mental Health Symptoms and Disorders*

Epidemiology is concerned with the understanding of distribution, patterns, and determinants of various elements of health and disease or illness conditions that are specific to a particular population (Porta, 2014). Epidemiological research shows that athletes experience high rates of symptoms of distress, anxiety, depression, alcohol misuse, and sleep disturbance (Gouttebauge et al., 2019; Reardon et al., 2019). When analysing these symptoms, current athletes experience higher rates of prevalence than those of retired athletes (Gouttebauge et al., 2019; Reardon et al., 2019). For elite golfers, limited information is presently known. Most quantitative research that has explored the mental health of elite golfers also involved athletes from other individual and team sports within the sample, and therefore any results presented included those of other elite athletes in other sports (e.g., Åkesdotter et al., 2020; Nixdorf et al., 2013; Yang et al., 2007). For instance, Nixdorf and colleagues (2013) explored the prevalence of depressive symptoms amongst German elite

athletes. Of the 162 athletes who completed questionnaires on their mental health symptoms, four individuals were golfers. Collectively, results from this study did indicate that athletes who competed in individual sports, like golf, were more likely to experience depressive symptoms than those who competed in team sports. These results have been confirmed in other studies, across a variety of individual and team sports (see Schaal et al., 2011).

A great deal of attention within the elite golfing literature has been devoted to performance and competition, with specific focus on experiences of stress (Fry & Bloyce, 2020), arousal regulation (van der Lei et al., 2016), performance anxiety (Schaefer et al., 2016), perfectionism (Hill et al., 2010), and choking (Hill et al., 2019) to name a few. Within each of these research areas, the focus has been on improvements in skill execution and consistency, maintaining attentional focus, and overall performance in future competitions. The focus has not been to gain an epidemiological understanding of mental health symptoms and disorders amongst athletes in this sport. Unfortunately, this has resulted in a deficit of knowledge, one that has limited the ability to better devise strategies to diagnose, prevent, and treat mental health symptoms and disorders experienced specifically by golfers.

Within elite golf, recommendations have been made to improve epidemiological data collection methods. Specifically, the International Golf Federation in 2020 produced a consensus statement concerning methods of recording and reporting of epidemiological data on injuries and illnesses specific to golf (see Murray et al., 2020). The consensus statement followed the International Olympic Committee consensus statement on methods for recording and reporting of epidemiological data on injury and illness in sport (see: Bahr et al., 2020). The International Golf Federation consensus statement focused on the following areas: 1) using consistent definitions and characteristics pertaining to injury and illness, including mechanisms of injury - be they new, subsequent, recurrent, or exacerbations; 2) recording

golf specific exposure within competition, practice, or training; 3) calculating incidence and prevalence of injuries and illnesses as well as their burdens; 4) collecting population characteristics; and 5) using standardized forms and data collection methods. Unfortunately, the consensus statement focused almost exclusively on physical injuries and illnesses, with little mention of mental or social health. Currently, standardized epidemiological data collection methods within golf do not exist for mental health symptoms and disorders.

What is needed within the sport of golf is a mental health research agenda, complete with an epidemiological data strategy (Gorczyński & Webb, 2021; Gorczyński & Webb, 2022). Overall, epidemiology helps advance research, evidence-based practice, and policy development. Through an epidemiological data strategy, researchers can identify and understand the aetiology of disease or illness conditions so that they may devise efficient and effective evidence-based prevention or treatment approaches. An epidemiological data strategy must move from an understanding of disease or illness distribution, or what is known as descriptive epidemiology, to understanding the risk factors and determinants associated with the disease or illness, or what is known as analytic epidemiology (RiesMerikangas et al., 2009).

Descriptive epidemiology addresses both incidence and prevalence. Incidence rates refer to new cases of a disease or illness in a specific population for a specific time period. Prevalence rates refer to existing cases of a disease or illness in a specific population for a specific time period (RiesMerikangas et al., 2009). Unfortunately, within the sport of golf, neither incidence or prevalence rates of mental health symptoms or disorders are known.

Analytic epidemiology addresses risk factors and determinants of disease or illness in a specific population (RiesMerikangas et al., 2009), and careful attention needs to be paid to different demographic information about the specific population, including data on age, sex, gender, gender identity, sexuality, class, income, race, ethnicity, (dis)ability, level of

competition, length of competition, type of league, level and type of coaching, travel demands and schedule, and geography. Additionally, psychosocial, cognitive, emotional, and behavioural factors need to be identified and evaluated. This may include perceptions of body image, perceived competence, intentions to play, motivation, self-efficacy, perceived behavioural control, social support, self-worth, self-esteem, self-concept, anxiety symptoms, depressive symptoms, perfectionism, wellbeing, knowledge of mental health, smoking cigarettes, drinking alcohol, diet, sleep, gambling, and physical activity (Faulkner & Gorczynski, 2013). Both retrospective and prospective studies provide data that allow the evaluation of disease or illness correlates or determinants to be conducted and demonstrate which factors are associated with or predictive of mental health symptoms and disorders.

Within the sport of golf, there is limited data on risk factors or determinates that provides information on correlation or causation of mental health symptoms or disorders. For instance, a recent study from Korea conducted quantitative evaluations of stress and sources of stress with players on the Ladies Professional Golf Association of Korea Tour (KLPGA) and the Dream Tour (a minor development tour for the KLPGA) (Kim & Choi, 2022). It showed that players have experienced stress due to competition with other players, financial concerns, difficulties with their families, relationships with their coaches, and their performances in competition. To manage these stressors, players stated they benefited most from coping strategies as well as trying to ensure high levels of life and career satisfaction. Although previous research has shown the importance of active coping strategies with stress, such as those rooted in problem solving to address and resolve stressful situations (Folkman & Moskowitz, 2004), most professional players in the study engaged in passive coping strategies, such as those centred around avoidance, denial, or minimization of negative effects of stress (Penley, Tomaka, & Wiebe, 2002). Kim and Choi (2022) stated this may have been due to the nature of KLPGA, where players believed that passive coping strategies allowed



them to maintain a positive image given their popularity with fans, frequent communication through social media, and financial sponsorship deals. Kim and Choi (2022) confirmed that professional players might be at risk of emotional exhaustion and would benefit from active coping strategies of stress (e.g., take steps to change stressful situations, examine a stressful situation from multiple perspectives), improved social support from family and friends, mental health skills training, and continuous care from a psychotherapist. Some information about closely related aspects of mental health symptoms are also known from studies with non-elite golfers. For instance, with respect to sport related anxiety symptoms (e.g., worry, somatic anxiety, and concentration during competition), positive associations have been found with perfectionism, putting performance, and choking (Heron & Biliac, 2022). Within this non-elite population, negative associations have been found between sport related anxiety and age and years played. However, caution must be taken while evaluating these results with respect to mental health symptoms and disorders. First, sport related anxiety symptoms are distinct from a diagnosis of an anxiety disorder. A diagnosis of Generalized Anxiety Disorder, for instance, requires the following symptom presentation, including its severity and frequency:

- Excessive anxiety and worry that occurs on most days over a period of at least 6 months with the individual experiencing difficulties controlling their anxiety and worry;
- At least three of the following symptoms:
  - o Restlessness or being on edge;
  - o Difficulties concentrating;
  - o Muscle tension;
  - o Tiring easily;
  - o Irritability;

- Difficulties with sleep (falling asleep, staying asleep, restless sleep, unsatisfying sleep);
- Anxiety, worrying, or physical symptoms significantly distress or prevent an individual from their areas of daily functioning;
- Symptoms cannot be attributed to or explained by another medical condition, mental disorder, or substance (APA, 2013; Reardon et al., 2019; Reardon et al., 2021).

The Sport Anxiety Scale-2 (Smith et al., 2006) used in the Heron and Biliac (2022) study is not a validated questionnaire for any anxiety disorder and cannot be used to render a diagnosis of any anxiety disorder. Second, the population under evaluation was not composed of elite golfers. Although this study presented some interesting considerations with respect to sport anxiety symptoms with non-elite golfers, it unfortunately cannot render any information about anxiety disorders for elite golfers. Future research would need to take into consideration specific, clinically relevant, and validated instruments for mental health symptoms and disorders (e.g., such as the Sport Mental Health Assessment Tool 1 (Gouttebauge et al., 2021) and include elite golfers.

Given limited analytic epidemiological evidence that is currently available for elite golfers with respect to mental health symptoms and disorders, information and data must be inferred from other elite athletes in other sports. For instance, it has been demonstrated that athletes with the following clinical history are at greater risk of developing anxiety or depressive symptoms: those who are female; have family histories of mental health symptoms and disorders; have fractured or poor relationships with their families or friends; have unsupportive coaches; receive little social support; have experienced pain or injuries;

have experienced competitive failure; and have been forced to retire either through injury or competition (Reardon et al., 2019).

Further, qualitative research provides detailed information about certain lived experiences of elite golfers, and although the results of qualitative research cannot offer direct correlational or causal data with respect to epidemiologically underpinning diagnosis, prevention, or treatment of mental ill-health, that is evidence-based, it can shed important information on further research that is necessary to enhance research and practice. Qualitative data can be extremely valuable in either the initial stages of epidemiological investigation, in better understanding various disease or illness conditions, factors that might be responsible for or related to disease or illness conditions or concerning any form of intervention. It is also a vital methodology, complete with different methods, that can help with the re-evaluation of a disease or illness condition to better understand how diagnosis, prevention, and treatment may be re-conceptualized or addressed (Bannister-Tyrrell & Meiqari, 2020).

Recent qualitative research by Hill and colleagues (2019) found that the way golfers interpreted their failures had tremendous consequences on their wellbeing and future competitions. Hill and colleagues (2019) found that golfers who adopted destructive perspectives to choking events had experienced a loss of self-confidence, lowered self-worth, thoughts of exiting the sport, and even self-destructive behaviour (i.e., drink driving). Indeed, earlier, Hill et al. (2011) found that one of the professional golfers in their study, who had experienced multiple choking episodes, reported having suicidal ideation as a result of his negative reflection of such failures. Additional qualitative research by Fry and Bloyce (2020) found that professional golfers experienced various stressors that may have caused or exacerbated mental health symptoms. For instance, golfers spoke of long and tiring travel schedules, experiences of isolation and loneliness where long stretches of time were spent away from family and friends, superficial relationships with other professional golfers,

overall poor social support, multiple and never-ending financial challenges, and gross effort and reward imbalances. Further qualitative research by Matz, Smith, and Choi (2022), captured the difficulties and mental health symptoms experienced by elite golfers during COVID-19. Their research found that the pandemic caused multiple financial challenges, competitions to become more difficult and rigorous, and a great deal of uncertainty about the future of the sport. Overall, the pandemic caused many golfers to feel uncertain about their career prospects, which influenced their self-esteem, and self-concept or how they constructed their own identities based on their relationship with the sport. Collectively, results from these qualitative studies within elite golf, mirror those found amongst other elite athletes (Goutteborge et al., 2022; Reardon et al., 2019).

#### Practical Applications to Improve Mental Health in Golf

Within the general population, there are many health benefits attributed to playing golf (see Murray et al., 2017). Murray and colleagues (2017) describe golf as a sport that is played by over 55 million individuals in 206 countries and enjoyed by people of all ages of various cultures. Through golf, Murray and colleagues (2017) argue, people can continue to remain physically active at all stages of life and can enjoy the various positive physical health effects that golf has to offer. These effects include improved physical fitness, cardiovascular health, respiratory functioning, metabolic health, musculoskeletal health, and even reductions in risk of certain forms of cancers. With regards to mental health, much less is known. There are reports that playing golf may reduce stress, address aggression, increase confidence, improve symptoms of anxiety, and build social ties. However, anyone who has played golf, especially at the elite level, knows that golf may cause stress, aggression, and anxiety while shattering one's confidence and may easily harm good and established relationships.

Although rigorous research needs to better demonstrate some of the health claims associated with playing golf, overall, it is a sport that can be enjoyed by many individuals making it a desirable activity to be promoted. Of course, there are differences in support structures that are needed for those who play golf recreationally and those who play golf competitively and professionally. For individuals who compete in golf at the elite level, strategies are needed to help them succeed, enjoy their professional pursuits, but also maintain and improve their mental health. Mental health literacy is one such strategy that can help promote mental health in elite athletes by using resources offered through an array of mental health disciplines (Gorczynski et al., 2019; Gorczynski et al., 2021; Moore et al., 2022).

Mental health literacy is concerned with knowledge of mental health and mental health symptoms and disorders, self-management strategies of mental health symptoms, challenging mental disorder stigma, awareness of mental health support structures to help others, and the ability to seek professional support (Jorm et al., 1997; Kitchener & Jorm, 2002). Mental health literacy is more than just knowledge of mental health and various symptoms and disorders, it is a strategy where individuals can advocate for their own mental health and the mental health of others. Key to mental health literacy is the ability for individuals to develop and use cognitive and social skills to motivate individuals and themselves to gain access, understand, and use information that promotes their mental health (WHO, 1998). For mental health literacy strategies to be successful and effective, they need to be context specific, developmentally and age appropriate, and culturally competent (Kutcher, Wei, & Coniglio, 2016). Within an elite golf context, that means that mental health literacy strategies be driven by an awareness of the sport, it's historical underpinnings, current administrative structure, cultural practices, areas of tension which have resulted in discrimination and exclusion from the sport, progressions from youth to professional levels, coaching and educational structures, and various demands which may present themselves as

risk factors for mental health symptoms and disorders. This means that any support mechanisms offered through a mental health literacy strategy would be informed by the mental health needs of the elite golfers. Current evidence suggests that ecological perspectives should be taken toward the design of any mental health literacy strategy. That is, perspectives that consider the whole athlete which includes their lives within and outside of sport (Gorczyński et al., 2021; Purcell et al., 2022; Stambulova et al., 2014). The ecological model presents a broad perspective to understanding the determinants of mental health, including risk factors that originate within the individual, through relationships with others, within their communities, and within society in general. An ecological perspective views individuals as constantly evolving and changing to adapt to the needs of their societies (Bronfenbrenner, 1977; McLaren & Hawe, 2005; McLeroy et al., 1988). Rooted in this perspectives of mental health literacy, some strategies to maintain, and improve, mental health for elite golfers, coaches, and parents and family members are briefly described below (Gorczyński et al., 2019; Gorczyński et al., 2021; Moore et al., 2022).

## Golfers

Elite golfers are encouraged to be aware of their knowledge of mental health, perspectives on mental health and mental health symptoms and disorders, any self- or public-stigmatizing views they may hold, and intentions to seek professional support when necessary. Although athletes should be aware of the necessary demands to compete at a high level of performance within their sport, they should understand what is important outside of sport, too (Gorczyński et al., 2019; Gorczyński et al., 2021). Taking a holistic life perspective, golfers can engage in critical self-reflection, take time to better understand themselves, especially how they conceptualize themselves. Having a robust self-concept is

key to understanding and maintaining one's self-identity and being able to seek support when needed. Engaging in this sort of self-reflection can be done individually through journaling, or facilitated by a psychotherapist, registered mental health practitioner, or a registered sport psychologist. In addition to being aware of oneself, athletes should not neglect good relationships with their friends and families and strive for good social support from their coaching staff. Maintaining good relationships is key to being able to be aware of existing mental health resources and how to access them, as well as other support structures and resources for career development including retirement. Also, golfers can take on active coping strategies to deal with chronic stress, maintain a positive goal-oriented outlook on performance and failure, meaningfully examine career progress and satisfaction, and address poor sleep (Gorczyński, 2022).

## Coaches

Coaches have several responsibilities, including both administrative and sport related, that are focused on their athletes. Overall, coaches face many different forms of stress from a variety of sources. It is key that coaches do not forget about themselves and their mental health needs (Hill et al., 2021; Gorczyński et al., 2019; Otterbein et al., 2021). Coaches should engage in practices to help them better understand their own mental health, including symptom specific knowledge and perspectives that may be self- or public stigmatizing. Being aware of mental health resources and how to access them can not only be beneficial to the coach, but also their athletes. Awareness of mental health symptoms will help ensure athletes receive the support and mental health care they may need. Delays in treatment may result in a loss of focus, performance, injuries, or even exit from sport (Reardon et al., 2019). Also, coaches serve as role models for athletes and may demonstrate behaviours that reinforce a

climate that is conducive to mental health (Bissett, Kroshus, & Hebard, 2020). Playing a supportive role with athletes in addition to delivering athletic training and skill development and mental health awareness is also key. Coaches should develop strong and supportive relationships during their tenure with the athletes they work with as increased social support is key to improved mental health. Also, many parents view coaches as playing an important role in the mental health and overall wellbeing of their child who is engaged in sport (Brown, Deane, Vella, & Liddle, 2017).

### Parents and family members

Parents and family members play key social roles in the mental health of athletes. Strong family bonds are associated with fewer mental health symptoms and disorders amongst elite athletes (Reardon et al., 2019). Parents need to be mindful to not project their own goals and desires onto their children and allow their children to develop within sport according to their own wishes (Dorsch et al., 2015). Parents and family members of golfers should therefore, be supportive, maintain good relationships, and offer information about resources about mental health should they be required. Parents and family members should be aware of mental health and mental health symptoms, various stigmatizing views, as well as support systems in place that may be accessed when needed. Ultimately, parents can play a large role in ensuring their younger athletes receive support. When their children are younger, parents have considerably more control over their child's career and athletic involvement (Charbonneau & Camire, 2019). Naturally, this decreases with time as children age and aim to have more autonomy and decision making within their own lives and athletic careers. Parents need to respect this development of autonomy and ensure they offer support when needed. Lastly, parents need to be mindful of their own mental health and ensure they seek



support when necessary. Mental health symptoms can sometimes be expressed in different ways while watching their children play sport, such as through frustration, irritation, aggression, and disruptive and derogatory behaviour. This can be extremely disruptive and alarming to younger athletes and can cause concern (Omli & Wiese-Bjornstal, 2011). Parents should be mindful of seeking support for their mental health when necessary.

### Summary and Conclusions.

Elite golfers are not immune to experiencing mental health symptoms and disorders. Research has shown that mental health symptoms and disorders affect the performance and overall lives of athletes. Although the mental health of elite golfers has not been studied in detail mental health literacy strategies can be designed to help golfers prevent and address mental health symptoms and disorders. Rigorous research, including descriptive and analytic epidemiological studies, is needed to help design context specific mental health literacy strategies and to help improve diagnosis, prevention, and treatment of mental health symptoms and disorders within elite golf.

### Further Reading

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