Depression in Danish and Swedish elite football players and its relation to perfectionism and anxiety

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ARTICLE INFO

ABSTRACT

Objectives: The aim of this study was to investigate the relation of perfectionism and anxiety to depressive symptoms in Danish and Swedish male elite football players. Additionally, the relationship between age and the study variables, and differences between elite junior and professional players were examined. Design and Methods. A cross-sectional design was used to survey 323 A-squad and U19 players (M age = 22.08 years, SD = 5.15). The survey included biographical information as well as measures of depressive symptoms, perfectionism (strivings and concerns), competitive anxiety, and social phobia. Results. Results revealed an overall prevalence rate for depressive symptoms among the participants of 16.7%. Moreover, correlation analyses showed evidence of the relationships between depression and perfectionistic concerns, competitive anxiety and social phobia. The results of a mediation analysis demonstrated that there was a positive indirect effect of perfectionistic concerns on depression via competitive anxiety. Significant negative correlations between age and anxiety, social phobia, and perfectionistic concerns were found. Depression, however, was not significantly correlated with age even though elite junior players' depression levels were significantly higher than those of professional players and they showed higher levels in competitive anxiety and social phobia. Conclusions. Findings of the study indicate that more awareness of mental health in elite football is needed, and that the investigated psychological factors may be a starting point for establishing preventive programs and supportive interventions for footballers suffering from depressive symptoms.

Football (i.e., soccer), currently the most popular team sport worldwide for men, women and children, is played by over 250 million people in more than 200 countries (Fuller, Junge, & Dvorak, 2012). Hence, it is particularly important that the risks associated with participation in this sport are identified and managed effectively (Gouttebarge & Aoki, 2014). The Federation Internationale de Football Association (FIFA), for example, manages the risks associated with football players' health by using a risk management approach (Fuller et al., 2012). However, Gouttebarge and Aoki (2014) presented findings revealing that medical care and support during a football career were directed exclusively towards physical health, while sufficient support related to mental health was lacking. In this paper, mental health should not be defined as the mere absence of illness but as a syndrome of symptoms of positive feelings and positive functioning in life (Keyes, 2002; Schinke, Stambulova, Si, & Moore, 2017). Gouttebarge, Backx, Aoki, and Kerkhoffs (2015a) further suggested that elite footballers

might suffer from mental health problems during their career. Their results investigating 149 current players from six different countries showed a prevalence of 26% for anxiety and depression symptoms using a 12 item general health questionnaire. Moreover, Gouttebarge, Frings-Dresen, and Sluiter (2015b) examined the prevalence of common mental health problems in elite football across five European countries. They found that the prevalence of symptoms ranged from 11% to 18% for distress, from 25% to 43% for anxiety/depression and from 19% to 33% for sleep disturbances. Further, a recent study by Kilic et al. (2017) investigated the prevalence of symptoms of common mental disorders among current and retired professional football players from Denmark. The study found that 18% of current players and 19% of retired players showed anxiety and/or depressive symptoms. Based on these indications of mental health problems and the fact that 11% of the overall deaths among football players from 2007 to 2013 resulted from suicide (Gouttebarge & Aoki, 2014), more research on

mental health in general and depression in particular for elite footballers seems warranted.

Depression, one of the most commonly diagnosed mental health problems, is defined as frequently experienced depressive moods, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (American Psychiatric Association, 2013). As a consequence, depression increases physical distress and health problems, ultimately impairing functional well-being and quality of life (Zhou, Zhu, Zhang, & Cai, 2013). It has been estimated that approximately 15% of the population worldwide is at risk of developing depressive symptoms (Vilhelmsson, 2013). Depressive symptoms are reported mostly among adults (Gouttebarge, Kerkhoffs, & Lambert, 2015c). The highest rate of depression (25–26%) has previously been found among younger adults aged 16–34 years (Gulliver, Griffiths, Mackinnon, Batterham, & Stanimirovic, 2015). While research on depression in the general public is extensive, research on depression in the sport context, however, is limited. A main research focus has been on sport's antidepressant function and how regular physical activity can reduce depressive symptoms, preventing the occurrence of depression (Babiss & Gangwich, 2009). In line with this research it has been assumed that because elite athletes are so physically active they are immune to depression. Recent studies (Gulliver et al., 2015; Hammond, Gialloreto, Kubas, & Davis, 2013; Rice et al., 2016) have, however, highlighted that elite athletes might be just as likely as non-athletes to experience depression, and that psychosocial benefits attributed to sport do not inherently occur through mere sport participation. Furthermore, there is a widely held opinion shared by athletes, coaches, and the general population that only mentally strong athletes can be successful (Hammond et al., 2013), and that the sports culture disapproves of weakness disclosure (Bauman, 2016). As a consequence, mental health problems remain hidden, and any responsibility for the condition is given solely to the individual. Therefore, athletes who suffer from mental health problems are considered to be individual cases that are quickly diagnosed away from official control and treated by external therapists (Wolanin, Gross, & Hong, 2015).

While strides have been made in the classification, assessment, and identification of depression, the cause of depression given its complexity is difficult to articulate and has not been adequately elucidated (Riso, Miyatake, & Thase, 2002). Depression usually results from a combination of recent (critical) events and other longer-term or personal factors, rather than one immediate issue or event (Richards, 2011). It is particularly important to examine which sources may contribute to depression among elite athletes as sources might be different from those of the general population. Wolanin et al. (2015), for example, emphasized that elite athletes' strenuous lifestyle, packed with sporting events and high expectations, increases the risk of stress and depression. A current review found injury, involuntary career termination, performance expectations, and possibly overtraining to be the most prominent predictors of depression among athletes (Rice et al., 2016). In football and many other sports, junior players are under the increased pressure to make it to the senior teams if they want to continue their career, hence the junior-senior transition has been identified as a phase that can increase the risk for developing mental health problems (Franck, Stambulova, & Ivarsson, 2016). Even if studies have identified environmental factors and events in elite sports that contribute to the development of depression, there is a noticeable gap when it comes to the systematic investigation of personality factors as possible contributors to depressive symptoms among elite athletes (Frank, Nixdorf, & Beckmann, 2015; Rice et al., 2016). In one of the few existing studies, ineffective coping strategies were identified as a factor related to depression in elite athletes (Nixdorf, Frank, & Beckmann, 2015). Furthermore, maladaptive perfectionism and pessimistic attributional style after failure were shown to be related to depression in a sample of young elite athletes (Nixdorf, Frank, & Beckmann, 2016). Most studies on mental health problems in the elite sport setting have solely investigated depression (Junge & Feddermann-Demont, 2016)

and since personality disorders have been found to be present with depressive symptoms in the general population (Riso et al., 2002), it seems warranted to further examine the relationship between personality factors and depression in elite sport.

A personality factor frequently investigated in relation to depression is perfectionism (Enns & Cox, 2005). Perfectionism is characterized by never settling for second best, constantly striving to improve, and exterminating even small errors, all of which are common characteristics of successful athletes (Flett & Hewitt, 2002). Over the last decade, research has revealed perfectionism as a predisposing factor of burnout (Hill & Curran, 2016; Madigan, Stoeber, & Passfield, 2015, 2016) and depression (Nixdorf et al., 2016) in athletes. Stoeber and Otto (2006) differentiate between perfectionistic strivings (PS) and concerns (PC). PS refers to an individual's striving for excellence and high standards of performance whereas PC relates to an individual's concerns about making mistakes, concerns about the discrepancy between one's standards and performance, and fears of negative evaluation and rejection by others if one fails to be perfect (Stoeber, 2011). Studies suggest that perfectionistic concerns are related to depressive symptoms (Hewitt & Flett, 1993; Sherry et al., 2012) whereas perfectionistic strivings are inconsistent predictors of depressive symptoms. Some research suggests perfectionistic strivings are vulnerability (Békés et al., 2015; Hewitt, Flett, & Ediger, 1996; Joiner & Schmidt, 1995) and other research that they are resiliency factors (Enns & Cox, 2005).

Previous studies investigating the relation between depression and perfectionism have neglected that perfectionism dimensions often lead to and are comorbid with other forms of emotional distress for example anxiety (Smith, Sherry, Rnic, Saklofske, & Enns, 2016). Anxiety is defined as an emotional response consisting of cognitive concerns and physiological arousal to a perceived threat. Anxiety is characterized by negative consequences such as nervousness, worry and apprehension (Rodis, 2013). Perfectionistic concerns have been especially associated with fear of failure in performance situations as well as fear of negative evaluation by others (Madigan et al., 2015).

Studies also show that anxiety and depression are correlated, can co-exist, and are both strongly related to a general distress factor (Cohen, Young, Gibb, Hankin, & Abela, 2014).

This study will investigate two forms of anxiety and their relation to both perfectionism and depression. The first form is competitive anxiety which is defined as a specific trait anxiety that regularly appears before or during competition (Smith, Smoll, Cumming, & Grossbard, 2006). The second one is social phobia which is sometimes also referred to as social anxiety. Social phobia is a chronic and debilitating psychiatric anxiety disorder characterized by fear of social evaluation, which can lead to avoidant behavior regarding social situations due to fear of embarrassment and rejection (Hamilton, Chen, Waugh, Joormann, & Gotlib, 2015).

The purpose of this cross-sectional study was to investigate perfectionism and anxiety's relation to depressive symptoms in Danish and Swedish male elite football players. Studies investigating the relation between depression and these personality factors in elite athletes are lacking. More specifically, we examined if competitive anxiety and social phobia would mediate the relationship between perfectionism and depression. It was assumed that high perfectionistic concerns would be associated with high competitive anxiety and high social phobia. We therefore also assumed that perfectionistic concerns via competitive anxiety and social phobia would predict levels of depression. Because the two dimensions of perfectionism have shown different, sometimes opposite relationships, the differentiation between PS and PC is of key importance when investigating the correlates and consequences of perfectionism (Madigan et al., 2015). Due to the fact that younger athletes are more affected by depression than older athletes (Gulliver et al., 2015) age will be included as a covariate. An additional purpose of this study was to examine the relationship between age and the study variables, and to investigate differences between elite junior and professional players.