Open access Original research

BMJ Open Sport & Exercise Medicine

# Help-seeking behaviours related to mental health symptoms in professional football

Kaizeen Confectioner,<sup>1</sup> Alan Currie,<sup>2,3</sup> Nicolle Gabana,<sup>4</sup> Nienke van Gerven,<sup>1</sup> Gino M M J Kerkhoffs,<sup>5,6,7</sup> Vincent Gouttebarge <sup>1,5,6,8</sup>

**To cite:** Confectioner K, Currie A, Gabana N, *et al.* Helpseeking behaviours related to mental health symptoms in professional football. *BMJ Open Sport & Exercise Medicine* 2021;**7**:e001070. doi:10.1136/ bmjsem-2021-001070

Accepted 10 May 2021

### **ABSTRACT**

**Objectives** The primary objective was to examine the attitudes of professional footballers towards help-seeking behaviours related to mental health symptoms and the impact of a mental health awareness video on these help-seeking behaviours. The secondary objective was to evaluate whether the mental health awareness video was feasible in professional football.

**Methods** A quasi-experimental study based on a one-group pretest post-test was conducted using a questionnaire. Attitude, help-seeking behaviours and confidence were measured with validated questionnaires, including the Attitudes Toward Seeking Professional Psychological Help-Short Form (ATSPPH-SF) and General Help-Seeking Questionnaire (GHSQ).

**Results** Sixty-five professional footballers (63% men; 37% women) were enrolled in the study. The mean ATSPPH-SF score was 18.1 at pretest and 19.4 at posttest (p=0.00). The mean GHSQ score was 47.6 at pretest and 48.9 at post-test (p=0.00). The level of confidence in helping someone experiencing mental health symptoms was 11.1 at pretest and 11.7 at post-test (p=0.00). All participants rated the mental health awareness video as relevant; 88% mentioned that it added value to raise awareness about mental health symptoms and disorders in professional football. Eighty-three per cent rated the design positively, 69% were positive about the duration of the video and 88% of participants reported an increase in their knowledge and understanding of mental health symptoms and disorders in professional football.

**Conclusion** The mental health awareness video led to a better attitude of professional footballers towards mental health. We recommend the mental health awareness video be implemented in professional football to disseminate essential information related to mental health symptoms in professional football.

Check for updates

© Author(s) (or their employer(s)) 2021. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BM.I.

For numbered affiliations see end of article.

### **Correspondence to**

Vincent Gouttebarge; v.gouttebarge@amsterdamumc. nl

### INTRODUCTION

Health in elite athletes seems to be considered mainly in terms of proper physical functioning. By contrast, mental health symptoms and disorders in elite athletes are less well recognised and often stigmatised. Mental health disorders are typically defined as conditions causing clinically significant distress or impairment, including a cluster

### What is already known?

- ➤ The 4-week prevalence of mental health symptoms among professional footballers ranges from 9% for adverse alcohol use to 38% for anxiety/depression, influencing negatively their football performance and quality of life.
- ▶ Using mental health literacy and educational strategies to address mental health symptoms in elite athletes offers the opportunity to enhance their help-seeking behaviours and well-being.
- A mental health awareness video was developed in order to disseminate essential information related to mental health symptoms in professional football.

### What are the new findings?

- Professional footballers were positive towards the relevance and added value of the mental health awareness video.
- ► The view of the mental health awareness video led to a significant increase in the attitude of help-seeking behaviours related to mental health symptoms and disorders among professional footballers after.
- ➤ The view of the mental health awareness video led to a significantly higher confidence level in helping someone experiencing mental health symptoms among professional footballers.
- Mental health literacy leads to better attitudes of professional footballers towards help-seeking behaviours related to mental health symptoms, which should be favourable to the work of their medical team

of symptoms that meet certain diagnostic criteria. In contrast, mental health symptoms may occur separately without a clinically significant pattern meeting specific diagnostic criteria. Moreover, mental health symptoms are more common and impair activities either in daily life, work or sport.

Among active and former elite athletes, studies show that the prevalence of mental health symptoms and disorders are substantial and similar to the prevalence in the general population.<sup>2</sup> In a study among professional

footballers, the 4-week prevalence of mental health symptoms ranged from 9% for adverse alcohol use to 38% for anxiety/depression and 12-month incidence from 12% for distress to 37% for anxiety/depression.<sup>2</sup> Moreover, a professional sports career is characterised by more than 640 distinct stressors that could induce mental health symptoms and disorders.<sup>1</sup> Additionally, the COVID-19 pandemic has been associated with increased symptoms of anxiety and depression among both male and female professional footballers.<sup>3</sup> Mental health symptoms can negatively influence the players' football performance and their quality of life.<sup>2</sup>

Yet, sports culture celebrates mental toughness and disapproves of the disclosure of weaknesses. Emotional and psychological problems remain hidden, and stigma hinders athletes from seeking timely and appropriate help. Some of the barriers experienced by elite athletes seeking treatment for mental health symptoms and disorders include: stigma, low mental health literacy, negative past experiences with mental health treatment-seeking, busy schedules and hypermasculinity.<sup>5</sup> Additional barriers relate to the attitude of the individual, which includes choosing to handle the problem by themselves and thinking the problem will just go away. Even with access to relevant information and advice, athletes may choose not to seek help. The disadvantages of doing so, such as loss of playing time and being perceived as weak, outweigh the benefits.4

Expert statements on mental health in elite sport have suggested using mental health literacy and educational strategies to address mental health symptoms in elite athletes as these offer the opportunity to enhance helpseeking behaviours and the well-being of the athlete.<sup>47</sup> With the above in mind and to raise awareness and positively influence attitudes of professional footballers, a mental health educational module was recently developed within which a mental health awareness video was developed. Before its implementation in professional football, a study was conducted with the primary objective of examining the attitudes of professional footballers towards help-seeking behaviours related to mental health symptoms and the impact of a mental health awareness video on these help-seeking behaviours. The study's secondary objective was to evaluate whether the mental health awareness video was feasible (in terms of relevance, added value and appropriateness) in professional football.

### METHODS Design

A quasi-experimental study based on a one-group pretest post-test was conducted through a questionnaire.

### **Participants and setting**

The participants for this study included both female and male professional footballers. Inclusion criteria were: (1) being a professional footballer; (2) ≥18 years and (3) ability to read and comprehend text in English. In the study, the

definition of a professional footballer was that they (1) train to improve football performance, (2) compete in the highest or second-highest national league, (3) report football training and competition as their major occupational activity, devoting several hours in all or most of the days to these activities, and exceeding the time allocated to other types of professional or leisure activities and (4) were a member of Football Players Worldwide (FIFPRO), the only global representative for professional football players. No exclusion criteria were formulated. FIFPRO's administration team assisted in recruiting participants and reached a convenience sample of 65 professional footballers.

#### **Outcome measures**

Attitudes toward help-seeking behaviours related to mental health symptoms and disorders were assessed with the Attitudes Toward Seeking Professional Psychological Help-Short Form (ATSPPH-SF) and the General Help-Seeking Questionnaire (GHSQ). 89 The ATSPPH-SF relies on 10 items scored on a 4-point scale (from 0 'strongly disagree' to 3 'strongly agree') to explore attitudes toward seeking psychological help from a professional (eg, 'I would want to get psychological help if I were worried or upset for a long period of time').8 Based on the score of each item (reversed score for negatively worded items), a total score ranging from 0 to 30 was calculated. Higher sum scores indicate more positive attitudes to professional psychological help-seeking.8 The ATSPPH-SF has been validated in English, showing adequate psychometric properties (internal consistency: 0.72–0.85; test–retest reliability: 0.80).8 10 11

The GHSQ consists of 11 items exploring intentions to seek help from several sources.<sup>9</sup> The GHSQ was slightly altered to include four informal source items (eg, 'If you were having a personal or emotional problem, how likely is it that you would seek help from a friend?'), four formal source items (eg, 'If you were having a personal or emotional problem, how likely is it that you would seek help from a doctor/GP?'), two football source items (eg, 'If you were having a personal or emotional problem, how likely is it that you would seek help from a club staff member?') and an item for no one (eg, 'I would not seek help from anyone'; reversed score). Each item was scored on a 7-point scale (from 1 'extremely unlikely' to 7 'extremely likely'). A higher score indicates higher intentions to seek help from that particular source. The GHSQ has been validated in English, showing adequate psychometric properties (internal consistency: 0.67–0.90; test–retest reliability: 0.86). 12 13 Both the ATSPPH-SF and the GHSQ have been widely used in research settings across different populations as well as among elite athletes. 14

Confidence in helping someone experiencing mental health symptoms was assessed using four items developed by Sebbens *et al.*<sup>15</sup> Participants were asked, 'How confident are you in (1) recognising someone with a mental health problem; (2) reaching out to someone



with a mental health problem; (3) referring someone with a mental health problem to a professional and (4) supporting someone with a mental health problem'. Based on each item scored on a 5-point scale (from 0 'not at all' to 4 'very'), a sum score ranging from 0 to 16 was calculated, with higher sum scores indicating greater confidence. 15

The feasibility of the mental health awareness video was operationalised in its degree of relevance, added value and appropriateness. Relevance was explored through a single statement, namely 'The mental health awareness video is relevant in order to raise awareness about mental health problems in professional football'. Added value was explored through two statements, namely 'The mental health awareness video is of added value in order to raise awareness about mental health problems in professional football' and 'The mental health awareness video has increased my own knowledge and understanding of mental health problems in professional football'. Appropriateness was explored through two statements, namely 'The mental health awareness video is presented in an appropriated form (animation and interviews with players) for the context of professional football' and 'The duration (around 5 min) of the mental health awareness video is appropriated for the context of professional football'. All five statements were measured on a 5-point scale (from 1 'strongly disagree' to 5 'strongly agree').

### Mental health awareness video

Similar to previous interventions compiled for professional footballers, and according to a structured and systematic process, the mental health awareness video was developed following four steps: (1) needs assessment; (2) formulation of objectives;
(3) selection of content;
(4) development. The first step was to explore the needs of professional footballers towards an education module on mental health. Understanding these needs was paramount to developing a video that would benefit the target users of the video. The results of a needs assessment (questionnaires and interviews) conducted in professional football and the recent available scientific literature were discussed during an interdisciplinary meeting held in March 2020 (Hoofddorp, The Netherlands). The meeting involved nine participants from different backgrounds and expertise (eg, psychologists, psychiatrists, former professional footballers, communication expert, player association representatives). During the meeting, the principal objective for the mental health awareness video was formulated, namely, to disseminate essential information related to mental health symptoms in professional football (eg, definition, recognition, potential causes, available support). Proposed content was discussed, and participants agreed to a mental health awareness video that should be based on (1) interviews with professional footballers and (2) animated video features focusing on the essential information (eg, definition, stressors). During the months following the

interdisciplinary meeting, all available information was synthesised and discussed with a creative partner selected for the development of the video, interviews with players were recorded, and a storyboard for the animated video features was compiled. Finally, the mental health awareness video lasting around 6 min was created. Screenshots of the video are presented in figure 1.

### **Procedures**

Two English electronic questionnaires (one pretest and one post-test) were set up (in Typeform Professional), including all outcome measures related to attitudes and confidence. The outcome measures related to feasibility were embedded only in the post-test questionnaire. The following descriptive variables were added to the pretest questionnaire: age, gender, height, weight, duration of a professional football career, number of matches played, level of play and level of education. Each questionnaire took approximately 10 min to complete. Information about the study was sent via email to potential participants by FIFPRO. Participants interested in the study gave their informed consent (electronically) and received the pretest questionnaire, which they were asked to complete within 1 week. After completing the pretest questionnaire, participants were asked to view the mental health awareness video within 1 week. Finally, participants received the post-test questionnaire, which they were also asked to complete within 1 week. The responses to both questionnaires were anonymised for reasons of privacy and confidentiality. Once completed, the electronic questionnaires were saved automatically on a secured electronic server that only the principal researcher could access. All players participated voluntarily in the study and did not receive any reward for their participation. Data were collected in October and November 2020.

### Statistical analyses

The statistical software IBM SPSS V.26.0 for Apple Mac was used for data analysis. Analyses were conducted for the whole group of participants and separately for female and male professional footballers. Descriptive analyses (mean, SD, frequency, range) were performed with all variables from the pretest and post-test questionnaires. Variation in attitude and confidence was explored by comparing the pretest and post-test scores with the non-parametric Wilcoxon signed-rank test (p<0.05).<sup>19</sup>

### **Patient and public involvement**

Players' representatives were involved in developing the mental health awareness video and designing and conducting the study.

### RESULTS Participants

A total of 65 professional footballers (63% men; 37% women) gave their electronic informed consent and were enrolled in the study. Their mean age, height and weight was 28 years (SD=5), 172 cm (SD=10) and 71 kg



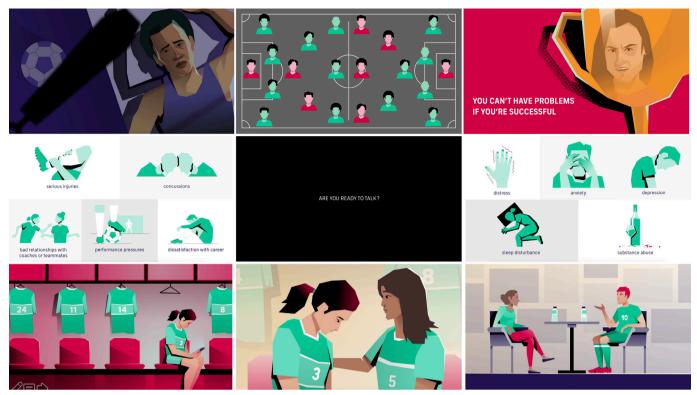


Figure 1 The mental health awareness video for professional footballers.

(SD=13). The mean duration of participants professional footballer careers was 10 years (SD=5), with a mean number of 211 matches, mostly on the highest national league (92%). All characteristics of the participants are presented in table 1.

## Attitudes towards help-seeking behaviours and impact of the mental health awareness video

The mean ATSPPH-SF score of the participants was 18.1 (SD=4.3) at pretest and 19.4 (SD=3.8) at post-test. The mean GHSQ score of the participants was 47.6 (SD=12.8) at pretest and 48.9 (SD=11.7) at post-test. A Wilcoxon signed-rank test indicated that for both measures of attitudes toward help-seeking behaviours, post-test ranks were statistically significantly higher than pretest ranks (ATSPPH-SF: Z=622; p=0.00; GHSQ: Z=875; p=0.00). The level of confidence in helping someone experiencing mental health symptoms was 11.1 (SD=3.2) at pretest and 11.7 (SD=3.0) at post-test. A Wilcoxon signed-rank test indicated that post-test ranks were statistically significantly higher than pretest ranks (Z=607; p=0.00).

### Feasibility of the mental health awareness video

All participants rated the mental health awareness video as relevant to professional footballers, and 88% mentioned that it had added value to raise awareness about mental health symptoms and disorders in professional football. The majority of the participants were positive about the design (83%) and duration (69%) of the mental health awareness video for professional football. Eighty-eight per cent of participants reported that the mental health awareness video had increased their knowledge and

understanding of mental health symptoms and disorders in professional football.

### DISCUSSION

Our quasi-experimental study (pretest post-test design) among 65 professional footballers revealed that their attitude of help-seeking behaviours increased after viewing the mental health awareness video. All participants agreed on the relevance of the mental health awareness video, and a large majority was positive about its added value. The appropriateness of the design and duration of the mental health awareness video showed positive results. It helped to increase knowledge on mental health for the large majority of participants.

### Attitude, help-seeking behaviours and confidence

The ATSPPH-SF and GHSQ scores are in line with previous studies conducted in the sport context. One similar study aimed at testing the feasibility and efficacy of three internet-based interventions designed to increase mental health help-seeking attitudes, intentions and behaviour in young elite athletes (N=59) compared with a control condition. The interventions of this study consisted of mental health literacy and destignatisation condition, a feedback condition providing symptom levels, and a minimal content condition comprising a list of help-seeking resources, compared with a control condition where there were no interventions. The authors found that none of the interventions yielded a significant increase in help-seeking attitudes, intentions or behaviour relative to control. However, postintervention,



**Table 1** Mental health awareness module: characteristics, attitude, confidence and view of professional footballers (N=65)

(14=05)		
	Characterist	ics
Gender (male /female; %)	63/37	
Age (in years; mean±SD)	28±5	
Height (in cm; mean±SD)	172±10	
Weight (in kg; mean±SD)	71±13	
Football career (in years; mean±SD)	10±5	
Number of matches (mean±SD)	$210 \pm 9$	
Level of education (%)		
No school completed	6	
Nursery/elementary school	0	
High school	49	
Vocational/technical school	2	
College, university or equivalent	43	
	Pretest	Post-test
Attitude towards help seeking (0–30; mean±SD)	18.1±4.3	19.4±3.8
	18.1±4.3	
(0–30; mean±SD) Help-seeking intentions (11–77;	18.1±4.3	19.4±3.8
(0–30; mean±SD) Help-seeking intentions (11–77; mean±SD)	18.1±4.3 47.6±12.8	19.4±3.8 48.9±11.7 11.7±3.0
(0–30; mean±SD) Help-seeking intentions (11–77; mean±SD)	18.1±4.3 47.6±12.8 11.1±3.2 View of profe	19.4±3.8 48.9±11.7 11.7±3.0
(0–30; mean±SD) Help-seeking intentions (11–77; mean±SD) Confidence (0–16; mean±SD)	18.1±4.3 47.6±12.8 11.1±3.2 View of profe footballers	19.4±3.8 48.9±11.7 11.7±3.0
(0–30; mean±SD) Help-seeking intentions (11–77; mean±SD) Confidence (0–16; mean±SD)  Module is relevant (%)	18.1±4.3 47.6±12.8 11.1±3.2 View of profe footballers	19.4±3.8 48.9±11.7 11.7±3.0
(0–30; mean±SD)  Help-seeking intentions (11–77; mean±SD)  Confidence (0–16; mean±SD)  Module is relevant (%)  Module has added value (%)  Appropriated design of the	18.1±4.3 47.6±12.8 11.1±3.2 View of profe footballers 100 88	19.4±3.8 48.9±11.7 11.7±3.0

there was a trend toward a greater increase in help-seeking behaviour from formal sources for the mental health literacy/destigmatisation condition than control (p=0.06). This intervention was also associated with increased depression literacy (p=0.003, p=0.005) and anxiety literacy (p=0.002, p=0.001) relative to control at postintervention and 3-month follow-up, respectively, and a reduction in depression stigma relative to control at postintervention (p=0.01, p=0.12) and anxiety stigma at 3-month follow-up (p=0.18, p=0.02).  $^{14}$ 

A recent systematic review based on five included studies (1239 participants in total) focused on the effectiveness of Mental Health Literacy training programmes in improving mental health knowledge and help-seeking and reducing stigma among athletes. Overall, either small or medium effects were found for mental health knowledge, stigma reduction, help-seeking attitudes, and intentions for postintervention and follow-up

intervention. In contrast, a null effect was found in help-seeking behaviours for both postintervention and follow-up intervention. Therefore, the authors concluded that Mental Health Literacy interventions could enhance help-seeking attitudes and intentions and mental health knowledge and reduce stigma but do not increase help-seeking behaviours. Another study suggested that in addition to sport-specific interventions for athletes, a better understanding of specific needs of the athlete and availability of good treatment may create a follow-on effect of increased help-seeking behaviour.

### Difference in pretest and post-test

In our study, professional footballers showed an increased help-seeking attitude and intentions and an increased confidence level in helping someone experiencing mental health symptoms after viewing the mental health awareness video. While these differences between pretest and post-test were statistically significant, it is worth mentioning that the increase in post-test scores was limited: +1.3 for attitude towards help-seeking (scale from 0 to 30), +1.3 for help-seeking intentions (scale from 11 to 77) and +0.6 for confidence level (scale from 0 to 16). The authors believe that these differences do not seem meaningful in practice.

### Implementation of the mental health awareness video

Given the positive feedback by the study participants in terms of relevance and added value, the awareness video should be implemented in professional football to educate and empower the attitude of footballers and relevant staff members about mental health. Therefore, several strategies could be applied. One of them includes club visits carried out by the professional footballers' unions in their respective country. During this visit, players can be informed and educated about mental health. It could also be made mandatory for players to be educated on such a topic during their preseason period, where time can be dedicated to such relevant issues. For that, a top-down approach (empowerment from clubs and managers) might be needed in order to help hasten a change in attitudes towards mental health in football. Another strategy, given the current COVID-19 situation, could be the use of webinars held for players.

### **Beyond mental health awareness**

Mental health is an integral part of a player's well-being. For sportspeople exposed to so many stressors, it is important to have an environment where mental health symptoms and disorders are not stigmatised and openly discussed. Therefore, a mental health awareness video is an integral step towards a positive outcome but should be one of many steps that must be taken. Mental health assessment and management in elite athletes should be as commonplace and accessible as their other medical care. All stakeholders, including players, unions, clubs, coaches, administrations, owners and fans, should be involved and empowered with relevant information to recognise the importance of creating



an environment that supports mental health wellness and mental health help-seeking of professional athletes. For both the assessment and recognition of mental health symptoms and disorders in elite sports, the IOC have recently developed the Sport Mental Health Assessment Tool 1 and Sport Mental Health Recognition Tool 1. Both tools enable mental health symptoms and disorders in elite athletes to be recognised earlier and facilitate the timely referral of those athletes towards appropriate support and treatment.

Preventive strategies for mental health symptoms and disorders are also needed, and mental health screening should be mandated to ensure that affected athletes receive timely treatment. Athletes experiencing adverse life events or injuries should be given extra support. A network of professionals who can support the players should also be in place. Mental toughness should not be equated with lack of experiencing mental health symptoms and disorders, but instead, with agreeability towards mental health help-seeking. Working with immediate caregivers of the footballer, such as a partner, parents or siblings, could also lead to positive mental health outcomes.

### Limitations of the study

The sample population of the study was small and had an unequal percentage of male and female participants. Better diversity in gender might have had added value, as well as information on race or ethnicity of the participants. Participation and responses may have been impacted by the current climate surrounding the COVID-19. The unique challenges faced by the participants during this time could have influenced the players understanding of mental health concerns and help-seeking as mental health has been given importance during the pandemic. In addition, the study lacked a control group where no interventions were provided, which would have given a better understanding of the changes in attitude and help-seeking behaviours post interventions. Moreover, differences in mental health services, the level of stigma between participants of different countries, and differences in cultures were not considered.

### CONCLUSION

The mental health awareness video led to a better attitude of professional footballers towards mental health. Players were positive about its relevance and added value. We recommend the mental health awareness video be implemented in professional football to disseminate essential information related to mental health symptoms in professional football.

### **Author affiliations**

<sup>1</sup>Football Players Worldwide (FIFPRO), Hoofddorp, The Netherlands

<sup>2</sup>Regional Affective Disorders Service, Cumbria, Northumberland Tyne and Wear NHS Foundation Trust, Newcastle, UK

<sup>3</sup>Department of Sport and Exercise Sciences, The University of Sunderland, Sunderland, UK

<sup>4</sup>Athletic Department, University of Massachusetts Amherst, Amherst, Massachusetts, USA

<sup>5</sup>Amsterdam UMC, University of Amsterdam, Department of Orthopaedic Surgery, Amsterdam Movement Sciences, Meibergdreef 9, Amsterdam, Netherlands <sup>6</sup>Amsterdam Collaboration on Health & Safety in Sports (ACHSS), Amsterdam UMC IOC Research Center, Amsterdam, Netherlands

<sup>7</sup>Academic Center for Evidence-based Sports Medicine (ACES), Amsterdam, Netherlands

<sup>8</sup>Section Sports Medicine, University of Pretoria, Pretoria, South Africa

Twitter Vincent Gouttebarge @VGouttebarge

**Acknowledgements** We greatly thank all professional footballers for their participation in the study.

**Contributors** All authors were involved in the design of the study and data interpretation. VG was responsible for data collection and the data analysis. KC drafted the manuscript, with critical review provided by all authors. All authors read and approved the final version of the manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not required.

Ethics approval Ethical approval for the study was provided by the Medical Ethics Review Committee of the Amsterdam University Medical Centres, location Academic Medical Centre (W20\_445 # 20.491; Amsterdam, The Netherlands). This study was conducted in accordance with the Declaration of Helsinki and the Dutch Personal Data Protection Act.

Provenance and peer review Not commissioned; externally peer reviewed.

**Data availability statement** No data are available. All data relevant to the study are included in the article or uploaded as supplemental information.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

### ORCID ID

Vincent Gouttebarge http://orcid.org/0000-0002-0126-4177

### REFERENCES

- 1 Reardon CL, Hainline B, Aron CM, et al. Mental health in elite athletes: international Olympic Committee consensus statement (2019). Br J Sports Med 2019;53:667–99.
- 2 Gouttebarge V, Castaldelli-Maia JM, Gorczynski P, et al. Occurrence of mental health symptoms and disorders in current and former elite athletes: a systematic review and meta-analysis. Br J Sports Med 2019:53:700–6.
- 3 Gouttebarge V, Ahmad I, Mountjoy M, et al. Anxiety and depressive symptoms during the COVID-19 emergency period: a comparative cross-sectional study in professional football. Clin J Sport Med 2020. doi:10.1097/JSM.000000000000886. [Epub ahead of print: 15 Sep 2020].
- 4 Breslin G, Shannon S, Haughey T, et al. A systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches and officials. Syst Rev 2017;6:177.
- 5 Castaldelli-Maia JM, Gallinaro JGdeME, Falcão RS, et al. Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. Br J Sports Med 2019;53:707–21.
- 6 Picco L, Abdin E, Chong SA, et al. Attitudes toward seeking professional psychological help: factor structure and sociodemographic predictors. Front Psychol 2016;7:547.
- 7 Gorczynski P, Currie A, Gibson K. Developing mental health literacy and cultural competence in elite sport. J Appl Sport Psychol 2020.
- 8 Fischer EH, Farina A. Attitudes toward seeking professional psychological help: a shortened form and considerations for research. J Coll Stud Dev 1995;36:368–73.
- 9 Wilson C, Deane F, Ciarrochi J. Measuring help-seeking intentions: properties of the general help-seeking questionnaire. *Can J Couns* 2005;39:15–28.



- 10 Elhai JD, Schweinle W, Anderson SM. Reliability and validity of the attitudes toward seeking professional psychological help Scale-Short form. *Psychiatry Res* 2008;159:320–9.
- 11 Hackler AH, Vogel DL, Wade NG. Attitudes toward seeking professional help for an eating disorder: the role of stigma and anticipated outcomes. J Couns Dev 2010;88:424–31.
- 12 Deane FP, Wilson CJ, Ciarrochi J. Suicidal ideation and helpnegation: not just hopelessness or prior help. *J Clin Psychol* 2001;57:901–14.
- 13 Rickwood D, Cavanagh S, Curtis L, et al. Educating Young People about Mental Health and Mental Illness: Evaluating a School - Based Programme. Int J Ment Health Promot 2004;6:23–32.
- 14 Gulliver A, Griffiths KM, Christensen H, et al. Internet-based interventions to promote mental health help-seeking in elite athletes: an exploratory randomized controlled trial. J Med Internet Res 2012;14:e69.
- 15 Sebbens J, Hassmén P, Crisp D, et al. Mental health in sport (MHS): improving the early intervention knowledge and confidence of elite sport staff. Front Psychol 2016;7:911.

- 16 Verhagen E, Voogt N, Bruinsma A, et al. A knowledge transfer scheme to bridge the gap between science and practice: an integration of existing research frameworks into a tool for practice. Br J Sports Med 2014;48:698–701.
- 17 Gouttebarge V, Goedhart E, Kerkhoffs G. Empowering the health of retired professional footballers: the systematic development of an after career consultation and its feasibility. BMJ Open Sport Exerc Med 2018;4:e000466.
- 18 Gouttebarge V, Cowie C, Goedhart E, et al. Educational concussion module for professional footballers: from systematic development to feasibility and effect. BMJ Open Sport Exerc Med 2019;5:e000490.
- 19 Woodward M. Epidemiology: study design and data analysis. Boca Raton: CRC Press, 2014.
- 20 Bu D, Chung P-K, Zhang C-Q, et al. Mental health literacy intervention on help-seeking in athletes: a systematic review. Int J Environ Res Public Health 2020;17:7263.
- 21 Walton CC, Purcell R, Rice S. Addressing mental health in elite athletes as a vehicle for early detection and intervention in the general community. *Early Interv Psychiatry* 2019;13:1530–2.