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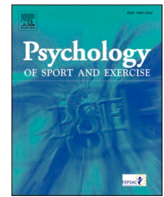

Review

Athlete mental health help-seeking: A systematic review and meta-analysis of rates, barriers and facilitators

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ABSTRACT

Athletes are vulnerable to a range of mental health symptoms, in part due to stressors within the sport environment. An early intervention framework suggests the benefits of routine screening and referral for mental health, however, greater understanding around athlete help-seeking is needed to support referral uptake. This review examined rates of formal help-seeking behaviour as well as barriers and facilitators to help-seeking in sport settings. Relevant studies were retrieved from SportDiscus, PubMed and PsycInfo, with unpublished studies identified through contacting authors. Help-seeking rates were meta-analysed and barriers and facilitators were meta-synthesised. Twenty-two studies were included. Help-seeking rates were reported in 11 studies (N = 3415) and the pooled proportion of help-seeking was 22.4 % (95 % CI 16.2–30.2, I^2 = 95.7 %). Barriers were reported in 13 studies and facilitators in six, highlighting a range of sporting-specific factors, such as stigma in relation to athlete identity and sport culture, fear of deselection, and concerns around confidentiality in sport settings, in addition to lack of awareness, low mental health literacy, and negative attitudes to services. Normalising experiences of mental health in sport settings, including through role models, was a key facilitator to help-seeking. Results provide implications for sport organisations to promote help-seeking and athlete mental health, such as through the use of role models, ensuring clarity around confidentiality, stigma reduction interventions, and fostering team cultures that promote mental health. Findings also support the value of sport staff in facilitating help-seeking, and organisational culture changes to foster wellbeing.

Elite athletes encounter a range of sporting-related stressors that can detrimentally impact mental health (Reardon et al., 2019). Prevalence studies show that athletes experience disorders at rates that are at least comparable to the general population (e.g., Gouttebarge et al., 2017; Kilic et al., 2017; Rice et al., 2016). In order to best support athletes and promote mental health, an early intervention framework for elite sport settings has been proposed (Purcell, Gwyther, & Rice, 2019). This framework recognises the broader ecological system in which athletes are located, consisting of the athlete, the microsystem (i.e., parents, friends, coaches, sports staff), the exo-system (i.e., the individual sport setting), and the macrosystem (i.e. national and international sporting bodies, media, and the public). The framework proposes a range of strategies and changes in sport settings to promote wellbeing and foster a culture that values athlete mental health. The proposed framework focuses on prevention and early identification of at-risk or symptomatic athletes, which is partly achieved through a) upskilling sport staff to act as 'navigators' to better identify and respond to mental health symptoms, and b) through routine mental health screening occurring alongside physical health assessment. Following identification of at-risk athletes, the model proposes subsequent referral to professional mental health support, provided either within sport settings or by specialist services where needed. However, experiences from other settings have indicated that routine mental health screening and referral do not necessarily translate into service uptake (e.g., Coventry et al., 2015; Tully, Baumeister, Bennetts, Rice, & Baker, 2016; Xue, Cheng, Xu, Jin, & Gong, 2020) and that a range of barriers inhibit help-seeking post referral (Collopy, Cosh, & Tully, 2021). Thus, promoting athlete help-seeking to utilise referrals remains necessary to ensure the success

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of the early intervention framework.

Mental health help-seeking is understood as an adaptive process to cope with mental health concerns through gaining outside assistance (Rickwood & Thomas, 2012). Sources of help-seeking commonly include self-help, informal (e.g., friends, family), semi-formal (e.g., help-line, local support group, internet searches) and formal, also referred to as professional, help. Formal help-seeking is from professionals who have a recognised role and appropriate training in providing help and advice, such as mental health and health professionals (Rickwood, Deane, Wilson, & Ciarrochi, 2005) and commonly refers to general practitioners, counsellors, psychologists and psychiatrists. Mental health help-seeking is typically investigated through exploring either an individual's a) attitudes towards help-seeking, b) intentions (i.e. the possibility of motivation) to seek help should they experience mental health difficulties, or c) through assessment of past or current help-seeking behaviours (i.e. has the individual accessed supports) (Rickwood & Thomas, 2012; Özparlak, Karakaya, & Özer, 2023). Specifically, help-seeking behaviour can be defined as a problem focused, planned behaviour, involving interpersonal interaction with a selected health-care professional (Cornally & McCarthy, 2011). While intentions and attitudes are often the focus of help-seeking research, help-seeking literature has shown only weak links between intentions and attitudes with actual help-seeking behaviour (Rickwood, Thomas, & Bradford, 2012), highlighting the importance of research that focuses on help-seeking behaviour itself.

Formal help-seeking behaviour remains low amongst the general population with at least half to three-quarters of adults with a mental health disorder across a range of nations not accessing professional support (e.g., Australian Bureau of Statistics, 2021; Lubian et al., 2016; Wittchen et al., 2011). Help-seeking may be even lower amongst athlete populations than the general population, with athletes reporting poorer attitudes to help-seeking than non-athletes (Edwards, Froehle, & Fagan, 2021; Watson, 2005), and student-athletes utilising mental health supports less than non-athletes (Kilcullen, Scofield, Cummins, & Carr, 2022). Athletes commonly deny their mental health symptoms (Castaldelli-Maia et al., 2019) and are reluctant to disclose mental health due to fears about reactions of peers (Reardon et al., 2019) or being perceived as weak (Souter, Lewis, & Serrant, 2018). Fears around losing playing time and scholarship eligibility are also barriers to mental health disclosure (Williams et al., 2006), where vignette research suggests that stigma may be relevant in athlete selection and pay (Merz et al., 2020). Further, mental health literacy is typically low within sport settings (Gorczynski et al., 2019). Mental health literacy refers to knowledge and beliefs about psychological disorders, including knowledge that guides detection, and management, as well as knowledge of how to seek mental health information or help (Jorm, 2000). Due to low mental health literacy in sport settings, disorders often go undetected (Edwards, Traylor, & Froehle, 2022; Schinke et al., 2022) or symptoms might be viewed as conducive to performance and are thus reinforced or left unaddressed (Schinke et al., 2022). Consequently, athletes might be less likely to engage in help-seeking for mental health and may experience unique barriers to help-seeking behaviour. Yet, the extent to which athletes utilise professional mental health support remains uncertain and reported help-seeking rates vary (e.g., Drew & Matthews, 2019; Gulliver, Griffiths, Mackinnon, Batterham, & Stanimirovic, 2015).

It is, therefore, important to quantify help-seeking behaviour amongst athletes, and synthesise current understanding of sport-specific barriers and facilitators that might impact athlete help-seeking behaviour. Stigma and low mental health literacy were associated with low help-seeking intentions and poorer attitudes to help-seeking in a recent review (Castaldelli-Maia et al., 2019). This review also highlighted a range of cultural factors, such as acceptance of women as athletes, that were associated with mental health outcomes and help-seeking attitudes. A review of US collegiate-athletes showed that service utilisation was impacted by gender, stigma, peer norms and coaches (Moreland, Coxe, & Yang, 2018). To date, however, reviews have included both current and former athletes, yet help-seeking rates vary into retirement (Prinz, Dvořák, & Junge, 2016). Further, stigma around mental health and accessing help may also differ into retirement. Thus, there is a need to focus on help-seeking during athletic careers. Current reviews have largely focused on correlates of help-seeking attitudes and intentions and, to the best of our knowledge, no extant reviews have quantified or reported rates of help-seeking behaviours. Identifying rates of behaviour is necessary in order to understand the extent to which help-seeking interventions may be needed as a part of supporting athlete mental health to enhance the success of frameworks that aim to promote wellbeing. There is also a recent burgeoning in literature around mental health in elite sport in the past few years (Ekelund, Holmström, & Stenling, 2022; Lundqvist & Andersson, 2021; Schinke et al., 2022), thus, it is timely to provide an updated review including recent relevant research related to mental health help-seeking behaviour amongst athletes. Bringing together research exploring help-seeking of current elite athletes, including rates, barriers, and facilitators of help-seeking behaviour, can help to guide and inform organisational settings in successful implementation of proposed mental health frameworks (Purcell et al., 2019). The current review will a) explore rates of formal/professional help-seeking behaviour for athletes, b) examine barriers to athletes seeking help for mental health from a mental health professional, and c) examine facilitators to mental health service utilisation amongst athletes.

1. Method

The review was conducted in line with PRISMA guidelines (Page et al., 2020) (see supplementary materials for PRISMA checklist) and consistent with the process for systematic reviews in sport and exercise (Gunnell, Belcourt, Tomasone, & Weeks, 2022). The review was registered with PROSPERO (CRD42022341981).

1.1. Search strategy

Electronic databases were searched from database inception on January 1, 2023 (PubMed, PsycINFO, and SportDiscuss) with no time restraints. A search string was developed in consultation with a research librarian and explored terms related to elite or collegiate or professional sport or athletes and mental health or help-seeking or psychology or counselling (see supplementary material for full search string). Authors of eligible studies were contacted for any additional publications or unpublished data.

1.2. Eligibility criteria

Eligible studies presented original quantitative or qualitative data (including mixed-method, cross-sectional, longitudinal, retrospective audit or prospective designs) from any date range. Ineligible articles were narrative or quantitative reviews, position statements, letters/editorials, or published in languages other than English (see supplementary materials for table outlining inclusion/exclusion criteria).

Population: Studies were included where they reported results for current para and non-para athletes of any age in elite sport, consistent with international and/or national competitive level and professionalism definitions of elite (see Swann, Moran, & Piggott, 2015). Thus, included samples were those with international, national, collegiate, or professional athletes. Articles that reported solely on retired or non-athlete populations or where a current athlete sub-group was not specified were ineligible.

Interest: Assessment of formal help-seeking behaviour from a mental health professional and/or reporting what athletes describe as barriers and/or facilitators related to formal help-seeking.

Context: Current athletes from any elite sport setting.

Outcomes: formal help-seeking rates and/or barriers and/or facilitators to help-seeking. Studies were eligible where they assessed a)

formal help-seeking behaviour (i.e., accessing help from a mental health professional, see Rickwood & Thomas, 2012) for any mental health reason or disorder or b) barriers and/or facilitators to help-seeking. Ineligible outcomes were informal or semi-formal help-seeking (such as seeking help from friends or family members, religious figures in the community, those who were not mental health professionals), help-seeking for athletic performance rather than mental health, and help-seeking attitudes or intentions or stigma. Intervention studies promoting mental health literacy or reducing stigma (e.g. psychoeducation) were also ineligible.

1.3. Selection process

Screening was manually conducted independently by two raters (1st and 2nd authors). Both authors screened titles and abstracts using Covidence and disagreements were resolved by discussion. Following title and abstract review, both raters screened the full texts of remaining articles to assess eligibility for inclusion in the review, with disagreements again resolved by discussion.

1.4. Data collection process and data items

Data extraction was completed by one author (1st author) using a standard data extraction template. Data extraction accuracy was verified by one other rater (third author). Data pertaining to year of publication, country of participants, sample size, sample characteristics such as sporting level and setting, type of sport(s), study design, method of data analysis and epistemological position (qualitative studies), and assessment of help-seeking were extracted. Where available, data outlining the types of barriers and facilitators were summarised by key themes/codes reported in the respective studies, which were then synthesised in the results. Data relating to proportion of the sample seeking mental health support (n/N) were extracted.

1.5. Critical appraisal

Quality assessment criteria have remained contested in reviews of qualitative research (Sandelowski, 2012). In line with Tod, Booth, and Smith (2022), quality assessment of all included studies was performed to assess strengths and weaknesses, and guide conclusions. The Joanna Briggs Institute (JBI) tools (checklist for prevalence data, checklist for cross-sectional studies, checklist for qualitative studies) were used to assess each study, with appropriate tools used for each study design (Lockwood, Munn, & Porritt, 2015; Moola et al., 2020; Munn, Moola, Lisy, Riitano, & Tufanaru, 2015). The JBI tools assess studies against a list of criteria relevant to the design. An overall quality score is not generated, which overcomes concerns related to reliance on scores and comparability of scores between studies (Tod et al., 2022). Critical appraisal for each study was undertaken by one reviewer (1st author) and verified by one of two additional raters (2nd and 3rd authors).

1.6. Effect measures and data

Help-seeking data were pooled together using Comprehensive Meta-Analysis Version 2 (Borenstein, Hedges, Higgins, & Rothstein, 2013). Random-effects models were specified utilising the inverse-variance method specified by DerSimonian and Laird on the assumption of high statistical and methodological heterogeneity between studies. Heterogeneity was evaluated using the I^2 statistic and classified according to the Cochrane guidelines (Deeks, Higgins, & Altman, 2022). Heterogeneity between studies was further explored with pre-specified meta-regression for continuous covariates when $k \geq 10$ per covariate and sub-group analyses pursued for categorical variables when $k \geq 2$ per sub-group. The meta-regression shows the 1-unit change in proportion of help-seeking (β slope) per 5-unit change in mean age and percentage of female participants in the study samples. The sub-group analyses test for variability in effect from the different subgroups (Deeks et al., 2022). The presence of possible reporting bias was tested by inspection of the funnel plot and trim-and-fill method reported by Egger, Davey Smith, Schneider, and Minder (1997).

Barriers and facilitators data were predominantly qualitative. Two studies included quantitative results, and these were transformed into qualitative format (Frantzen & Fetters, 2016) by utilising the labels of those barriers cited as most common. Data were then subject to meta-synthesis, with a focus on interpreting findings and patterns across all of the included results (Lachal, Revah-Levy, Orri, & Moro, 2017; Sandelowski, 2012). That is, patterns across the data were identified and relevant results were grouped together into related categories and subcategories. Thus, predefined definitions of terms were not applied, rather, results of studies were collated and are then presented in line with identified categories.

2. Results

The search retrieved 3928 articles. Following removal of duplicates and title and abstract review, 55 articles were subject to full text review and 35 were excluded (see Figure 1). After contacting authors of eligible studies, two additional unpublished studies were included, resulting in a total of 22 studies included in the review.

2.1. Summary of included studies

Of included studies, 11 focused on student-athletes, with the remainder reporting on athletes that were competing at international level ($k = 6$), national league level ($k = 3$), professional junior squad level ($k = 1$), and elite athletes with level of competition not specified ($k = 1$). Included studies were predominantly conducted in three regions - North America ($k = 10$), Europe ($k = 8$), or Australia ($k = 3$) - with one study including athletes from 56 countries (Table 1). Two studies conducted in the USA had samples of racial-ethnic minorities (Ballesteros & Tran, 2020; Harris & Maher, 2022). Most studies included athletes from a range of team and individual sports, while seven studies reported on athletes from one sport only. All studies reported on athlete sex rather than gender. Study quality varied (see Tables 2 and 3).

2.2. Help-seeking rates

Eleven studies reported help-seeking rates, all of which were cross-sectional in design using self-report surveys to quantify mental health help-seeking (Ballesteros & Tran, 2020; Bird, Chow, Meir, & Freeman, 2018; Drew & Matthews, 2019; Giovannetti, Robertson, Colquhoun, & Malachowski, 2019; Gulliver et al., 2015; Junge & Prinz, 2019; Kola-Palmer, Lewis, Rodriguez, & Kola-Palmer, 2020; Mountjoy et al., 2019; Prinz et al., 2016; Walton et al., 2021; Åkesdotter, Kenttä, Eloranta, & Franck, 2020). The reported proportion of help-seeking in each sample varied from 8.1 % (Drew & Matthews, 2019) to 57.1 % (Gulliver et al., 2015). From a cumulative sample of $N = 3415$ athletes ($k = 11$, median $n = 224$), the pooled proportion of help-seeking was 22.4 % (95 % confidence interval [CI] 16.2–30.2, $I^2 = 95.7$ %) and a forest plot is depicted in Figure 2. There was no evidence of publication bias (Kendall's τ, $Z = 1.71$, $p = 0.09$; Egger's test, $t(9) = 1.54$, $p = 0.16$). Duval and Tweedie's trim and fill method imputed one effect size to the right of the mean and only marginally changed the pooled prevalence rate (24.4, 95 % CI 17.8–32.4, Fig. S1).

Meta-regression showed that neither age per-5 year unit change ($\beta = -0.09$, 95 % CI −0.27 to 0.09, $p = 0.32$) nor the proportion of females per-5% unit change ($\beta = -0.01$, 95 % CI −0.02 to 0.02, $p = 0.78$) could explain the substantial heterogeneity, indicating that variation in reported help-seeking rates across studies was not explained by age or sex. Sub-group analyses suggested that combined samples of athletes from team and individual vs. team sport athletes only, time-frame over which help-seeking was assessed (lifetime help-seeking, help-seeking during

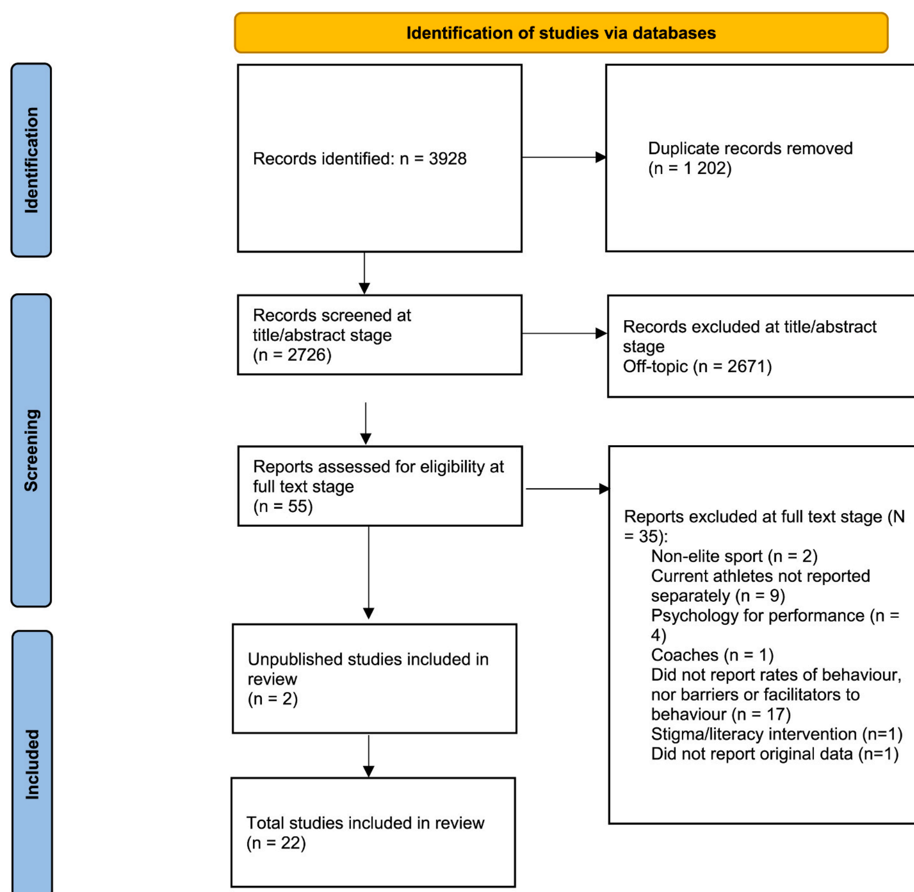

Figure 1. PRISMA Flowchart showing number of studies at each stage of the review, reasons for exclusion and total number of studies retained.

career, or help-seeking in past 6–12 months), and a mental health service provided in the sport setting vs. other services were associated with variability in help-seeking, however, there was evidence of overlapping 95 % CIs (see supplementary material).

2.3. Barriers to help-seeking

Thirteen studies reported help-seeking barriers: one quantitative, one mixed method, six interview/focus group studies, and five studies using open-ended survey questions. Of these, one was conducted from a constructivist epistemological position (O'Keeffe, N, Campbell, & O'Connor, 2022), one was interpretivist (Coyle, Gorczynski, & Gibson, 2017), one critical realist (Poucher, Tamminen, & Kerr, 2023), and other studies did not specify epistemology. Predominantly, qualitative data were analysed using thematic analysis (seven studies) or content analysis (three studies), with two studies not specifying analytic approach. Barriers are outlined below and summarised in Table S3. Across varying methodological and epistemological approaches, similarities in barriers were identified. Variation in barriers reported across studies did not align with frameworks drawn on.

2.3.1. Stigma

Stigma, such as feelings of shame, embarrassment or weakness, was the most commonly described barrier to help-seeking, noted in twelve studies (Bird, 2018; Bird, Chow, & Cooper, 2020; Delenardo & Terrion, 2014; Giovannetti et al., 2019; Gulliver, Griffiths, & Christensen, 2012; Harris & Maher, 2022; Kola-Palmer et al., 2020; Moore, 2017; O'Keeffe et al., 2022; Poucher et al., 2023; Watson, 2006; Wilkins et al., 2020). In particular, in five studies, athletes reported concerns around being perceived as 'weak' or 'soft' (Bird, 2018; Delenardo & Terrion, 2014; Gulliver et al., 2012; Kola-Palmer et al., 2020; Moore, 2017), especially where ongoing mental health support was needed (Delenardo & Terrion, 2014). In three studies, stigma and the perception of weakness was reported to be especially amplified for male athletes due to masculinity and notions of men as 'tough' (Delenardo & Terrion, 2014; Gulliver et al., 2012; O'Keeffe et al., 2022).

2.3.1.1. Stigma and athlete identity. Stigma was especially prominent for athletes through its intersection with the athletic role. Perceived weakness was a pertinent barrier for athletes in four studies due a belief that this was counter to expectations of an athlete (Delenardo & Terrion, 2014; Harris & Maher, 2022; Moore, 2017; Poucher et al., 2023). In particular, there was a notion that having a mental disorder was contrary to the view of athletes as both physically and mentally tough (Delenardo & Terrion, 2014), and as 'superheroes' or 'superhuman' (Harris & Maher, 2022; Poucher et al., 2023). Relatedly, a belief that seeking mental health help could be viewed as not coping with the requirements of being an athlete (Gulliver et al., 2012), or that it might represent an excuse to 'cop out' of training and competition requirements (Delenardo & Terrion, 2014) were further stigma and identity related barriers to help-seeking.

2.3.1.2. Stigma in the sport environment. Perceived stigma specifically within the elite sport setting was also a prominent barrier for athletes, with concerns about the reactions of coaches and teammates reported in five studies (Delenardo & Terrion, 2014; Gulliver et al., 2012; Harris & Maher, 2022; Moore, 2017; O'Keeffe et al., 2022). A key concern was that seeking help for mental health would negatively impact playing and/or training opportunities. In particular, athletes reported concerns that help-seeking might impact selection (Delenardo & Terrion, 2014; Harris & Maher, 2022; O'Keeffe et al., 2022), such as by being viewed as

Table 1
Help-seeking rates, barriers and facilitators and summary of included studies.

Author(s) (year)	Study design	Aims	Country	Setting and sample characteristics	Data collection and analysis	Outcome Measures	Main Results
Åkesdotter et al. (2020)	Cross-sectional	Examine elite athletes' mental health and help-seeking	SWE	N = 333 from 63 national teams applying for University scholarship M_{age} 24.6 ± 3.1 58.9 % female	Online self-report survey	Received help from: health care centre, psychologist, medical team, psychiatrist, medical doctor, sport psychologist, counsellor, other	**Rates**: 29.1 % (97/333) reported seeking help (females: 37.8 %, males: 16.8 %); most common was contacting psychologists, sport psychologists or health care centre "Other" (n = 18) mostly frequently sought help from a school counsellor or friends/family
Ballesteros and Tran (2020)	Cross-sectional	Investigate distress and use of mental health services	USA	N = 241 Racial-ethnic minorities Student-athletes in NCAA 42.9 % female	Online self-report survey	"Have you ever received psychological or mental health services from your current college/university's Counselling or Health Service?" Y/N	**Rates:** 11.4 % (22/193) of student-athletes had received University mental health services (11 % African American, 11.5 % Latino, 11 % Asian American)
Bird (2018)	Cross-sectional mixed methods	Help-seeking behaviour and predictors of seeking help	USA	N = 269 NCAA student-athletes from 15 team and individual sports M_{age} 19.59 ± 1.4 76.6 % female	Online self-report survey; Thematic analysis	BACE; "Describe what you believe to be the most important factors that prevented you from seeking professional help for your personal or emotional concern"	**Barriers:** lack of perceived seriousness, preference for alternative sources of help, stigma, instrumental barriers, attitudes towards service providers, negative consequences of seeking help
Bird et al. (2018)	Cross-sectional	Examine stigma and attitudes towards online vs face-to-face counselling	USA	n = 101 student-athletes (total N = 202) at NCAA Division I 13 sports M_{age} 20.01 ± 2.1 49.5 % female	Online self-report survey	Modified GHSQ; "Have you received professional mental health help in the past 12 months?" Y/N	**Rates**: 30.7 % (31/101) of student-athletes sought professional help (vs 15.8 % of non-athletes). Student-athletes were most likely to seek help from informal sources
Bird et al. (2020)	Mixed methods	Explore experiences of help-seeking using HBM framework, gain in-depth understanding of help-seeking	USA	N = 6 NCAA Division I student-athletes from 6 sports M_{age} 20.8 ± 0.7 66 % female	Paper self-report survey; Semi-structured interviews; Deductive - inductive coding into HBM factors	BACE; CHAQ	**Barriers:** BACE: Attitudinal barriers were the highest, then stigma-related barriers; Interviews: belief that help is not needed, they can handle issues themselves, they are not someone who needs help; uncertainty about what seeing a mental health professional may involve, unclear about the relationship, fear of disclosing sensitive information and being vulnerable, and concern about being judged **Facilitators**: CHAQ: Strongest cues to action were 'feeling better mentally' and 'being complimented' for taking action; Interviews: realising help was needed; having a coach/trainer facilitate help-seeking e.g., organising appointments.
Coyle et al. (2017)	Qualitative interviews	How young elite athletes conceptualise and experience mental health	UK	N = 8 international-level divers Age range 16–24 years 75 % female	Semi-structured Interviews; Thematic analysis, interpretivist approach	NA	**Barriers:** Preference for informal support; perceptions and experiences of sport psychologists not being helpful for mental health, sport psychologists not viewed as not focusing on mental health **Facilitators**: Healthy and motivating team cultures may support in managing mental health, good past experiences of help-seeking
Delenardo and Terrion (2014)	Qualitative interviews	Attitudes and opinions towards mental health and help-seeking	CAN	N = 8, varsity student-athletes Gridiron Football M_{age} 22	Semi-structured interviews; Thematic analysis	NA	**Barriers:** Stigma, poor mental health literacy, perception of 'weakness',

(continued on next page)

Table 1 (*continued*)

Author(s) (year)	Study design	Aims	Country	Setting and sample characteristics	Data collection and analysis	Outcome Measures	Main Results
				All male			masculinity and perception of need for toughness, **Facilitators:** elite athletes with mental health experiences as role models
Drew and Matthews (2019)	Cross sectional	Explore mental health in athletes and help-seeking	IRL	N = 185 student-athletes, regional, state or national representatives Varied sports M_{age} 20.77 ± 0.5 35 % female	Self-report survey – online or paper	Any serious personal, emotional, behavioural problems in the past year that would have benefited from professional help? No/did not need help/did not seek help although needed it/did seek professional help	**Rates**: 8.1 % (15/185) of athletes sought help for mental health from a professional in the past year; 21 % reported needing help; 62 % of student-athletes who reported needing help did not seek it.
Giovannetti et al. (2019)	Cross-sectional mixed methods	Examine experiences of mental health issues and how to support student-athlete mental health	CAN	N = 113 University student-athletes, from 25 sports M_{age} 21.05 ± 3.0 59.3 % female	Online self-report survey, including open-ended questions; Content analysis	Indicate whether you have used resources and/or services for your mental health offered outside of this university within the last 6 months; Indicate whether you have used resources and/or services for your mental health offered at this university within the last 6 months	**Rates:**18 % (156/865) percent had used mental health resources and/or services at their university; 26.5 % (229/865) had used services and resources outside of the university **Barriers:** Lack of time, belief that issues were not serious enough, not bad enough to need to talk to someone, discomfort in discussing issues, lack of awareness about the services available, stigma and embarrassment.
Gulliver et al. (2012)	Qualitative focus groups	Explore barriers and facilitators to help-seeking for mental health amongst young elite athletes	AUS	N = 15 AIS athletes from 1 team and 1 individual sport M_{age} 19.3 (range 16–23) 40 % female	3 focus groups, Thematic analysis with a priori and grounded coding	NA	**Barriers:** primary barrier was stigma; other barriers: not willing to express emotion; lack of awareness of problem; denial of problem; lack of time; not sure who to ask; help not accessible; concern about impact on playing/ training; belief would not help **Facilitators:** education/ awareness of mental health and/or services; social support; encouragement from others; accessibility; good relationship with service provider; time; integration into life of an athlete; confidentiality; positive past experiences; ease of expressing emotions
Gulliver et al. (2015)	Cross sectional	Prevalence of mental disorders in athletes	AUS	N = 224 AIS and nationally funded athletes, various team and individual sports M_{age} 24.9 ± 6.0 52.7 % female	Online self-report survey	GHSQ (Have you ever seen a professional for personal or emotional problems?)	**Rates:** 57.1 % (128/224) of elite athletes reported seeking help from a professional for mental health concerns From; Psychologist 48.7 %, Psychiatrist 5.8 %, GP/Doctor 14.7 %, Counsellor/school counsellor 26.3 %
Harris and Maher (2022)	Qualitative focus groups	Explore student-athletes' stressors and challenges and their impacts on mental health and performance	USA	N = 21 NCAA Division I student-athletes 9 team and individual sports	3 focus groups (2 in person, 1 virtual); Thematic analysis	NA	**Barriers:** Stigma, not want to talk about mental health, concerns about appearing weak or inferior to other athletes, including possible impacts on selection; pressure to live up to athletic persona of being a superhero; masculinity; time, with operating hours not fit with the training and study schedules; Perceptions that mental health programs are not useful and are provided to meet a requirement, and focused on performance not mental health

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Table 1 (*continued*)

Author(s) (year)	Study design	Aims	Country	Setting and sample characteristics	Data collection and analysis	Outcome Measures	Main Results
Junge and Prinz (2019)	Cross-sectional	Prevalence of and risk factors for mental health	GER	N = 290 players from Women's Football League M_{age} 21.5 ± 4.2 All female	Paper self-report survey	Counselling or treatment from a psychologist or psychotherapist: No; yes, in the past; yes, currently	**Rates:**13.6 % (39/290) had received treatment previously, 5.2 % (15/290) were currently receiving treatment Nearly 40 % of the players stated that they wanted or needed support previously
Kola-Palmer et al. (2020)	Cross-sectional mixed-methods	Factors associated with help-seeking behaviours	UK FRA	N = 167 professional RFL athletes Rugby M_{age} 24.9 ± 4.6 All male	Online self-report mixed-methods survey; Content analysis	"Have you accessed Sporting Chance?" Y/N[a] Open-ended question: "In your opinion, what are the main reasons that prevent players from accessing player welfare supports?"	**Rates:** 15.6 % (26/197) had sought help **Barriers:** Poor mental health literacy, lack of knowledge/ awareness of mental health, treatment or how to access treatment, help not needed; stigma, fear of weakness, shame, embarrassment; Personal characteristics and attitudes, lack of interest, lack of trust in system; Instrumental barriers, lack of time
Moore (2017)	Cross-sectional mixed-methods	Willingness to seek academic, athletic and behavioural services	USA	N = 349 NCAA student-athletes 18 sports M_{age} 19.4 55 % female	Online self-report mixed-methods survey	Rate comfort in seeking mental health services on 9-point Likert scale Open-questions: barriers preventing the athletes from feeling comfortable in seeking services	**Barriers**: stigma; weakness; service providers not understand demands on athletes; fear will impact performance; reactions of teammates and coaches; concerns around confidentiality; lack of awareness/understanding of mental health; lack of knowledge of service access; losing playing time or scholarship
Mountjoy et al. (2019)	Cross-sectional	Explore mental health and experiences of abuse in elite sport	56 nations	N = 377 from FINA 2019 World Championships M_{age} 22.4 ± 4.7 61.1 % female	Self-report survey - online and paper	"Have you ever wanted or needed support from a psychotherapist for personal or mental health problems?" no; yes previously; yes currently	**Rates**: 42.1 % (158/377) of the athletes stated that they currently or previously sought mental health support 15.9 % (57/377) reported currently receiving support, 28.4 % (101/377) had previously sought support
O'Keeffe et al. (2022)	Qualitative interviews	Explore barriers and facilitators to professional help-seeking post-injury	IRL	N = 26 Gaelic football players with injury in past 3 years M_{age} M 20.6.4 ± 3.1; F 23.5 ± 2.8 46.2 % female	Focus groups; Thematic analysis; Constructivist approach		**Barriers**: lack of education/ awareness, not knowing about symptoms; stigma and negative attitudes of others, embarrassment, weakness; access, not knowing where or how to seek help **Facilitators**: education, positive attitudes of others, normalising help-seeking, increased accessibility
Prinz et al. (2016)	Cross-sectional survey	Prevalence of and risk factors for mental health	GER	N = 157 German First Football League M_{age} 33.0 ± 6.3 All female	Online self-report survey	Use of psychotherapeutic support during the football career	**Rates**: 38.7 % stated that they wanted or needed psychotherapeutic support during their career. 9.9 % (15/157) players had sought help during career
Poucher et al. (2023)	Qualitative interviews	Explore impact of elite training environments on mental health	CAN	N = 32 Olympic and Paralympic athletes 7 team and individual sports M_{age} 25 46.8 % female	Interviews; Thematic analysis; Critical realist approach	NA	**Barriers:** confidentiality, negative past experiences, lack of trust, lack of relationship with service provider, stigma and athlete identity, minimising problem **Facilitators:** service access within sport**,** peers who have experienced mental disorders, supportive coach
Walton et al. (2021)	Cross-sectional	Gender difference in and contributors to mental health	AUS	N = 523 AIS athletes Varied sports M_{age} M 24.5 ± 8.43	Online self-report survey	GHSQ; past and current (12 months) help-seeking, not described	**Rates**: 21 % (111/523) of athletes reported having ever accessed psychological help (13 % of men and 27 % of women). Within the last 12

(*continued on next page*)

Table 1 (*continued*)

Author(s) (year)	Study design	Aims	Country	Setting and sample characteristics	Data collection and analysis	Outcome Measures	Main Results
				M_{age} F 23.85 ± 6.27 56 % Female			months 9 % of men and 27 % of women received psychological treatment.
Watson (2006)	Cross-sectional mixed-methods	Barriers to seeking help for students and student-athletes	USA	N = 267 (n = 135 student-athletes) NCAA Division 1 6 team and individual sports M_{age} 20.7 51.9 % female	Self-report mixed-methods survey; Not reported	Open ended question regarding reasons for not seeking counselling or support services for personal problems and issues	**Barriers:** reasons for not accessing support were: no need (15.3 %), personal discomfort (13.3 %), perception of others (12.4 %) and time (12.4 %). Time was reported more frequently by student-athletes than students
Wilkins et al. (2020)	Cross sectional	Examine perceptions of CBT amongst soccer players	UK	N = 24 professional junior athletes at Premier League Football club M_{age} 20.4 ± 1.5 All male	Paper self-report survey	Author-created questionnaire Rated 9 barriers to CBT access on scale 1–10: When “Not knowing when to seek help”; How/Where = “Not knowing how/where to seek help”; Knowledge = “Lack of knowledge about what to expect in a CBTsession”; Stigma = “Opinions of peers (i.e., negative attitudes of others, stigma)”; Process = “Find the process uncomfortable (i.e., discussing thoughts, feelings, and behaviours)”; Religion = “Religious beliefs”; Time = “Lack of time”; Money = “Lack of money”; Transport = “Lack of transport”)	**Barriers**: 1) Not knowing how/where to seek help, 2) Lack of knowledge about what to expect, 3) Not knowing when to seek help, 4) finding the process uncomfortable (i.e., discussing thoughts, feelings),5) Stigma and opinions of peers.

ACS: Australian Sporting Commission; AIS: Australian Institute of Sport; BACE: Barriers to Access to Care Evaluation; CBT: cognitive behaviour therapy; CHAQ: Cues to Health Action Questionnaire; RFL: Rugby Football League; GHSQ: General Help-Seeking Questionnaire; HBM: Health Belief Model; NCAA: National Collegiate Athletics Association

AUS: Australia, CAN: Canada, FRA: France, GER: Germany, IRL: Ireland; SWE: Sweden; UK: United Kingdom; USA: United States of America

[a] Sporting Chance is a charity that provides treatment and support for elite athletes in the UK

Table 2
Quality Assessment of studies reporting help-seeking rates.

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Åkesdotter et al. (2020)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Ballesteros and Tran (2020)	Yes	Yes	UC	Yes	Yes	No	Yes	Yes	No
Bird et al. (2018)	No	Yes	UC	Yes	Yes	Yes	Yes	No	UC
Drew and Matthews (2019)	No	Yes	UC	Yes	Yes	No	Yes	Yes	No
Junge and Prinz (2019)	No	Yes	UC	Yes	Yes	No	Yes	Yes	UC
Giovannetti et al. (2019)	No	Yes	No	Yes	UC	No	Yes	Yes	No
Gulliver et al. (2015)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kola-Palmer et al. (2020)	No	Yes	UC	Yes	Yes	No	Yes	Yes	UC
Mountjoy et al. (2019)	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Prinz et al. (2016)	No	Yes	UC	Yes	Yes	No	Yes	Yes	Yes
Walton et al. (2021)	Yes	UC	Yes	Yes	Yes	Yes	Yes	Yes	UC

Assessed using the JBI critical appraisal checklist for prevalence data (item content below).
JBI, Joanna Briggs Institute; UC, unclear.
JBI critical appraisal for prevalence data item summary.
Q1. Research methodology and study sample.
Q2. Research methodology and sampling strategy.
Q3. Research methodology and sample size adequacy.
Q4. Research methodology and study setting description.
Q5. Research methodology and data analysis suitability.
Q6. Research methodology and valid assessment of condition.
Q7. Research methodology and reliable assessment across participants.
Q8. Appropriateness of data analysis.
Q9. Adequacy or management of response rate.

Table 3
Quality Assessment of studies reporting barriers and facilitators to help-seeking.

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Bird (2018)	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Bird et al. (2020)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Coyle et al. (2017)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Delenardo and Terrion (2014)	No	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes
Giovannetti et al. (2019)	No	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes
Gulliver et al. (2012)	No	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes
Harris and Maher (2022)	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Kola-Palmer et al. (2020)	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Moore (2017)	No	Yes	Yes	No	UC	No	No	No	No	Yes
O'Keeffe et al. (2022)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Poucher et al. (2023)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Watson (2006)	No	Yes	Yes	No	UC	No	No	No	No	Yes
Wilkins et al. (2020) [a]	Yes	Yes	No	Yes	No	No	No	Yes	–	–

JBI, Joanna Briggs Institute; UC, unclear.
JBI critical appraisal for qualitative research item summary.
Q1. Research methodology and philosophical perspective congruity.
Q2. Research methodology and research objectives congruity.
Q3. Research methodology and methods congruity.
Q4. Research methodology and data analysis congruity.
Q5. Research methodology and data interpretation congruity.
Q6. Cultural or theoretical location statement.
Q7. Researcher influence on research addressed and vice-versa.
Q8. Adequate representation participants voices.
Q9. Ethical and approval…
Q10. Conclusions extend from data analysis or interpretation.
[a] Assessed using the JBI critical appraisal checklist for cross-sectional studies; all other studies assessed using the JBI critical appraisal checklist for qualitative research (item content below).

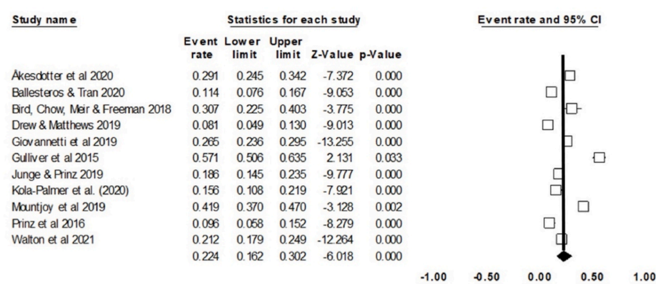

Figure 2. Forest plot showing the proportion of athlete help-seeking in k = 11 studies, 22.4 % (95 % CI 16.2–30.2). The pooled effect is denoted by the diamond and vertical line. Squares denote the proportion of help-seeking for each individual study and the horizontal lines denote the 95 % CI for each individual study. Effect sizes to the right of the vertical line denote study help-seeking proportions that are higher than the pooled effect. CI, confidence interval.

inferior to other athletes (Delenardo & Terrion, 2014; Harris & Maher, 2022). Concern around loss of training opportunities and scholarships was also reported (Gulliver et al., 2012).

2.3.2. *Mental health awareness and literacy*

Poor mental health literacy was another barrier reported by respondents in seven studies (Bird, 2018; Giovannetti et al., 2019; Gulliver et al., 2012; Kola-Palmer et al., 2020; Moore, 2017; O'Keeffe et al., 2022; Wilkins et al., 2020). Specifically, a lack of awareness of when help would be needed was a barrier related to limited mental health knowledge and literacy that was described by athletes in three studies (Gulliver et al., 2012; O'Keeffe et al., 2022; Wilkins et al., 2020). Additionally, a lack of clarity regarding the distinction between mental health symptoms and what constitutes normal experiences of being an athlete, such as usual 'ups and downs' or fatigue was described (Giovannetti et al., 2019; Gulliver et al., 2012; O'Keeffe et al., 2022). Further, in three studies, due to limited understanding of symptoms, athletes reported a concern that their difficulties were not serious enough to warrant help or might appear trivial (Bird, 2018; Giovannetti et al., 2019; O'Keeffe et al., 2022).

2.3.2.1. Belief that help was not needed. Potentially related to lack of mental health literacy, athletes in five studies also reported a belief that help-seeking was not needed (Bird, 2018; Bird et al., 2020; Kola-Palmer et al., 2020; O'Keeffe et al., 2022; Watson, 2006); although the mental health needs or symptoms of the sample was reported in only one of these studies (Bird, 2018). Denial or downplaying the seriousness of the problem was a barrier described in five studies (Bird, 2018; Bird et al., 2020; Gulliver et al., 2012; O'Keeffe et al., 2022; Poucher et al., 2023), which might partially relate to mental health literacy in combination with stigma. Athletes also reported a belief that mental health difficulties was not something that would affect them individually (Bird et al., 2020). An additional reason for the belief that help-seeking was not needed was a lack of understanding around the benefits of seeking help (O'Keeffe et al., 2022), with a belief that the problem could be self-managed (Bird, 2018; Bird et al., 2020; O'Keeffe et al., 2022; Watson, 2006) or would resolve itself in time (Bird, 2018; O'Keeffe et al., 2022).

2.3.2.2. Lack of knowledge around services. In six studies, a lack of knowledge of services was a described barrier to help-seeking (Bird, 2018; Giovannetti et al., 2019; Gulliver et al., 2012; Kola-Palmer et al., 2020; Moore, 2017; O'Keeffe et al., 2022; Wilkins et al., 2020). Athletes were unaware of services that were available (Bird, 2018; Giovannetti et al., 2019; Gulliver et al., 2012; O'Keeffe et al., 2022) and uncertain how to commence help-seeking (Bird, 2018; Gulliver et al., 2012; Kola-Palmer et al., 2020; Moore, 2017; O'Keeffe et al., 2022; Wilkins et al., 2020). An additional barrier reported in four studies was related to a lack of knowledge around the process of therapy and mental health service provision (Bird et al., 2020; Gulliver et al., 2012; O'Keeffe et al., 2022; Wilkins et al., 2020). In particular, athletes reported a reluctance to seek help due to not knowing what to expect (Gulliver et al., 2012; O'Keeffe et al., 2022; Wilkins et al., 2020), and a lack of clarity around the nature of the relationship with the service provider (Bird et al., 2020).

2.3.3. Mental health services

2.3.3.1. Attitudes towards services. Poor perceptions of mental health service provision were also reported as a barrier to help-seeking. In five studies, previous unfavourable experiences with mental health or psychological service providers were cited (Bird, 2018; Coyle et al., 2017; Gulliver et al., 2012; Harris & Maher, 2022; Poucher et al., 2023). A belief that the services would not help was also reported in five studies (Bird, 2018; Coyle et al., 2017; Gulliver et al., 2012; Harris & Maher, 2022; Watson, 2006), with athletes in two studies indicating a perception that services in sport settings were geared towards performance and not mental health (Coyle et al., 2017; Harris & Maher, 2022). Additionally, in one study, University/college service provision for student-athletes was viewed as provided to meet a requirement rather than provide substantive mental health support (Harris & Maher, 2022). A lack of trust in service providers in sport settings (Kola-Palmer et al., 2020; Poucher et al., 2023), including due to a lack of existing relationships (Bird, 2018; Poucher et al., 2023), was also cited as a barrier. In particular, trust related to concerns around privacy and confidentiality within sport settings (Bird, 2018; Moore, 2017; Poucher et al., 2023). Concomitantly, in two studies, athletes reported a perception that mental health professionals outside of sport settings would not be able to relate to them as athletes or understand the demands that accompanied being an athlete (Harris & Maher, 2022; Moore, 2017). In two studies, a preference for informal support was also reported as a barrier to professional help-seeking (Bird, 2018; Coyle et al., 2017).

2.3.3.2. Access. Access barriers were also reported in three studies (Harris & Maher, 2022; Kola-Palmer et al., 2020; O'Keeffe et al., 2022). In one study, there had been a lack of services provided within the sport setting until recently (Kola-Palmer et al., 2020), while the cost of access was a barrier in two studies (Bird, 2018; O'Keeffe et al., 2022). In a study of University/college services for student-athletes, the location and operating hours of the service were described as inconvenient for scheduling appointments around training and study (Harris & Maher, 2022). Relatedly, time was an additional barrier reported in six studies that limited access to services and help-seeking (Bird, 2018; Giovannetti et al., 2019; Gulliver et al., 2012; Kola-Palmer et al., 2020; O'Keeffe et al., 2022; Watson, 2006). An additional barrier reported in one study was a perception that support service access favoured higher performing athletes (Poucher et al., 2023).

2.3.4. Personal barriers

A range of personal or individual barriers were also identified. Athletes reported a reluctance to ask for help (Kola-Palmer et al., 2020) or to see themselves as someone needing help (Bird et al., 2020), partly due to not wanting to be a burden (Bird, 2018). Additionally, athletes reported a belief that they should be able to cope with (Poucher et al., 2023) or handle the problem themselves (Bird, 2018). A further barrier reported in one study was a perception that seeking help could detrimentally impact performance (Moore, 2017). Additionally, in six studies, discomfort in the process of help-seeking, such as discomfort or a lack of willingness to share sensitive issues and discuss emotions, was a further barrier to help-seeking (Bird, 2018; Bird et al., 2020; Giovannetti et al., 2019; Gulliver et al., 2012; Watson, 2006; Wilkins et al., 2020).

2.4. Facilitators

Facilitators were less commonly explored, and were reported in six studies; one mixed-method and five qualitative interview/focus group studies. Facilitators are outlined below and summarised in Table S3.

2.4.1. Awareness and literacy

Having an awareness of the need for mental health support was cited as a key first step in facilitating help-seeking in three of the six studies (Bird et al., 2020; Gulliver et al., 2012; O'Keeffe et al., 2022). Increasing education around mental health symptoms to aid in recognising the need for help was reported as valuable in aiding help-seeking (Gulliver et al., 2012; O'Keeffe et al., 2022). Relatedly, emotional competence, such as awareness of and ability to express feelings, was reported as a further facilitator (Gulliver et al., 2012; O'Keeffe et al., 2022).

2.4.1.1. Awareness and understanding of services. Increased education and awareness around services and how to access help were reported in two studies as needed to facilitate help-seeking (Gulliver et al., 2012; O'Keeffe et al., 2022). In addition, increasing understanding around the benefits of help-seeking, and increasing awareness of what to expect in a consultation, were reported as facilitators in a study utilising a constructivist approach (O'Keeffe et al., 2022). Ensuring confidentiality around help-seeking (Gulliver et al., 2012) was a further facilitator reported in a focus group study.

2.4.2. Sport culture

The culture and perceptions of mental health and help-seeking within the sporting context were also viewed as critical in facilitating help-seeking in five of the six studies. Help-seeking was facilitated where attitudes of coaches or teammates allowed athletes to feel comfortable to seek help (Coyle et al., 2017; O'Keeffe et al., 2022; Poucher et al., 2023), and where help-seeking would be encouraged or viewed favourably in the sport environments (Gulliver et al., 2012). Athletes being prompted to seek help by coaches or sport staff, such as through appointments being arranged, was a further facilitator to help-seeking described in two studies (Bird et al., 2020; Gulliver et al., 2012).

2.4.2.1. Normalising help-seeking. The need to normalise help-seeking within elite sport in order to facilitate service use was also reported (O'Keeffe et al., 2022). This normalisation might come through increased team discussion around help-seeking and mental health, as well as through the media (O'Keeffe et al., 2022). Further, in three studies, the value of role models, such as successful athletes talking about their mental health experiences, to increase awareness of athletes seeking help was cited as a way to normalise and facilitate mental health and help-seeking (Delenardo & Terrion, 2014; Gulliver et al., 2012; O'Keeffe et al., 2022). In particular, role models were reported to be a way of changing attitudes towards help-seeking within sport (Gulliver et al., 2012), such as through challenging the notion of mental health as indicative of weakness (Delenardo & Terrion, 2014).

2.4.3. Mental health services

2.4.3.1. Service access. Convenience and ease of service access was reported as a facilitator to service use in studies using constructivist and critical realist approaches (O'Keeffe et al., 2022; Poucher et al., 2023). Additional factors related to increasing access included improving financial support (O'Keeffe et al., 2022), as well as better integration of services into the life of an athlete (Gulliver et al., 2012). A preference for accessing services and resources online was reported, suggesting that such services might aid in help-seeking (Gulliver et al., 2012; O'Keeffe et al., 2022); especially with online services seen as potentially aiding anonymity (Gulliver et al., 2012).

2.4.3.2. Past experiences. In two studies, having previously had a positive help-seeking experience was a facilitator of future help-seeking (Bird et al., 2020; Coyle et al., 2017). Feeling better after beginning to seek help also facilitated ongoing service use (Bird et al., 2020). Additionally, in three studies, an existing relationship with a service provider was also viewed as facilitative (Bird et al., 2020; Gulliver et al., 2012; O'Keeffe et al., 2022).

3. Discussion

This review synthesised current understanding around formal help-seeking behaviour of athletes, revealing that approximately 22% of athletes sought help for mental health. In the general population across various nations, help-seeking rates of 12.1% (Lubian et al., 2016) and 17.5% (Australian Bureau of Statistics, 2021) have been reported. Help-seeking for younger adults can be higher, for example, in Australia the rate of help-seeking in young adults (16–34 years) was 24.1%, although prevalence of disorders was also higher in this age group (Australian Bureau of Statistics, 2021). The young adult rates may provide a better comparator based on the mean ages of samples included and the ages at which many athletes are typically in their peak performance (Allen & Hopkins, 2015). Results thus suggest that athletes seek help at slightly higher to similar rates than the general population. However, such comparison needs to be interpreted with caution due to variations in healthcare models and service access within sport settings across regions (e.g., Mountjoy, Junge, Slysz, & Miller, 2021); although no differences across help-seeking rates by region were identified by meta-regression. Further caution is also needed in interpreting comparisons due to lack of epidemiolocal evidence in the general population, as well as elite sport, regarding the proportion of those needing help who actually seek it. Heterogeneity in help-seeking rates was observed in the review, and this related to variations in assessment of help-seeking, including time frames over which seeking help was assessed (e.g., lifetime, career, past 6 months), sources of professional help, and the variety of settings and sports studied.

An awareness of the need to seek help, as well as encouragement and assistance to seek help from coaches and sport staff, were identified as fostering help-seeking. Thus, results lend support for the early intervention framework, specifically the utility of identification through routine screening, as well as for sport staff as 'navigators' who might aid in detecting mental health symptoms and facilitating referral and service access (Purcell et al., 2019). In light of results around service use rates and barriers, however, our review also highlights that additional changes in sport settings may be valuable to support the success of the early intervention framework through ensuring athlete uptake of mental health services post-referral. Beyond awareness, a range of barriers and facilitators were found that are likely to impact athlete help-seeking behaviour. While some barriers, such as stigma, mental health literacy, access, and discomfort discussing emotions have been reported in the general population (Gulliver, Griffiths, & Christensen, 2010; Radez et al., 2021), some of these barriers appeared to be especially prominent for athletes, such as the intersection of stigma with athlete identity. Further, a range of unique barriers for athletes were also identified. Accordingly, further organisational changes, as will be further outlined below, may be necessary to overcome the gap between referral and service uptake seen in other settings (e.g., Tully et al., 2016; Xue et al., 2020).

Findings underscore the widely reported value of enhancing mental health literacy in sport settings (e.g., Gorczynski et al., 2019; Henriksen et al., 2019; Purcell et al., 2022; Reardon et al., 2019). Findings from this review can also help to guide specific areas of mental health literacy that may be beneficially increased, with a range of barriers potentially able to be reduced through education as part of mental health literacy programs. For example, literacy around how somatic symptoms might present and the distinction between symptoms and impacts of physical training, and emotional literacy may be beneficial to address in mental health literacy programs. A lack of knowledge around the benefits of seeking help was a barrier and, thus, benefits of seeking help could also be conveyed as part of mental health literacy programs; in line with the Health Belief Model (HBM; Rosenstock, 1974), which postulates that expectations, such as perceived benefits of seeking help, are a key aspect that impacts mental health treatment utilisation (Henshaw & Freedman-Doan, 2009). Furthermore, mental health literacy programs could also include increased education around available services and the process of help-seeking to reduce these barriers.

The most routinely cited barrier to help-seeking was stigma, consistent with previous research highlighting athlete reluctance to disclose mental health symptoms (Reardon et al., 2019; Souter et al., 2018). Perceived stigma might be a realistic appraisal of mental health help-seeking, with vignette research suggesting that athletes with a history of any mental health disorder may be less likely to be signed than other athletes (Merz et al., 2020), resulting in a fundamental barrier to promoting help-seeking behaviour in this population. While stigma is a key barrier to help-seeking in the general population (e.g., Conner et al., 2010; Doblyte & Jimenez-Mejias, 2017), results highlight that stigma may be especially pertinent for athletes. Therefore, stigma reduction interventions to promote help-seeking, such as those developed for the general population (for reviews, see Corrigan, Morris, Michaels, Rafacz, & Rüsch, 2012; Griffiths, Carron-Arthur, Parsons, & Reid, 2014; Yamaguchi et al., 2013), may be valuably applied or adapted for use in elite sport settings. Within the sporting environment, an intervention has been piloted that increased mental health conversations between athletes, parents and sporting clubs (Hurley, Swann, Allen, & Vella, 2020), for example, as a step towards destigmatising mental health. Such targeted interventions might further be used or developed to foster help-seeking behaviours in elite sport. Such interventions also need to be targeted at all levels of the athletic community including coaches, managers, and other sport staff.

Of note, masculinity, a commonly identified stigma related barrier to help-seeking (e.g., Clark, Hudson, Rapee, & Grasby, 2020; Seidler, Dawes, Rice, Oliffe, & Dhillon, 2016), was only reported in three studies (one with only male participants, and two with mixed-sex samples), and sex differences in the study samples did not explain variation in help-seeking rates. However, athlete identity was commonly reported as a stigma or perceived weakness-related barrier within this population across sexes. This review thus underscores the need to promote alternative identities beyond an exclusive athlete identity during sporting careers to improve athlete mental health outcomes (e.g., Cosh, 2021). From a position of conceptualisation, there is considerable overlap between a fear of perceived weakness that seems to be central to both masculine norms around help-seeking and athlete identity. Further research is needed to fully understand which concept is particularly relevant to male athletes and whether identity-based interventions that divest athlete identity (or broaden other identities) might foster help-seeking behaviour.

Identified barriers and facilitators highlight that team culture has a key role in help-seeking, with meta-regression also showing that help-seeking rates were lower in studies examining team sport athletes only. Results are, thus, consistent with suggestions that a culture shift in elite sport is needed to improve athlete mental health (Purcell et al., 2022). Extending existing frameworks promoting culture change including through mental health literacy provision (Purcell et al., 2022), this review also highlights the potential utility of role models within sport settings to normalise and promote mental health help-seeking. Publicity within sport settings, such as via internal communications or presentations and team workshops around athletes engaging in help-seeking may function both to promote athlete role models and also normalise experiences of mental health symptoms. Normalising experiences of mental health symptoms can be furthered through changes in media reporting and sport publicity (Vahabzadeh, Wittenauer, & Carr, 2011). Mental health amongst athletes is still partially stigmatised in the media (Cosh, Crabb, McNeil, & Tully, 2022), where help-seeking for mental health constitutes the actions of 'fallen athletes' (Cosh, Crabb, & Tully, 2015). Accordingly, media promotion and publicity of athlete role models may also support the normalisation of athlete mental health at a broader public level (the macro-system).

A range of factors relating to service provision also functioned as both barriers and facilitators to service access. In particular, perceptions of service providers as not understanding sporting demands was a barrier, while having an existing relationship with mental health

professionals was facilitative. These findings provide some support for the value of in-house services provided within sporting organisations that cater to athletes (Purcell et al., 2019). Such services may also be better situated to provide scheduling flexibility, as recommended for athlete service provision (Reardon et al., 2019), and allow the development of relationships prior to the need for service utilisation. Visibility of service providers in sport settings can also aid in normalising help-seeking (Beasley, Hardin, & Palumbo, 2022). However, utilisation rates for specific mental health services provided within sport settings were lower in the meta-regression than other service use. This lower rate might reflect assessment variations between studies, such as timeframes and a smaller range of sources of help assessed, but might indicate a lack of willingness to seek help in-house. Alternatively, this finding might reflect that organisations providing these services create environments that are more conducive to positive mental health outcomes and, thus, necessitate less help-seeking. Future research to further clarify the benefit of, and athlete preferences for, in-house services, as well as how to overcome perceptions of these as performance focused is thus warranted. Notably, trust was reported as a barrier in one study of help-seeking with a sporting-specific service (Kola-Palmer et al., 2020), with trust and confidentiality identified as barriers to athlete help-seeking more widely (e.g., Bird, 2018; Moore, 2017; Poucher et al., 2023). Findings thus underscore the value of confidentiality within sport settings to promote help-seeking and build trust. Increased respect for the need for confidentiality and greater transparency around the confidentiality of in-house services for athletes and sport staff alike, would be beneficial. Additionally, while telehealth services are valuable for enabling ongoing support despite travel requirements (Purcell et al., 2019), a preference for online support to overcome confidentiality concerns was also identified; indicating that telehealth service provision may be especially beneficial in sport settings.

An ecological systems model of athlete mental health has been proposed (see Purcell et al., 2019) and barriers and facilitators were reported across the sport ecosystem at the athlete and microsystem level, as well as exo- and macro-levels. Changes at macro and exo-systems (e.g., normalising of mental health symptoms) may also help to facilitate the microsystem and athlete level changes, such as culture within specific squads and changes in individual reluctance to seek help. Thus, results lend support for the need for actions at each level of the athlete ecosystem in order to support athlete mental health (Purcell et al., 2022). However, adapting the sport ecosystem may require organisational changes and additional resourcing. Currently, further mental health services and support is required across international sporting federations (Mountjoy et al., 2019). Only approximately 10% of studied athletes from 74 countries reported having access to a mental health professional or psychologist at least weekly or more (Mountjoy et al., 2021). Resourcing may limit the extent to which such organisational changes can occur, with finances cited as a barrier to implementation of health-related programs (Mountjoy et al., 2019). There also remains an ongoing need for culture change within elite-sport away from a performance focus and towards an athlete wellbeing focus to drive organisational change to ensure mental health is prioritised (Purcell et al., 2022; Schinke et al., 2022). These culture changes are needed to ensure genuine buy-in from sporting bodies around player support services to ensure their success (Lewis, Rodriguez, Kola-Palmer, & Sherretts, 2018). The results of the review underscore the value of viewing athlete mental health as part of occupational health and safety requirements for sport organisations (Schinke et al., 2022) in order to further the successful implementation of frameworks to promote athlete mental health (Purcell et al., 2019; Purcell et al., 2022). As such, a refocus from performance only, to a focus on athlete wellbeing and occupational health is needed within elite sport settings to foster help-seeking and athlete outcomes (see Purcell et al., 2022; Schinke et al., 2022 for further discussion on organisational change).

3.1. Limitations of the extant literature and future research directions

This review provides insights into athlete help-seeking behaviour, which has seen increased research attention only in recent years. However, a number of limitations to the extant mental health help-seeking research in the context of sport remain. Assessment of mental health symptoms was limited across included studies. As is common in published help-seeking literature, not all studies reporting help-seeking rates provided assessment of symptoms. Where reported, the symptom profiles of the samples varied and there was little consistency in how mental health was assessed or defined. Thus, understanding of help-seeking behaviour and rates amongst those who may most require support is limited. Another limitation is that help-seeking behaviour was typically self-reported. Objective assessment of behaviour, especially alongside data on mental health symptoms would greatly enhance knowledge around athlete help-seeking.

Research examining facilitators to help-seeking remains limited and only one study reported any diagnostic and help-seeking history (Poucher et al., 2023). As such, facilitators need further examination, especially amongst samples of athletes who have sought help or need it. In a similar vein, help-seeking rates or mental health symptoms were rarely reported in barriers research, and only one unpublished study examined barriers to help-seeking specifically amongst those with an emotional concern who had not sought help (Bird, 2018). Thus, results do not necessarily reflect the barriers for the large proportion of athletes who need help and do not seek it (Junge & Prinz, 2019; Prinz et al., 2016). Accordingly, the extent to which a perception of not needing help, for example, reflects low mental health literacy, minimising or denying a problem, or that those athletes were not symptomatic and did not need support, remains unclear. Continued examination of barriers, especially amongst those who need and do not utilise help, would be valuable.

Further, included studies primarily focused on able bodied athletes, with only two studies including para-athletes (Gulliver et al., 2015; Poucher et al., 2023). Thus, understanding around help-seeking behaviour of para-athletes remains limited. Although no differences in mental health outcomes have been found between para and non-para-athletes (Olive, Rice, Butterworth, Clements, & Purcell, 2021), greater sport-related risk factors may exist for para-athletes that confer greater risk for mental health disorders (Olive et al., 2022). It is also noteworthy that only one study examined help-seeking rates amongst racial and ethnic minority athletes (Ballesteros & Tran, 2020). This study found a low help-seeking rate, despite 80% of the sample indicating having had a mental health concern within the past year. Additional examination of help-seeking in minority groups or other subgroups of athletes, including specific barriers and facilitators, may be beneficial for further guiding service provision.

Additional methodological and reporting limitations in the existing body of research were identified. Only one study reported a power calculation (Åkesdotter et al., 2020) and greater transparency around power would be important for future help-seeking research. Concomitantly, response rates were not routinely reported and the extent to which there may be selection bias remains less certain. Studies examining help-seeking rates would also benefit from clarifying accessibility and cost of services and symptom profiles of samples. While study quality varied, a key limitation across the majority of qualitative studies was that few stated an epistemological position and rarely engaged with researcher reflexivity (Lockwood et al., 2015). Some qualitative analyses also presented few data extracts with which to support claims and evidence validity (Locke, 2004). Indeed, in the majority of included qualitative studies, there was little engagement with considerations relating to rigour and validity. Future qualitative studies exploring barriers and facilitators would benefit from further engagement with rigour in qualitative research (see Smith & McGannon, 2017; Sparkes & Smith, 2009).

3.2. Limitations of the review

Limitations of the review include the substantial heterogeneity in help-seeking rates, including variable assessment of help-seeking, and varied symptom profiles of samples, as well as mixed quality of included studies. The included studies consisted of samples of athletes from a range of ages, with difference in help-seeking behaviour across age groups previously reported (Gulliver et al., 2010), although age was not significant in meta-regression. Preferences for formal and informal help-seeking also vary across ages (Clark, Hudson, Dunstan, & Clark, 2018), and a less commonly reported barrier to help-seeking was a preference for informal support. Thus, a focus on formal help-seeking only, which is important to guide implementation of referral-based models, may limit understanding of a broader range of help-seeking behaviours across ages. Further, help-seeking rates were self-reported and reviewing objective assessment of behaviour was not possible. Additionally, studies were restricted to English language only, with the included studies from North America, Europe and Oceania. This restriction might limit understanding of other cultures and contexts, and might have limited ability to detect regional differences in help-seeking.

4. Conclusions

Athletes appear to access mental health services at approximately comparable rates to the general population. A range of sporting-related barriers to help-seeking were identified, including potential impacts of stigma with regards to athlete identity, selection, the team environment and culture, as well as challenges around confidentiality within sport settings. Low mental health literacy and lack of awareness of services, the process of therapy, or benefits of help-seeking were further barriers. Facilitators largely mirrored barriers, but also suggest a valuable role for athlete role models in normalising and de-stigmatising mental health and help-seeking. Results highlight that a range of changes at each level of the sport ecosystem would be best placed to facilitate mental health help-seeking amongst athletes. Taken together, results of this review indicate that strategies to promote athlete help-seeking in sport are needed, such as stigma reduction interventions, promotion of role models, ensuring clarity around confidentiality, fostering team cultures that promote wellbeing, and furthering the role of sport staff in facilitating help-seeking (e.g., increasing sport staff as 'navigators'). These strategies, alongside cultural shifts in organisations away from a performance only focus, will also be valuable to support the success of early intervention frameworks and promote athletes' mental health.

CRediT authorship contribution statement

S.M. Cosh: Conceptualization, Data curation, Formal analysis, Methodology, Project administration, Writing – original draft. **D.G. McNeil:** Data curation, Validation, Writing – review & editing. **A. Jeffreys:** Data curation, Validation, Writing – review & editing. **L. Clark:** Conceptualization, Writing – review & editing. **P.J. Tully:** Data curation, Formal analysis, Methodology, Writing – original draft.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.psychsport.2023.102586.

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