ATHLETES' PERSPECTIVES ON HELP-SEEKING FOR MENTAL HEALTH

by

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Abstract

This thesis has multiple aims with the overarching goal of advancing the athlete mental health help-seeking literature. Specific aims include: 1) highlighting the benefit of utilizing conceptual help-seeking frameworks to aid a help-seeking research project, 2) conducting the first scoping review on the athlete-help seeking literature to map the current literature base on athletes' perspectives on help-seeking, and 3) show the benefit of using patient and public involvement (PPI) to produce a protocol for a qualitative study. Chapter 1 provides a background to the literature and shows the need for a scoping review to be conducted on the help-seeking literature. The scoping review presented in Chapter 2 is an overview of the literature on athletes' access, attitudes, and experiences of help-seeking for mental health and highlights current gaps in the literature and recommended future research directions. Chapter 3 reports on the use of PPI using the Guidance for Reporting Involvement of Patients and the Public 2 (GRIPP2) short form, including the methods taken, the impact of PPI on the project, and how it led to the development of a protocol for a qualitative study. Chapter 4 fulfills several of the recommended research directions by describing the protocol for a qualitative study on UK student-athletes' experiences of help-seeking for mental health. This chapter outlines the methods aligned to a pragmatic approach and transformative paradigm that underpins this thesis, including the sampling and data collection and analysis. Chapter 5 provides a summary of this thesis and its novel contributions. Overall, this thesis contributes to the extant literature by showing that there are yet to be any studies investigating mental health help-seeking experiences in UK student-athletes. The use of PPI in conjunction with this review provided support for a qualitative study on this population group. Furthermore, the protocol for a qualitative study aligns with a growing open science agenda by detailing rationale for the study, methods to be used, and justifications of their use. The findings and outcomes of this thesis have implications for public health, sport governing bodies, and the higher education system

particularly in supporting the mental health needs of athletes and the need for campaigns to encourage

athletes to seek help for their mental health.

Dedication

I would like to dedicate this thesis to Louis Maxwell Curry. You have been in my thoughts regularly as I did this masters over the past 2 years. You would have graduated from your undergraduate degree during the time I have done my masters and I have no doubt that you would have achieved a fantastic result. Your intelligence and determination was inspirational, and I am sure that you would have gone onto great things in the future. You always showed great interest and genuine care in what we were all up to. I wish I could have told you about the research I have done, and what I plan to do. I can imagine we'd have had great discussions about our degrees and academia whilst on a long walk at home. I wish I had the knowledge that I do now to have helped you more, and to have asked the right questions. I feel I now have a better understanding of what you may have gone through. You will always remain in my thoughts.

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List of Papers and Conference Presentations from Thesis

Conference Presentations

Brown, K.R., Tidmarsh, G, Cumming, J, and Quinton, M.L. (2022, November). Athletes' perspectives on help-seeking for mental health: A scoping review [Oral presentation]. GAMeS International Conference for Mental Health and Sport, Wollongong (virtual). https://www.thegamesconference.com/

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Publications

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List of Acronyms

BUCS: British Universities and Colleges Sport

GRIPP2: Guidance for Reporting Involvement of Patients and the Public 2

MHL: Mental health literacy

NCHA: National College Health Assessment

NICE: National Institute of Healthcare and Excellence

NIHR: National Institute for Health and Care Research

PCC: Population-Concept-Context

PPI: Patient and public involvement

PRISMA-P: Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols

UK: United Kingdom

USA/US: United States of America

Referencing Style and Editing Acknowledgement

In line with APA 7th edition American English is also used through unless quoting from a specific source.

I would like to acknowledge the role my supervisors have played in providing feedback and comments on this thesis, as well as minor editing recommendations.

List of Appendix Files

Athlete Perspectives on Help-seeking for Mental Health

Chapter 1: General Introduction

Background to Athlete Mental Health and Help-Seeking

Defining Mental Health and Mental Illness

One of the main models to understand mental health and mental illness is the Dual Continuum Model of Mental Health. This model shows how mental health and mental illness are related but also distinct concepts (Keyes, 2002). This model has been applied and validated in various studies across different population groups. For example, in 2005, Keyes' showed the application of this model to a nationally representative sample from the US. Individuals were categorized into 5 different groups; mental illness and languishing (7%), pure mental illness (15.9%), pure languishing (9.8%), moderately mentally healthy (50.6%), and completely mentally healthy (16.6%) (Keyes, 2005). These results show how mental illness and poor mental health (languishing) can be experienced in isolation as well as together. This model has also been applied across various population groups (Iasiello et al., 2020) including: in sexual minority individuals (Bariola et al., 2017), in university students (Xiao et al., 2020), and in athletes (G. A. Bird et al., 2023). Its use across a variety of population groups highlights its usefulness and wide applicability in mental health research.

Whilst the Dual Continua Model's application has been suggested in athletes (Uphill et al., 2016), it appears that the model is yet to be applied within the help-seeking literature, meaning that mental health help-seeking and mental illness help-seeking have not been distinguished. This may be because it is difficult to distinguish between help-seeking for poor mental health or mental illness until individuals have actually sought help. Therefore, for the purpose of this thesis "help-seeking for mental health" can include either seeking help for mental health or mental illness. Furthermore, within the help-seeking literature there are several different terms used which indicate the same behavior.

Defining Help-Seeking

The different terms used interchangeably within the help-seeking literature include: treatment seeking, seeking help, help-seeking behavior, mental health help-seeking, and mental health service utilization. For this thesis, help-seeking or seeking help has been used unless referring to a study where a specific term has been utilized. Furthermore, as discussed by Rickwood and Thomas (2012), there is a lack of agreed definition of "help-seeking" and many studies lack a clear definition of "help-seeking" as shown in their study. This can make comparisons across studies difficult and make it challenging to distinguish between the source of support that the study is referring to. For the purpose of this thesis Rickwood and Thomas' (2012) definition will be utilized:

> *"In the mental health context, help-seeking is an adaptive coping process that is the attempt to obtain external assistance to deal with a mental health concern"* (Rickwood & Thomas, 2012, p. 180).

Mental health help-seeking has been explored across several populations including: in the military and veterans (Coleman et al., 2017; Hom et al., 2017; N. Jones et al., 2015; McGuffin et al., 2021), young people (Gulliver et al., 2010; Lynch et al., 2018; Rickwood et al., 2005), students (Chew-Graham et al., 2003; Eisenberg et al., 2007, 2009), and now in athletes (Habeeb et al., 2022; Harris & Maher, 2022; Ojio et al., 2021). Literature within these population groups has explored barriers, facilitators, preferences, and experiences of mental health help-seeking. This thesis will explore how these have been researched in athletes. Within the help-seeking literature two concepts that have closely been researched are mental health literacy (MHL) and stigma.

Mental Health Literacy is a Concept Closely Related to Help-Seeking

MHL is defined as knowing how to prevent mental disorders, recognize mental disorders, know about help-seeking options, treatments and self-help strategies, and having knowledge of mental health first aid skills in order to help others (Jorm, 2012). It also includes knowledge of attitudes and stigma

surrounding mental health issues, understanding positive mental health, and having help-seeking efficacy related to mental illness (Kutcher et al., 2016; Y. Wei et al., 2015). In non-athletes it has been found that greater MHL is correlated with greater well-being (Bjørnsen et al., 2019) and help-seeking attitudes (Doğan et al., 2022; Kim et al., 2020). The relationship between MHL and help-seeking intentions has also been found in athletes (Oftadeh-Moghadam & Gorczynski, 2022). Additionally, stigma is an important component in mental health help-seeking.

Stigma is defined as: "a mark of disgrace associated with a particular circumstance, quality, or person" (Pearsall, 1999, p. 1410). Within mental health literature, several different types of stigma have been defined. Public stigma is: "when the general population endorses stereotypes and decides to discriminate against people labelled mentally ill" (Corrigan et al., 2014, p. 43). This turns into self-stigma when a person internalises this public stigma. Furthermore, perceived stigma is when an individual is aware of the stigma surrounding a mental illness (Corrigan et al., 2014, p. 43). In a systematic review of both quantitative and qualitative studies, most quantitative studies found a negative relationship between stigma and help-seeking and stigma ranked highly as a barrier to help-seeking in the qualitative studies (Clement et al., 2015). This relationship between stigma and help-seeking has also been supported in athletes (Hilliard et al., 2019b, 2022).

In interventions to increase mental health help-seeking the focus has often been on increasing MHL and reducing stigma. In a systematic review of 5 studies by Bu et al., (2020), it was found that increasing MHL increased help-seeking in athletes. Similarly, an intervention conducted in student-athletes reduced self-stigma, improved MHL, and improved attitudes and intentions to seek help (Chow et al., 2021). This highlights how help-seeking, stigma, and mental health literacy are closely linked concepts. This will be reinforced throughout this thesis and in the scoping review (chapter 2) by showing the use of different measures in relation to mental health help-seeking.

The Focus on Mental Health in Athletes and How the Discipline has Changed

As with other disciplines there has been and continues to be a natural progression of the literature in sport psychology. In previous years, sport psychology has been very performance focused with little research or applied practice focusing on athlete mental health. However, in the last two to three decades there has been a greater focus on the mental health of athletes within the sport psychology discipline; highlighted by a systematic review of 13 position statements on mental health in sport that were supported by a sport governing body (Vella et al., 2021). Research has covered the prevalence of mental health issues in athletes, with both smaller and larger scale studies (Åkesdotter et al., 2020; Edwards et al., 2022; Rice et al., 2016). These larger scale studies show how the discipline is moving towards epidemiological research methods traditionally used in public health research (Gouda & Powles, 2014). However, it has been argued that there is a "lack of data distinguishing between mental health symptoms from disorders" in athletes, so this is an area that requires further epidemiological studies (Currie et al., 2021, p. 1). Another area of literature that is developing within sport psychology is the mental health help-seeking literature. Within this literature the prevalence of help-seeking in athletes has been investigated (Edwards et al., 2022; Edwards & Froehle, 2023; Flatt et al., 2021) however this appears to be much less researched than the prevalence of mental health issues in athletes. Furthermore, barriers, facilitators, preferences, and experiences of help-seeking have been investigated in athletes, like the research in other population groups as mentioned above. Help-seeking in athletes is unique and complex, as athletes are situated in and have access to support across multiple different systems.

Depending on the level of the athlete and their life stage, athletes can seek mental health support from the: higher education system, healthcare system, and sport context. For example, a sub-group that appears to be heavily investigated in the athlete help-seeking literature is student-athletes (Barnard, 2016; M. D. Bird et al., 2020; Giovannetti et al., 2019; J. C. Watson, 2005). As part of this

thesis, and particularly as part of the scoping review (chapter 2), the sub-groups that have been investigated within athlete help-seeking literature will be discussed in more detail.

Significance of the Problem and Why it is Important to be Addressed

Research shows that the prevalence of mental health issues is similar in athletes compared to non-athletes, although it can differ depending on factors such as the mental health condition and gender of the athletes. For example, in a meta-analysis that compared levels of mild or more severe depressive symptoms, high performance athletes and non-athletes did not differ (Gorczynski et al., 2017). Another study found that athletes experienced greater levels of anxiety than non-athletes and this was impacted by a component of their athletic identity (Knowles et al., 2021). Furthermore, Storch et al. (2005) found that female athletes experienced greater social anxiety and symptoms of depression than male athletes and non-athletes of both genders. Although there are factors that protect athletes against mental health difficulties, such as their high levels of physical activity, there are factors that may make them more susceptible to mental health difficulties or mental ill-health.

Along with the mental health risk factors that the general population experience including financial stress (Richardson et al., 2017; H.-S. Wei & Chen, 2014), social media (Bashir & Bhat, 2017; Sadagheyani & Tatari, 2021), and the more recent impact of the COVID-19 pandemic (Knowles et al., 2021), there are independent risk factors associated with being an athlete. These can include: overtraining and physical injury, pressure to perform in their sport, and body image ideals for certain sports which may lead to disordered eating or eating disorders (Kuettel & Larsen, 2020). Furthermore, student-athletes can experience a unique combination of risk factors as they are within, and have demands from, the higher education system and sport. For example, the nature of their dual career means that they have time demands from both (Condello et al., 2019). Student-athletes have been found to experience stress from the time and performance demands placed upon them at the same

time in both the academic context and their sport (Young et al., 2022). Despite the risk factors and

demands placed on athletes, not all athletes experiencing mental health difficulties seek help.

There is a yet to be a consensus reached on the difference in rates of help-seeking in athletes

and non-athletes. However, what is clear is that there is a gap between those experiencing mental

health difficulties and those seeking help, and this gap may be greater in athletes than non-athletes. For

example, in Edwards and Froehle's (2023) study it was found that whilst 73.4% of non-athlete students

received treatment for a mental health diagnosis, only 52.4% of varsity athletes and 64.3% of

club/intramural athletes received treatment. There are specific factors associated with being an athlete

that can reduce the likelihood of an athlete seeking help, such as the sport culture reinforcing the idea

that athletes do not want to appear weak; not knowing mental health disorders or symptoms and being

able to identify when their condition becomes serious; lack of knowledge as to where to seek help; and

stigma of mental health and therefore seeking help (Åkesdotter et al., 2023; Beauchemin, 2014; M. D.

Bird et al., 2020; Gulliver, Griffiths, & Christensen, 2012). Consequently, there appears to be a mismatch

between prevalence and help-seeking, and there are clearly factors specific to athletes that can put

them at risk of mental health issues and reduce their likelihood of seeking help. This highlights the

importance of the athlete help-seeking literature and the need for the further progression of this

literature base.

The Use of Patient and Public Involvement

In order to progress the help-seeking literature in an efficient and relevant way, it is important

to involve those with whom the research effects. To fulfil this, patient and public involvement (PPI) has

been used as part of this research. As with epidemiological studies, PPI is commonly associated with

health research (Cockcroft, 2020). A similar term related to PPI includes co-production. To situate the

use of PPI within this thesis, the similarities and differences between these terms will be discussed.

Patient and Public Involvement (PPI) and Co-production

There are various ways that PPI can be used in research and what patients and the public can be involved in (National Institute for Health and Care Research, 2021f). For example, the National Institute for Health and Care Research (NIHR) (2021f) give examples of the role of patients and the public at different stages of research. This includes in the identification of research questions; in designing and managing the research (e.g., developing written information in an understandable format to those involved); undertaking the research themselves (e.g., facilitating focus groups and analysis of results); and informing dissemination. It is unlikely that PPI will be used at every stage but a select few in a study depending on time and resources available as PPI can be a time-consuming and resource intensive task, as has been found by other researchers (Boylan et al., 2019). Co-production is a way of approaching PPI and how it can be used within research (NIHR Research Design Service London, 2021; Price et al., 2022). In the case of co-production, researchers and members of the public work together from the start to the end of the project (National Institute for Health and Care Research, 2021g)*.*

As you can see by the definitions above, PPI and co-production have "different origins, expectations and norms" (Smith et al., 2023, p. 161). There are clearly similarities between both approaches but there are differences in how, and who is involved. As explained by the NIHR, there are different approaches to public involvement in research which includes: consultation, collaboration, and co-production (National Institute for Health and Care Research, 2021d), and depending upon the approach determines the level of involvement. Irrespective of the exact definition of PPI in relation to co-production, it is not clear cut. As argued with the definition of co-production, it should be accepted that there are differences in definitions, but researchers should provide "contextually specific definitions" (Smith et al., 2023, p. 162). Thus, this study views PPI as a relationship between the researchers and student-athletes to influence the research direction and produce a valuable and meaningful research project. Owing to time and resources, it is not co-production as the student-

athletes were not involved from start to finish (National Institute for Health and Care Research, 2021g). The specifics of the involvement of the student-athletes will be provided in Chapter 3 where PPI will be reported using the GRIPP2 short form.

How PPI Differs From Qualitative Research and How PPI Benefits Qualitative Research?

There has been discussion as to the difference between PPI and qualitative research. For example, what counts as PPI and when it turns into research (Mc Menamin et al., 2022). There are some key differences between the two. Firstly, ethical approval is not required to carry out PPI unless the PPI participants require direct contact with the study participants (in this case they did not) (Health Research Authority / INVOLVE, 2016). This means that it can be quicker to set up than qualitative research as formal ethical approval is not required. However, it does not mean that ethics should not be considered when designing PPI (Mitchell et al., 2019). Furthermore, it has been argued that PPI actually makes research more ethical as it makes research more relevant; helps to define what is acceptable to participants (e.g., whether research is seen as risky and if they would be willing to participate); improves the informed consent process (e.g., so they can understand any risks involved); improves the experience of participating in research (e.g., checking practical arrangements of research); and improves communication of findings (INVOLVE, 2012).

PPI is not research yet qualitative research is, as the name suggests. Therefore, you do not report the results (e.g., quotes from PPI) but you do so in qualitative research (National Institute for Health and Care Research, 2021a). The outcomes of PPI are various depending upon the level and nature of involvement but ultimately, they are to help inform the research that is done (National Institute for Health and Care Research, 2021a, 2021f). However, there is said to be a grey area as to what counts as research and what counts as PPI, as they are closely aligned and linked (Mc Menamin et al., 2022). PPI and qualitative research have different functions, but these are often complementary (H.

Morgan et al., 2016), which this thesis shows through reporting the use of PPI and how it led to the

formation of a protocol for a qualitative study.

Justification of the Use of PPI in this Thesis

As mentioned, PPI is not traditionally used in sports science research, but it is in health research

(Cockcroft, 2020; Smith et al., 2023). Thus, guidelines are from the NIHR, National Institute for Health

and Care Excellence (NICE) and the UK Standards for Public Involvement (National Institute for Health

and Care Excellence, 2023b; National Institute for Health and Care Research, 2021a; UK Standards for

Public Involvement, 2023b). However, sports science and health research are closely aligned, and these

disciplines should utilize similar research methodologies. For example, sports science has many different

areas and specialisms (e.g., physiology, psychology, and biomechanics), as does health research. Within

health and medical research, one area of focus and specialism is mental health. Mental health research

spans many different population groups including both clinical (e.g. patients with psychosis and cancer

patients) and non-clinical (e.g., young people and healthcare workers) populations (Burns & Rapee,

2006; Czuchta & McCay, 2001; Denno et al., 2022; Leighton et al., 2021; Sawyer et al., 2001; Scheewe et

al., 2013; Vizheh et al., 2020). Mental health research has utilized PPI to guide its direction (Jennings et

al., 2018; Mawn et al., 2016; The PARTNERS2 writing collective, 2020) and as a result, both guidelines

and recommendations for using PPI within this research and these populations have been written,

particularly as it may be a more sensitive area (Mawn et al., 2016; Reniers et al., 2023; The PARTNERS2

writing collective, 2020). Given the expanding area of mental health research in athlete populations, PPI

is a relevant methodology to be employed.

As has been mentioned, the discipline of sport psychology has broadened its literature base to

encompass athlete mental health from only a focus on performance (Vella et al., 2021). Therefore, it can

be shown that the gap between health and medical research, and sport psychology is closing, and there

are increasing similarities between the two areas of research (Gouttebarge et al., 2019; Merikangas et

al., 2009; Sarac et al., 2018). Consequently, it is important to consider athletes as a separate public health group with specific needs. For example, as has been mentioned athletes experience unique demands and risk factors for mental health (e.g., overtraining and physical injury, and body image ideals for certain sports) (Kuettel & Larsen, 2020). Therefore, athletes should be considered as a unique population group in healthcare policies and guidelines, such as the NICE guidelines, as other population groups with mental health difficulties are (National Institute for Health and Care Excellence, 2016, 2017, 2020). To impact the same policies and guidelines as other population groups, it is important to use similar methods such as PPI in sport psychology research, particularly when the focus is on the mental health and wellbeing of athletes. PPI is also important when focusing on an under-researched area or population group to identify research priorities and directions.

As discussed, athlete mental health has only been researched in the last 2 to 3 decades. Within this broader research, help-seeking in athletes has recently received attention. PPI improves the relevance of research by gaining input on what is important to those it affects (National Institute for Health and Care Research, 2021e). Therefore, it is particularly beneficial for under-researched areas and population groups as it advances the understanding of the research direction that should be taken and ensures that studies are meaningful early in the building of the literature. It is clearly appropriate to use PPI within the athlete help-seeking literature to ensure that the research is meaningful and relevant to those that it affects. The use of PPI will be discussed in greater detail in Chapter 3.

The Theoretical Frameworks of this Thesis

Rickwood and Colleagues Help-Seeking Frameworks

It has been argued that conceptual and theoretical frameworks are lacking in the help-seeking literature (Rickwood & Thomas, 2012). Consequently, Rickwood and Thomas (2012) proposed a help-seeking model from reviewing the help-seeking literature. This was formulated in addition to a model proposed by Rickwood et al. (2005), as part of a paper discussing the results of a series of studies on

help-seeking in young people in Australia. These two conceptual frameworks have been utilized

throughout this thesis and the chapters encompassed. The complementary help-seeking frameworks

have played a role in the formation of the research question, in the creation of the scoping review, in

the questions asked during the PPI, in the analysis of data, and in the discussion of results.

The first framework created by Rickwood et al. (2005) is framework made up of 4 stages. Table 1

shows the 4 stages, the definition of these stages, and examples from Gulliver, Griffiths and Christensen

(2012) paper on barriers and facilitators to help-seeking in athletes.

Table 1

Rickwood et al's. (2005, p. 8) *4-Stage Help-Seeking Framework and its Application to Gulliver, Griffiths and Christensen (2012) Athlete Help-Seeking Study on Barriers and Facilitators*

Stage	Definition	Example Applied to Qualitative Athlete Help-Seeking study
1: Awareness and appraisal of problems	"The process begins with the awareness of symptoms and appraisal of having a problem that may require intervention." (p.8)	A barrier to athletes seeking help was a lack of knowledge of mental health disorder symptoms and understanding if their symptoms were severe enough to need help from a mental health professional.
2: Expression of symptoms and need for support	"This awareness and problem-solving appraisal must then be able to be articulated or expressed in words that can be understood by others and which the potential help-seeker feels comfortable expressing." (p.8)	A facilitator for athletes seeking help was "being aware of your feelings and finding it easy to express them" (p.9)
3: Availability of sources of help	"Sources of help must be available and accessible." (p.8)	A facilitator to athletes seeking help was accessibility including "money, transport and location." (p.9)
4: Willingness to seek out and disclose to sources	"Finally, the help-seeker must be willing and able to disclose their inner state to that source." (p.8)	A barrier was "difficulty in or not willing to express emotion" (p.6)

In addition to Rickwood et al. (2005) help-seeking framework, Rickwood and Thomas (2012) developed a conceptual measurement framework through a systematic review of the help-seeking literature. As a result of a lack of conceptual help-seeking measurement frameworks used within this literature, Rickwood and Thomas proposed this measurement framework. Table 2 shows the components to this framework along with the definitions.

Table 2

Rickwood and Thomas' (2012) *Help-Seeking Measurement Framework*

Component of Measurement Framework	Definition of Component	Sub-Component of Measurement Framework
Process	"the part of the behavioral process that is of interest" (p.180)	Orientation = "whether the focus is on a general orientation or attitude toward obtaining assistance" (p.180)
		Intention = "future behavioral intentions" (p.180)
		Behavior = "observed behavior (either in the past or prospectively in the future")" (p.180)
Timeframe	"A course of action takes place within a particular time frame, and this needs to be specified clearly" (p.181)	i.e. past/next 4 weeks
		Past/next 12 months
		Ever

Table 2 Continued

Source	"refers to the source of the assistance that is sought." (p.181)	Formal = "professional health service providers with a specified role in delivery of mental health care (formal), ie, psychiatrist, psychologist, general practitioner, mental health nurse" (p.181)
		Semi-formal = "service providers and professionals who do not have a specified role in delivery of mental health care (semiformal), ie, teacher, work supervisor, academic advisor, youth worker, coach" (p.181)
		Informal = "informal social supports (informal), ie, friend, partner, parent" (p.181)
		Self-help = "self-help resources (self-help), ie, unguided website use" (p.181)
Type	"refers to the form of actual support that is sought, such as psychoeducation, referral, supportive counseling, and therapy" (p.181) Guidance for these sub-components are provided from the social support literature.	Instrumental = "financial assistance, transport" (p.182)
		Informational = "health-related information, referral information" (p.182)
		Affiliative = "ie, peer support" (p.182)
		Emotional = "support for emotional wellbeing" (p.182)
		Treatment = "type of treatment or health service provision" (p.182)
Concern	"the type of mental health problem for which help is being sought" (p.182)	General distress/concern Specific symptoms/types (i.e. depression)

Rickwood et al's. (2005) conceptual framework explains help-seeking as a process with distinct stages. Comparatively, Rickwood and Thomas' (2012) framework is a measurement framework as a proposal of how to measure help-seeking in research. Therefore, both serve different functions in their use within the help-seeking literature. Using both in combination means that they provide a more analytical and comprehensive approach. As will be shown in this thesis, both have a role to play and benefit in shaping research questions and analyzing results.

The application of these frameworks inside and outside of the athlete help-seeking literature

These frameworks have been applied in the help-seeking literature across various populations including athletes. Outside of the athlete help-seeking literature the frameworks have been utilized to define what source of support the study is focusing on (Martinez et al., 2020), specify the aims of the study (Schomerus et al., 2019), and to define what parts of the help-seeking process are being investigated (Tomczyk et al., 2020). Within the athlete help-seeking literature the frameworks have also been used. In an intervention study by Gulliver, Griffiths, Christensen, et al. (2012), Rickwood et al's. (2005) 4-stage framework was used to inform the three different interventions in the study, with each of the intervention focusing on one or more of the four stages (Gulliver, Griffiths, Christensen, et al., 2012). In addition, studies have contributed to the validity of Rickwood et al's. (2005) help-seeking framework (C. Jones et al., 2022), by relating their results to the framework. Similarly, in a study by Lebrun et al. (2019), Rickwood and Thomas' (2012) measurement framework was used to identify the source of support engaged with, and the type of the support. It is clear that these frameworks have been used beyond and inside the athlete help-seeking literature. However, it appears that it is unusual for both to be utilized in conjunction, with often only one or two sub-components of the frameworks being used. Furthermore, the frameworks are often only applied to one part of the paper (e.g., the aims or in the discussion of the results) as opposed to throughout a study.

Research Gaps and Aims to be Addressed by this Thesis

Help-Seeking Frameworks

Considering what has been discussed so far, there are several research gaps that this thesis has addressed. Firstly, Rickwood and colleagues' frameworks do not appear to be used in conjunction or in their entireties. As mentioned by Rickwood et al. (2005), help-seeking literature lacks the use of conceptual frameworks or theory. Therefore, the first two aims of this thesis were to show: 1) Benefits of using both the help-seeking framework and measurement framework in conjunction with each other, and 2) The benefit of using both frameworks throughout a project by using them to frame the research questions; the data extraction and analysis of the scoping review; and in the discussion of results. By investigating these aims, this thesis will make theoretical contributions to the literature. Firstly, it will show the benefit of using help-seeking frameworks when doing research on mental health help-seeking in athletes. Furthermore, it can contribute to validating the help-seeking frameworks or any potential changes required to these frameworks.

Access to, Attitudes Towards, and Experiences of Help-Seeking for Mental Health

Within the help-seeking literature in athletes there are various terms used when exploring help-seeking, and they are not always well defined. For example, 'intentions' (Hilliard et al., 2022), 'attitudes' (Hilliard et al., 2019a), 'experiences' (M. D. Bird et al., 2020), and 'availability' (Way et al., 2020). In conjunction with the use of Rickwood and colleagues help-seeking frameworks, the third broad aim of this thesis will be: 3) To provide definitions of help-seeking access, attitudes, and experiences, and situate these definitions in the literature. By addressing this aim, this thesis will make an empirical contribution to the literature and show the importance of clearly defining these terms when conducting research, alongside help-seeking frameworks.

Systematic and Scoping Reviews in the Athlete Help-Seeking Literature

  Scoping reviews are a more recent method in health research and there is yet to be a scoping review on athletes' help-seeking from formal and semi-formal sources. Also, there are only few systematic reviews on athlete help-seeking (Castaldelli-Maia et al., 2019; Moreland et al., 2018; Way et al., 2020). Consequently, the fourth aim of this thesis is: 4) To conduct the first scoping review to synthesize the evidence on athlete help-seeking from formal and semi-formal sources. This will provide a methodological contribution to the literature by using a more recent methodology and also an empirical contribution by synthesizing the evidence and highlighting gaps in the literature.

Quantitative Measurements of Help-Seeking

  As has been discussed, stigma, mental health literacy, and help-seeking are closely related concepts. There are several measures that are being used within the help-seeking literature which include these three terms, as well as the terms mentioned above (e.g., 'intentions' and 'attitudes'). Consequently, the fifth aim of this thesis will be: 5) To show the variety of help-seeking measures, and if validated measures are being used.

Patient and Public Involvement and Protocol for a Qualitative Study

  As has been mentioned, the use of PPI is more commonly used within health research (Smith et al., 2023). Within disciplines that have used PPI, it has been said that the reporting of its use has not been sufficient (J. Jones et al., 2021; Staniszewska et al., 2011). Consequently, the aims of this thesis are: 6) To show the benefit of using PPI in the athlete help-seeking literature, and 7) To show the benefits of reporting PPI. A publication format that has been introduced in recent years are protocol papers (Li et al., 2016), and this has expanded to protocols for qualitative studies (Blandford et al., 2022; Heeney et al., 2021). Therefore, an aim of this thesis is: 8) To show the benefit of writing a protocol for a qualitative study and how it can be created in conjunction with PPI. Overall, this thesis will highlight more recent and modern methods in sport psychology that have more traditionally been used in other disciplines

such as public health. This will be shown in the form of a scoping review; PPI and its reporting with the

GRIPP2 short form; and the protocol for a qualitative study. This will also highlight the benefits of

transparency in research, aligned with the open science agenda (Tamminen & Poucher, 2018).

Structure of this thesis

In order to fill the research gaps and satisfy the overall aims mentioned above, this thesis will

have 3 main chapters in addition to this introduction, followed by a discussion, and conclusion. The first

chapter is a scoping review which will map the literature on athletes' access to, attitudes towards and

experiences of help-seeking for mental health. This chapter will include an introduction, the specific

aims of the scoping review, the methods of the review, the results, and a discussion. This scoping review

will be written in line with the Preferred Reporting Items for Systematic Review and Meta-Analysis

Protocols (PRISMA-P) checklist for scoping reviews (displayed in Appendix 1) and informed by several

best practice methodological frameworks including Arksey and O'Malley's (2005). This will be followed

by the reporting of PPI, employed as part of this project, using the GRIPP2 short form. This chapter will

reflect on the use of PPI throughout this thesis; how it has informed the scoping review and its

dissemination; and the protocol for a qualitative study. The fourth chapter outlines the protocol for a

qualitative study which relates to the scoping review and was planned by the PPI group. This will outline

the methods to be used for a qualitative study including the justification of its use. This thesis will end

with a discussion and conclusion chapter. This will bring together the results from all three chapters,

outline the contributions to the literature, and recommended research directions.

Methodological Position

This thesis has been underpinned by a pragmatic approach and transformative paradigm.

Pragmatism is a practical approach to research which allows the use of any methods to answer the

research question in hand (D. Morgan L., 2014; Yvonne Feilzer, 2010). This approach will be

demonstrated throughout this thesis through the selection of a scoping review, PPI, and qualitative

protocol to answer a broad research question. It will also be shown through the adaption of these methods to suit changes and problems faced at different stages of the project. In addition, the transformative paradigm has served as a foundation for the PPI element and qualitative protocol as part of this thesis. This approach considers the relationship between the researcher and participants, including any inequalities and power imbalances, and the adjusting of methods if needed (Mertens, 2007). In the reporting of PPI and the qualitative protocol, these elements will be discussed.

Finally, I, the author, identify as an insider to the research topic which impacted the conduct of the overall project and the methods selected. However, it is recognized that "it is restrictive to lock into a notion that emphasizes either/or, one or the other, you are in or you are out." (Dwyer & Buckle, 2009, p. 60). For example, Humphrey's (2007) identifies as being an "insider-outsider." (Humphrey, 2007, p. 13). With this considered, although overall I identify as an insider, there were elements where I was an outsider. I have been a student-athlete at the University of Birmingham during my undergraduate years. During my time as a student-athlete, I experienced mental health challenges that I sought help for from different individuals and systems that have been discussed as part of this project. However, it must be noted that my challenges existed before entering university and did not come about as a result of being a student-athlete. I was part of a university sports team; however, it was a smaller club that was run by students. I only competed once in BUCS for this sport. Reflecting on these points, I had a good understanding of the support systems available to students and student-athletes. However, as I have only been a student at the University of Birmingham, I do not know how this might differ across universities. Furthermore, as the club was student led I did not experience being part of a larger club that may have access to non-student coaches, and other support systems. Finally, as I have ADHD and autism, I am aware of different accommodations and different ways of working which influenced my alignment with the transformative paradigm. The impact of being an insider will be discussed in Chapters 3 and 4.

Chapter 2: Athletes' Access to, Attitudes Towards and Experiences of Help-Seeking for Mental Health:

A Scoping Review

Introduction

The prevalence of mental health conditions appears to be similar in athletes to the general population. What is less clear and less researched are the rates of help-seeking in athletes compared to non-athletes. A study by Edwards and Froehle (2023) compared treatment seeking of student-athletes to non-athletes. Of those who had received a diagnosis for a mental health condition, 52.4% of varsity athletes and 64.3% of club/intramural athletes, compared to 73.4% of non-athletes had sought treatment. Furthermore, in all individuals irrespective of mental health diagnosis or not, treatment seeking was lower in athletes than non-athletes. 23.0% of varsity athletes, 24.2% of club/intramural athletes, and 31.1% of non-athletes, had sought prior treatment. In this sample of US university students, it was apparent that the rates of help-seeking were lower in athletes compared to non-athletes. Comparatively, a study compared athletes to non-athletes in their eating disorder characteristics and rates of seeking treatment. It was found that there were no significant differences in current treatment seeking and future intentions to seek help in those who screened positive for an eating disorder, or threshold eating disorder (Flatt et al., 2021). Irrespective of the levels of mental health help-seeking in athletes compared to non-athletes, it is evident that a proportion of athletes are not getting the help required.

There are many reasons that can prevent an individual from seeking help. An area of research that has received attention within the athlete help-seeking literature, are the barriers to seeking help. For example, as discussed by Uphill et al. (2016), there are contextual factors associated with sport that can reduce the likelihood of an athlete seeking help. For example, athletes have been found to fear the impact of disclosure and seeking support upon their selection in sport (McGraw et al., 2018). Furthermore, in a sport setting it may be difficult to distinguish between mental health symptoms and

physical symptoms that are expected to be experienced in sport such as fatigue (Uphill et al., 2016).

Gulliver, Griffiths and Christensen (2012) found that a barrier to athletes seeking help included a lack of

knowledge of symptoms of poor mental health, particularly being able to differentiate between the

physical symptom of fatigue and symptoms of depression or anxiety. Further barriers reported included

stigma associated with mental health difficulties, a lack of knowledge of mental health services and

negative past experiences (Gulliver, Griffiths, & Christensen, 2012). It is clear that there are both athlete

specific factors and general barriers to help-seeking for mental health in athletes.

As mentioned in Chapter 1, the use of conceptual and theoretical frameworks have been lacking

in the help-seeking literature (Rickwood & Thomas, 2012). Consequently, this thesis has employed the

use of Rickwood et al's. (2005) help-seeking framework, and Rickwood and Thomas' (2012) conceptual

measurement framework of help-seeking for mental health. The stages and components to these

frameworks have been outlined in Chapter 1. For the scoping review, the frameworks have aided the

formation of the research question, the aims of the review, exclusion and inclusion criteria, and analysis

of the data. The background to this review will now be mapped onto step 2 (expression of symptoms

and need for support), step 3 (availability of sources of help) and step 4 (willingness to seek out and

disclose to sources) of Rickwood et al's. (2005) help-seeking framework, and the process and source

components of Rickwood and Thomas' (2012) conceptual measurement framework. By relating existing

research on athlete help-seeking to these frameworks, it will show how they contributed to the

formation of the research question.

Formal and Semi-Formal Sources of Help (Source): For Example, Healthcare, the Sporting Context, and

the Higher Education System

Rickwood and Thomas' (2012) conceptual measurement framework categorizes the variety of

sources of help someone can seek for their mental health. Formal sources are "professional health

service providers with a specified role in the delivery of mental health care" (p.181), whereas semi-

formal sources are "service providers and professional who do not have a specified role in the delivery of mental health care" (Rickwood & Thomas, 2012, p. 181). Formal and semi-formal sources can span healthcare, the sporting context, as well as the higher education system. Formal sources include a GP, clinical psychologist, psychiatrist, university counsellors, and sport psychologists. Semi-formal sources include dieticians, physiotherapists, academic tutors, lecturers, and sports coaches. Athletes can express their need for support to any of these sources should they be accessible to them.

Expression of Symptoms and Need for Support (step 2): Athletes' Expression of Symptoms to Sources of Support

The second step to Rickwood et al's. (2005) help-seeking framework is the expression of symptoms and need for support. From the athlete mental health literature, it is apparent that athletes have disclosed mental health difficulties to a variety of formal and semi-formal sources of support. In a study of Canadian athletes, individuals shared their experiences of receiving formal mental health support which included clinical psychologists and counsellors (Jewett et al., 2021). A study of student-athletes in Canada explored their experiences of disclosing psychological distress to coaches (Bissett & Tamminen, 2022), who are a semi-formal source of support. Evidently, athletes are expressing their symptoms to both formal and semi-formal sources.

Availability of Sources of Help (Step 3): Athletes Perceived Access to Services

The third step to Rickwood et al's. (2005) help-seeking framework is the availability of sources of help. In athletes, barriers to seeking help have included a lack of physical access to services, a lack of time to access mental health support, and also knowledge as to how to access support (Gulliver, Griffiths, & Christensen, 2012). Similar results were found in a sample of Canadian athletes, whereby 47.3% of the sample said that there was a time when they wanted to access services for their mental health but chose not to, with time being the main barrier. Other barriers included lacking the awareness of mental health services (Giovannetti et al., 2019). Furthermore, in a study of student-athletes on

service availability on campus and within athletics, views on access differed depending on the type of mental health support. For example, 90.9% of participants reported access to on campus mental health services, but only 66.1% to clinical sport psychology services (Way et al., 2020). Access to mental health services is clearly an issue in student-athletes and serves as a barrier to mental health support.

Willingness to Seek Out and Disclose to Sources (Step 4): Stigma Associated with Help-Seeking and Past Experiences

The final step in Rickwood et al's. (2005) help-seeking framework is willingness to seek out and disclose to sources. Stigma has been found to be a significant factor that impacts athletes' willingness to seek out and disclose to sources. For instance, athletes have been found to experience a fear of being perceived as weak if they disclose their mental health difficulties, which is often associated with the culture of sport (Agnew et al., 2018; Åkesdotter et al., 2023; Biggin et al., 2017). Furthermore, in Gulliver, Griffiths and Christensen (2012) qualitative study, a barrier to seeking help was negative past experiences whereas a facilitator was positive past experiences. It is apparent that there are multiple layers that impact an athletes' willingness to seek and disclose to sources. However, this willingness appears to differ depending upon the source of support.

General Orientation and Attitude Toward Obtaining Assistance, and Observable Behavior (Process): Preferences of Help-Seeking

The process component of Rickwood and Thomas' (2012) framework includes general orientation and attitude toward obtaining assistance, and observable behavior. Within the athlete help-seeking literature, research has investigated athletes' preferences for help-seeking, and it appears that an athletes' willingness to disclose to sources differs depending upon who they are (e.g., formal, semi-formal or informal). This has been shown by studies focused on attitudes towards seeking help in the future. In a study by Cutler and Dwyer (2020), when experiencing stress and anxiety student-athletes' were most likely to seek help from non-team support personnel, then team support personnel, followed

by the head coach and assistant coaches. Preferences for seeking help are also indicated in studies

looking at who athletes have sought help from in the past. In Åkesdotter et al's. (2020) study, of those

who had sought, the top 3 most used sources of support were a licensed psychologist (46%), a sport

psychologist (44%) and going to a health care center (28%). This was followed by the category 'other'

who were mostly school counsellors or family/friends (18%), a medical doctor (16%), psychiatrist (12%),

and then medical team (6%). Finally, athletes have expressed characteristic preferences for a source of

support. For example, athletes' were found to express preferences for the characteristics of the

counselor that they interact with including race/ethnicity, if they are associated or located within the

athletic department, and if they have a knowledge of sport (Lõpez & Levy, 2013). Therefore, attitudes to

help-seeking includes who a person chooses to seek support from, as well the characteristics of said

person. The following paragraphs provide definitions of access, attitudes, and experiences and how the

frameworks and literature were used to inform them.

Definitions of Access, Attitudes and Experiences

Through conducting this scoping review, the following definitions of access, attitudes, and

experiences were produced. Details of how these definitions were created are provided in the methods

section of this scoping review. Firstly, the two Rickwood and colleagues help-seeking frameworks were

the basis of these definitions (Rickwood et al., 2005; Rickwood & Thomas, 2012). These were

supplemented by the theory of planned behaviors' definition of attitudes (Ajzen, 1991). The definitions

were also influenced by reading the results of qualitative papers included in the review, such as Gulliver,

Griffiths and Christensen (2012) qualitative study on help-seeking. Finally, the definitions were inspired

by discussions with the PPI group. Specifically, this is where dialogue about perceptions of support

occurred which informed the definition of attitudes. The influence of PPI will be discussed further in

Chapter 3.

Access to seeking help refers to the availability of sources of help to the individual (Rickwood et al., 2005). This includes views on physical access and awareness/knowledge of how to access services. Perspectives on physical access include views on the location of services (e.g., can the individual get to the support easily?) and on time available which impacts an individual's ability to access services (e.g., do they have time available in their schedule to access the support?).

Attitudes to help-seeking is focused on the present views or future thoughts on seeking support. Attitudes has a present and future focus. This includes future behavioral intentions to seek help and any help seeking behavior intended in the future (Rickwood & Thomas, 2012). Through the lens of the theory of planned behavior, it is the "degree to which a person has a favourable or unfavourable" view of seeking help for their mental health in the present moment, or in the future (Ajzen, 1991, p. 188). Attitudes to help-seeking also includes perceptions of support meaning the view that individuals have on the role of said sources (i.e., in the context of mental health support what does an individual think a source can help with). In another way, this can be understood as a person's beliefs about support (Ajzen, 1991). Furthermore, attitudes also encompass' an individual's preferences for support when seeking help. For example, who would they be more likely to go to and seek mental health support from? It also includes an individual's preferences for the personality characteristics of a source of mental health support. Finally, attitude includes an individual's view on their willingness to disclose to sources in the present or in the future when they interact with a source of support (Rickwood et al., 2005).

Experiences is focused on the help-seeking that an individual has engaged in, in the past. This is their observable behavior in the past within the process component of Rickwood and Thomas' (2012) conceptual measurement framework (Rickwood & Thomas, 2012). Therefore, this includes actual help-seeking behavior. Experiences also includes if an individual was willing to disclose to a source in the past (Rickwood et al., 2005). Finally, experiences comprises the comparison of help-seeking behaviors between two groups (in the past). For example, comparing the help-seeking of athletes to non-athletes

(Anchuri et al., 2020). It also includes studies that compare athletes actual help-seeking behaviors compared to whether they wanted to seek it (e.g., 50% wanted support but only 20% received it). The following section discusses these definitions in the context of current systematic reviews within athlete mental health.

Current Systematic Reviews in this Area

There are several systematic reviews on the prevalence of mental health conditions in athletes (Gouttebarge et al., 2019; Kaishian & Kaishian, 2022; Reardon & Factor, 2010; Rice et al., 2016). For example, Kaishian and Kaishian (2022) completed a systematic review on the prevalence of mental health conditions among high school and college student-athletes. This systematic review found 22 studies, of which 2 were on high school student-athletes and 20 on collegiate level student-athletes. Furthermore, a narrative systematic review that included 60 studies looked at the prevalence of mental health disorders and other conditions, such as substance abuse. Of these studies, only 25% of them were of good reporting quality, as defined by the authors (Rice et al., 2016). The systematic reviews within the athlete help-seeking literature are limited and narrow in scope (Bu et al., 2020; Castaldelli-Maia et al., 2019; Moreland et al., 2018). A systematic review by Moreland, Cox and Yang (2018) synthesized the literature on barriers and facilitators to collegiate athletes' use of mental health services. 21 studies were included and analyzed for facilitators, barriers, the conceptualization (i.e., who the athlete was seeking help from and for what), and operationalization (i.e., details of the data collection method) of mental health service utilization. This systematic review lacked a quality assessment of papers (Moreland et al., 2018). Similarly, another systematic review by Castaldelli-Maia et al. (2019) included 52 studies on barriers, facilitators, influencing factors, and preferences for counsellor characteristics when help-seeking for mental health and also cultural influences on the mental health of elite athletes.

Evidentially, these reviews have synthesized the literature on barriers and facilitators to help-seeking for mental health. However, both only included studies on either elite athletes (Castaldelli-Maia et al., 2019) or collegiate athletes and their stakeholders (Moreland et al., 2018), which could exclude studies that include athletes of a mix of levels or recreational level athletes. Although Moreland et al. (2018) categorized the barriers and facilitators by personal characteristics, attitudes and opinions, and behavior for both athletes and key stakeholders, these terms were not well defined and also did not categorize barriers and facilitators by views on access. In Castaldelli-Maia et al's. (2019) systematic review, beyond the separation of results into barriers, facilitators, influencing factors and counsellor characteristics, there was not a more detailed categorization of these results (e.g., into access to help, attitudes towards help-seeking or experiences). Further, neither review used a theoretical or conceptual help-seeking framework to understand these results.

Overall, it is clear that a more detailed analysis of athlete help-seeking studies and their results, including barriers and facilitators, is needed. The categorization of results into related factors is needed to aid the understanding of help-seeking in athletes and highlight which areas of the literature need further advancement. Therefore, this review has investigated help-seeking in athletes and framed their results into athletes' views on access, their attitudes towards help-seeking, and their experiences of seeking help for their mental health. It was also evident that the use of a conceptual help-seeking framework was important to shape a review and understand the results of studies on athlete help-seeking which would also enable better comparisons between studies. Given that the two previous reviews were published in 2018 and 2019, a more up to date review was needed to encompass the more recent athlete help-seeking literature. A scoping review is an appropriate method for this topic as athlete mental health help-seeking within sport psychology is a relatively new area, that has evidence continually emerging (Levac et al., 2010).

Aims of this Scoping Review

The aims of this scoping review were to: 1) Assess and map the literature on athletes' access to formal and semi-formal sources of support, 2) Assess and map the literature on athletes' attitudes towards and intentions to seek mental health support from formal and semi-formal sources, and 3) Assess and map the literature on athletes past experiences of interacting with formal and semi-formal mental health support. In turn this review aimed to: 1) Highlight the current gaps in the athlete mental health help-seeking literature, 2) Give suggestions for further research, and 3) Show the benefit of using help-seeking frameworks to shape and analyze the results of a scoping review.

Methods

Protocol, Registration, and the use of Software

This protocol was registered on medRxiv which was published on the 21st February 2022. This can be accessed at: https://www.medrxiv.org/content/10.1101/2022.02.18.22271182v1. Furthermore, the protocol was published in BMJ Open in 2023 (Brown et al., 2023). Covidence (*Covidence*, 2021) was the software used to aid this review which was funded by the university department.

Frameworks used to Inform this Scoping Review

The predominant methodological framework used for this scoping review was Arksey and O'Malley's (2005) 5 stage framework. The optional 6th stage of consultation was also employed, which will be explained in Chapter 4. To supplement the use of this framework, other recommendations and frameworks were utilized. This included recommendations provided by Levac et al. (2010) who supply further advice on each of the stages of Arksey and O'Malley's framework. The Joanna Briggs institute (JBI) framework and recommendations were used to ensure that the scoping review met its purpose and provided the Person-Concept-Context (PPC) approach to inform the title of this scoping review (M. Peters et al., 2021; M. D. J. Peters et al., 2021). Finally, to ensure rigor the PRISMA-P checklist has been used in the design of the review and informed the write up of this review (Tricco et al., 2018). The PRISMA-P checklist can be found in Appendix 1. Moreover, when designing this review, published scoping review protocols and results papers were consulted (Bour, Ahne, et al., 2021; Bour, Schmitz, et al., 2021; Griffin et al., 2019, 2021; A. Murray et al., 2016; A. D. Murray et al., 2017; Nobre et al., 2020, 2021). In addition to the methodological frameworks, this scoping review has been informed by Rickwood et al's. (2005) colleagues help-seeking framework and Rickwood and Thomas' (2012) conceptual measurement framework for mental health help-seeking. As will be shown, Rickwood and Thomas' (2012) framework informed the inclusion and exclusion criteria, and both informed the data extraction and analysis.

Stage 1: Identifying the Research Question

The research question ('Athletes access to, attitudes towards and experiences of help-seeking for mental health') was informed by the JBI's PCC (Population-Concept-Context) framework alongside the help-seeking frameworks provided by Rickwood and colleagues (M. Peters et al., 2021; Rickwood et al., 2005; Rickwood & Thomas, 2012). The mapping of the research question onto these frameworks is shown in

Table **3**

Research Question and How it Maps onto Conceptual Frameworks.

Table 3

Research Question and How it Maps onto Conceptual Frameworks

Component of Research Question	Framework		
	PPC Framework	Rickwood et al. (2005)	Rickwood and Thomas (2012)
Athletes	Person		
access to	Concept	Availability of sources of help	
attitude towards	Concept		Process: orientation and intention
and experiences of	Concept	Willingness to disclose to sources	
Help-seeking for mental health	Concept	Willing to seek out sources	Type: emotional support, treatment/health service provision, and informational support

Concern: any mental health

concern; specific symptoms and

general distress

Source: formal and semi-formal

Stage 2: Identifying Relevant Studies

As is recommended, the inclusion and exclusion criteria were predetermined and specified in

the protocol paper (Arksey & O'Malley, 2005; Brown et al., 2023; Levac et al., 2010). However, as the

scoping review progressed additional exclusion criteria were added at the stages of title and abstract

and full text screening, to ensure that this review met its aims. This is to be expected in scoping reviews

as it is an "iterative" process (Arksey & O'Malley, 2005, p. 22). These decisions were discussed between

the MSc student (KB) and the two supervisors involved in the review at this stage (MQ, and JC) (Levac et

al., 2010). This was the final inclusion and exclusion criteria:

Inclusion criteria:

- Athletes from any sport (person) (M. Peters et al., 2021)

- Athletes aged 16+ (person) (M. Peters et al., 2021)

- All genders of athletes (person) (M. Peters et al., 2021)

- Process

  o Observable mental health help-seeking behavior (in the past). For example, going to see

    a primary care clinician for mental health concerns.

  o General orientation or attitude toward obtaining assistance. For example, preference

    for the source of help for a mental health concern.

  o Future behavioral intention to gaining support. For example, where the athlete will gain

    support for a mental health concern in the future. (Rickwood & Thomas, 2012)

- Time frame: ever (e.g., past behaviors and future intentions) (Rickwood & Thomas, 2012)

- Source: formal and semi-formal sources of mental health support (Rickwood & Thomas, 2012)

    - For example, university counsellors and welfare officers in higher education, and a general practitioner, psychologist and psychiatrist in healthcare (formal).

    - For example, university lecturer, academic tutor and sports coach in higher education and physiotherapist and dietician in healthcare (semi-formal).

    - For example, sports coach and manager in the sporting context (semi-formal).

- Type: emotional support, treatment/health service provision and informational support. (Rickwood & Thomas, 2012)

- Concern: any mental health concern: specific symptoms and general distress. (Rickwood & Thomas, 2012)

- Primary research, reviews of any type (e.g., systematic, scoping) (this is a scoping review of the peer-reviewed published literature).

- Papers in English

Exclusion criteria:

- Source: informal, or self-help. (Rickwood & Thomas, 2012)

- Type: instrumental support and affiliative support. (Rickwood & Thomas, 2012)

- Opinion pieces, magazine articles, grey literature, and newspaper articles.

- Papers in languages other than English.

Additional exclusion criteria:

- Papers on physical injury and help-seeking.

- Papers that just included data on the percentage of athletes that sought help.

- Papers that looked at the relationship between social support and mental health.

- Papers not explicitly focused on help-seeking for mental health.

- Papers on concussion.

- Narrative reviews, conference proceedings and case studies.

- Papers that looked at attitudes towards sport psychologists.

The justifications for the exclusion criteria are displayed in the protocol paper (Brown et al., 2023). The justifications for the additional exclusion criteria are displayed in Appendix 2.

Stage 2a: Initial Preliminary Searches and Stage 2b: Identification of Key Words and Terms.

The initial preliminary searches included the terms: athlete, help-seeking experiences, attitudes to help-seeking, access to mental health services, support in education, and mental health. Through looking at the titles and keywords of returned papers, and also search strategies from scoping and systematic reviews within the mental health help-seeking literature, more defined search terms were identified (Clement et al., 2015; Gulliver et al., 2010; Schnyder et al., 2017). Combined with discussions with a librarian from the University of Birmingham, the MSc student (KB), and the three supervisors (JC, MQ, and GT), the final search strategy including truncations and Boolean operators was decided upon:

> *athlete AND mental health OR mental illness OR mental disorder OR well being OR*
>
> *wellbeing AND help seeking OR seeking help OR help OR treatment seeking OR seeking*
>
> *treatment OR support OR mental health service OR health service OR mental health care OR*
>
> *mental healthcare OR health care OR healthcare OR treatment seeking OR behavior OR help*
>
> *seeking behavior*

The search strategy including limits applied and hits for each database can be found in Appendix 3. The following databases were searched: PsychINFO (via OVID), Embase (via Ovid), MEDLINE (via Ovid), APA PsychArticles Full Text (via OVID), Web of Science Core Collection, Scopus, Sport Discus (via EBSCO), CINAHL (via EBSCO), Proquest (Education Database), Proquest (Health and Medical Collection), Proquest (Nursing and Allied Health database), Proquest (Psychology Database), Proquest (Public Health Database), Proquest (Education Collection), and Proquest (Sports Medicine & Education). These

searches were first conducted between 30 March and 3 April 2022 and were re-run between 24 and 26

April 2023.

Stage 3: Study Selection

    Stage 3a: Title and Abstract Screening. In single reviewer mode in Covidence, the MSc student

(KB) screened the first 70% of titles and abstracts before switching to dual reviewer mode so that two

reviewers (the MSc student KB and supervisor MQ) could screen the remaining 30% titles and abstracts.

At the initial stage of title and abstract screening, the MSc student (KB) selected 'maybe' for papers that

needed further discussion. These abstracts were screened by both reviewers again MSc student KB and

supervisors MQ). Once all the titles and abstracts had been screened, the MSc student and supervisor

MQ met to resolve those that were marked as having a conflict, and the second supervisor JC was

involved for those outstanding. For the updated search conducted in 2023, all additional titles and

abstracts were screened by the MSc student and two supervisors (MQ and GT) were involved where

decisions were required. In total from the searches in 2022 and 2023, 3867 titles and abstracts were

screened. By the end of screening for the searches conducted in 2022, 190 went for full text review. This

increased to 242 once the searches were conducted in 2023.

    Throughout the process of title and abstract screening, the MSc student and two supervisors

(MQ and JC) kept in contact with regards to decisions on inclusion and exclusion criteria. This was to

ensure transparency and keep in line with the recommendations that reviewers should meet at the

beginning, middle, and end of screening (Arksey & O'Malley, 2005; Levac et al., 2010; Peters et al.,

2020).

    Stage 3b: Review of Full Articles for Inclusion. Of the 190 full texts, the MSc student reviewed

all full texts and the supervisor (MQ) reviewed 20%. The MSc student and two supervisors (MQ and JC)

met throughout the full text screening, and the second supervisor (JC) was involved to resolve any

disagreements. A lack of agreement meant that the paper was excluded from the review.

  Searching of the Reference Lists. Following searches of reference lists during data extraction of

the initially included studies, an additional 9 papers were added to the review in 2022, and 2 in 2023.

  Exclusions at the Data Extraction Stage. During the data extraction stage several studies were

excluded. Reasons for exclusions at this stage included the age of the participants being too young, and

the paper not explicitly focusing on help-seeking for mental health. By the end of the process of full text

screening, 92 papers were included in the review, as displayed in Figure 1.

Figure 1

PRISMA Flow Diagram
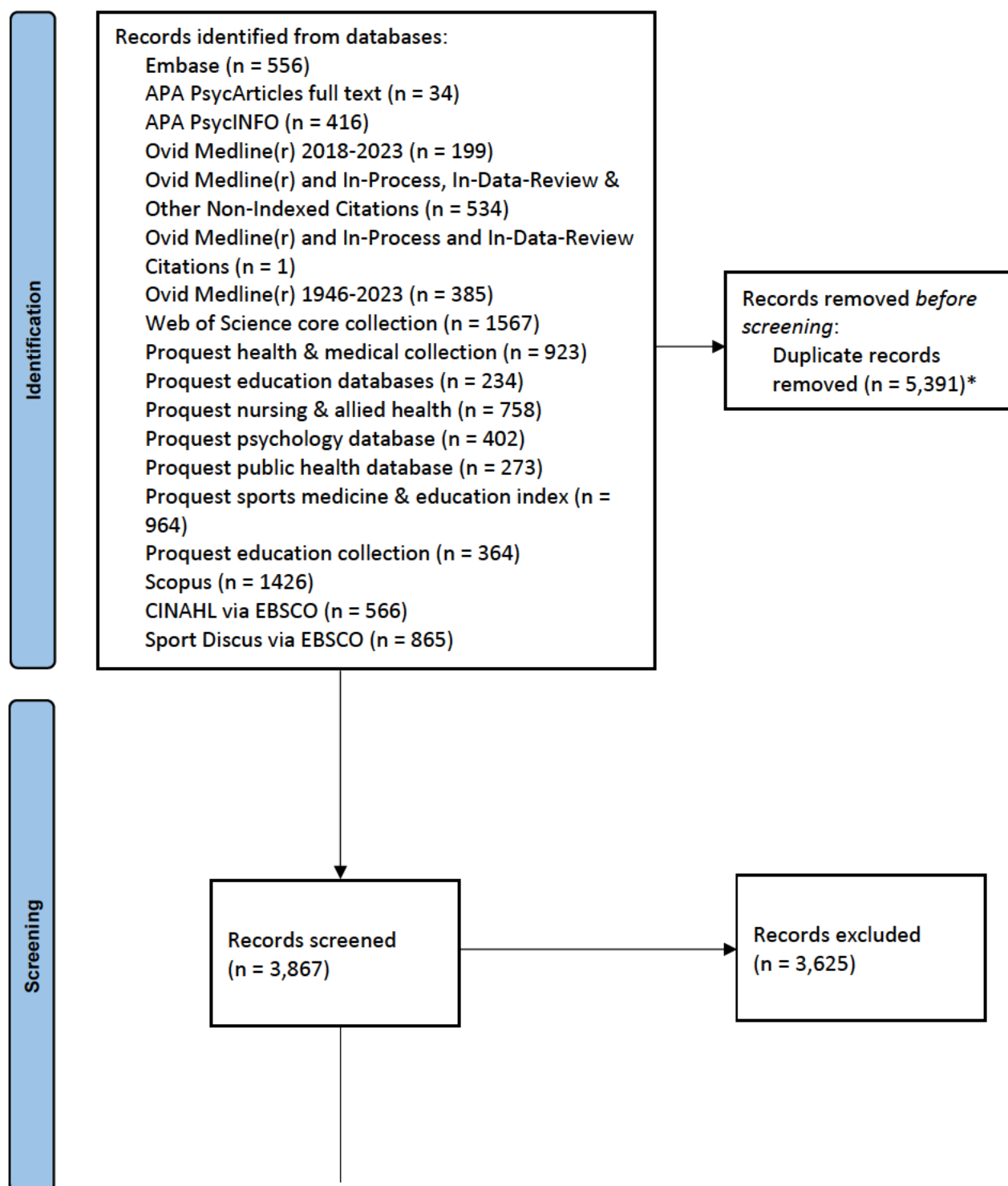
Figure 1 Continued
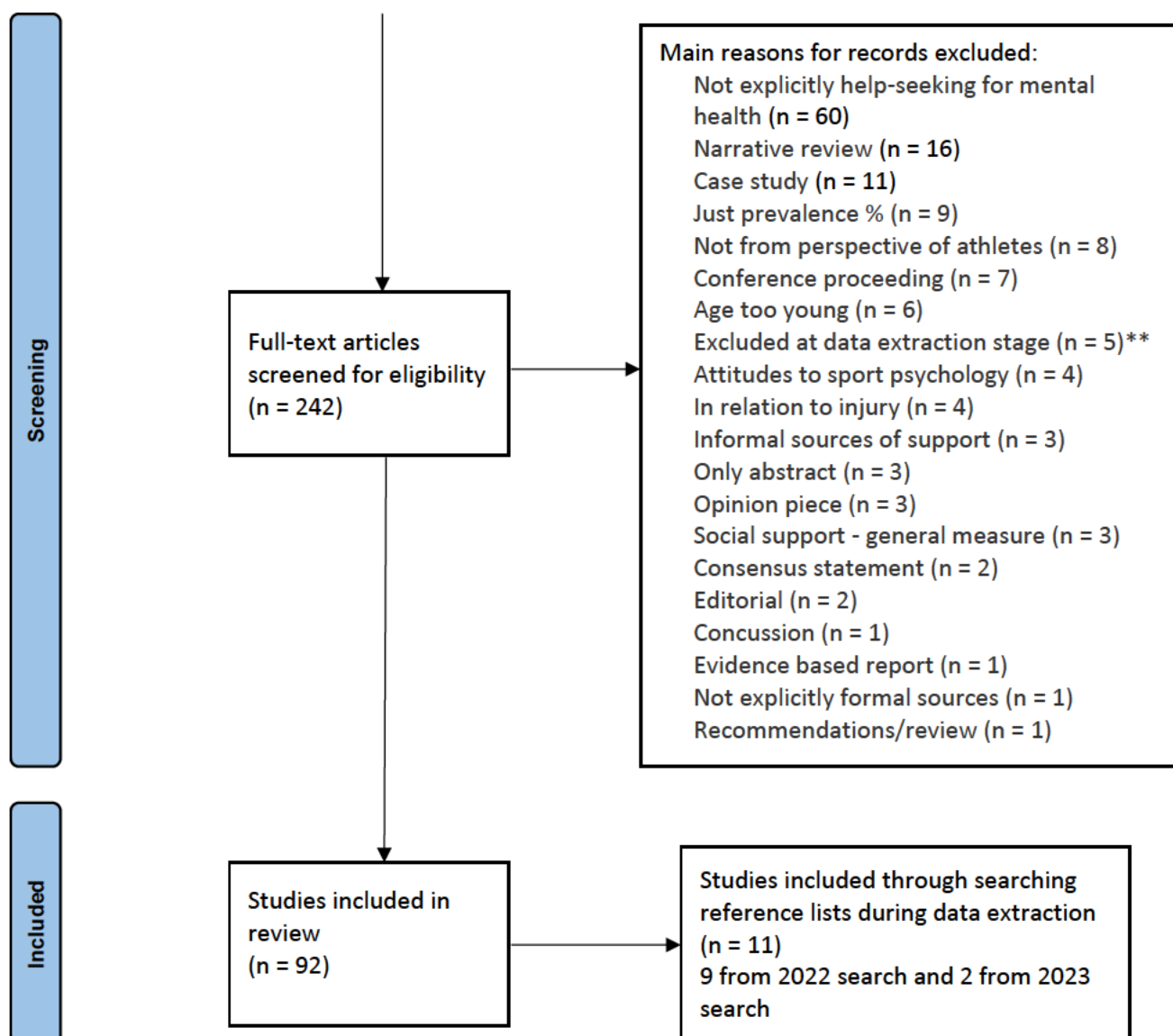
Note.

* These were the duplicate numbers from the first searches conducted in 2022

** Although 5 studies have been marked as being removed at the data extraction stage, there were more excluded that were marked with a different reason for exclusion (e.g., not explicitly help-seeking for mental health)

Stage 4: Charting the Data

Developing the Data Charting Form. Covidence (*Covidence*, 2021) was used to create the data extraction form. The form for this review was influenced by other scoping reviews and the frameworks employed (Arksey & O'Malley, 2005; Bour, Schmitz, et al., 2021; Griffin et al., 2019; Levac et al., 2010; A. Murray et al., 2016; Nobre et al., 2020; M. Peters et al., 2021; M. D. J. Peters et al., 2021). Furthermore, the form was influenced by the data extraction form used for the systematic review 'Non-pharmacological therapies for post-viral syndromes, including Long COVID: a systematic review and meta-analysis protocol' as the MSc student was involved in this review (Chandan et al., 2022). This particularly influenced the intervention component of the data extraction form. Feedback was provided by the two supervisors (JC and MQ), and amendments were made.

Stage 4a: Testing the Data Charting Form. The data charting form was initially tested by the MSc student and a supervisor (JC) whereby both independently extracted data from 5 studies into the data charting form in Covidence. This is in line with recommendations by Levac et al. (2010). Following this, the MSc student and two supervisors (JC and MQ) met to discuss, clarify, and make any required amendments to the data charting form.

Stage 4b: Charting the Data from All Included Studies*.* Once the first part of testing had been completed, the data extraction process commenced. The MSc student and supervisor (JC) then completed an additional 20 data extractions to ensure that 20% of the papers at this point were independently extracted by both. Once the MSc student and supervisor (JC) had completed 20% of the data extractions the MSc student compared the data extractions in Covidence, and both reviewers met for clarifications. The second supervisor (MQ) was involved where appropriate to discuss clarifications. Of importance, it was decided that mixed methods was to be selected if a survey included the use of an open written question alongside quantitative questions, as the open question was deemed to be the qualitative component. A list of the decisions and clarifications made at this point can be found in

Appendix 4. Following these discussions, the MSc student went on to complete the consensus data extractions in Covidence.

Further Changes to the Data Extraction Form. Once the testing of the data extraction form was completed, the MSc student commenced the remainder of the extractions. However, it became evident that the data extraction form required further changes to align with the aims of the review. The MSc student and all three supervisors (JC, MQ and GT) met to discuss the aims of the review, and the results that would likely be presented to align with these aims. The refined data extraction form and justifications for these changes are shown in Appendix 5.

Definitions of Access, Attitudes and Experiences. When refining the data extraction form, the definitions of access, attitudes, and experiences were clarified. These definitions are provided in the introduction to this chapter. The following paragraphs explain how and why these definitions were created and how papers were labelled as being focused on access, attitudes, or experiences. When doing the initial data extractions, it became apparent that it was difficult to ascertain the differences between these three concepts and the results in relation to them. Through discussions between the MSc student and all three supervisors (MQ, GT, and JC), it was decided that definitions of these terms were required. This is where the use of Rickwood and colleagues frameworks (Rickwood et al., 2005; Rickwood & Thomas, 2012), the theory of planned behavior (Ajzen, 1991), knowledge of the results of qualitative studies, and knowledge from discussions with the PPI group were used. There was consistent dialogue and agreement between the MSc student and three supervisors (MQ, GT, and JC) whilst the MSc student proceeded with this task.

Selections of Access, Attitudes, and Experiences, and Formal and Semi-Formal Sources of Support. Since the data extraction form was refined at a similar time to the formation of the definitions of access, attitudes, and experiences, it was decided that the selection of access, attitudes, and experiences, and formal and semi-formal sources of support would be based upon the abstract, the

explicit aims of the paper, and the data collection method. If it was not clear from these parts of the paper, a study could still be included in the review (as at the stage of full text screening it was deemed relevant and included in the results), but the selections of access, attitudes, and experiences, and formal and semi-formal sources of support was marked as unclear. Both attitudes and experiences were selected if it was clear that the athletes' current attitudes were shaped by their past experiences.

If a semi-formal or formal source of support was included in a measure that also referred to informal sources or self-help, then formal or semi-formal was selected based upon the sources included in the measures, and the informal source or self-help was ignored. To check if a data collection method (i.e., survey or questionnaire) included reference to formal and semi-formal sources, the details of this measure were sought for clarification.

Extraction of Intervention Studies. At this point, the inclusion of interventions and data extractions were clarified. Interventions were included if they aimed to increase or improve mental health help-seeking, either from formal or semi-formal sources, or general help-seeking for mental health. Access, attitudes, and experiences were selected based upon the goal of the intervention (i.e., is access, attitudes, or experiences towards help-seeking for mental health trying to be improved as a result of the intervention?). Formal or semi-formal was selected if the intervention was focused on improving mental health help-seeking from formal or semi-formal sources. It was left blank if it was not specified or appeared to be improving general help-seeking. Again, these were retrieved from the abstract of the paper, aims of the paper, and the data collection method used to measure the effects of the intervention.

Stage 5: Collating, Summarizing, and Reporting the Results

The data was analyzed through: 1) Descriptive numerical, and 2) Content analysis. The descriptive numerical analysis (Arksey & O'Malley, 2005; Levac et al., 2010; M. Peters et al., 2021) includes: the overall number of studies, the type of studies, the year of publications, the type of data

collection method, the study population, and the number of studies from particular countries. Details of

studies can be found in Appendix 6. In addition, directed content analysis was used to analyze the

included studies. This is when existing theory and research is used to inform analysis (Hsieh & Shannon,

2005; Potter & Levine-Donnerstein, 1999). In the case of this review, the existing theory and research

has informed the charting of the data (stage 4) in the selection of access, attitudes and experiences, and

formal and semi-formal sources of support.

Stage 6: Consultation (Optional Stage): Patient and Public Involvement

An optional 6th stage of Arksey and O'Malley's framework is consultation and stakeholder

involvement, and the importance of this step is highlighted by Levac et al. (2010). For this review, PPI

was used as consultation, and this will be discussed further in chapter 3 where it is reported using the

GRIPP2 short form. The PPI group informed the definitions of access, attitudes, and experiences, the

recommendations and further research directions as a result of the review findings, and further

dissemination that will follow from this thesis.

Results

Overview of Included Studies

       Type of Articles Included in the Review and Year of Publication. Of the 92 included studies

there were 77 primary articles (83.7%), 12 interventions (13.0%), and 3 systematic reviews (3.3%). As

shown in Figure 2, the first article on athlete help-seeking was published in 2005 which was a primary

research article by Watson (2005) on the attitudes of college student-athletes towards help-seeking (J.

C. Watson, 2005). From 2015 the number of primary articles gradually increased until 2022. The primary

articles in 2020, 2021, 2022 and 2023 accounted for 58.4% of the 77 primary articles published. The first

intervention study was published in 2012 (Gulliver, Griffiths, Christensen, et al., 2012) which was a

randomized controlled to examine the effectiveness of an internet-based intervention on help-seeking

attitudes, intentions, and behaviors. The 3 systematic reviews were published in 2018, 2019 and 2020.

Figure 2

Year of Publication of Primary Research Articles, Interventions, and Systematic Reviews
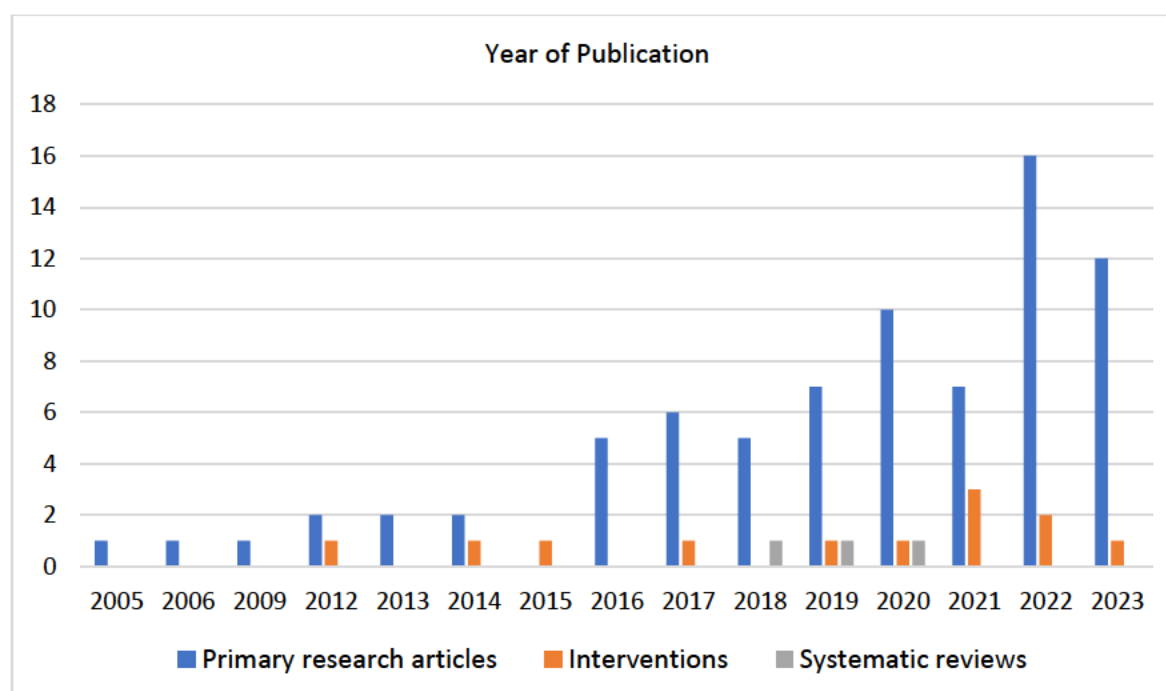
Note. The year of publication is the publication date of the printed article where available.

Geographic Location of Included Studies and the Reporting of Ethnicity. Most of the primary articles and interventions were conducted in the USA (52.2%). Following behind this, the UK/Great Britain or England conducted 10.1% of the primary articles or interventions. Primary articles and interventions were conducted in 10 other countries including Ireland (n = 5), Japan (n = 3), Canada (n = 5), Malaysia (n = 1), and Sweden (n = 2). 5 of the articles included athletes from a mix of countries and in 1 study the location of the participants was not clear. Further details and breakdown can be found in Appendix 7. Within the primary research articles and interventions, only 45 (50.6%) reported the ethnicity of athletes and 44.9% did not report any details of ethnicity. Further details can be found in Appendix 9.

Population Investigated in Primary Research Articles and Interventions and Data Collection Method for Primary Articles. Student-athletes were the population most investigated in the athlete help-seeking literature, with 60.7% (n = 54) of the 89 articles on this population group. 30.3% (n = 27) of the primary research articles and interventions were on elite athletes. Elite athletes were either defined by the author or through interpretation of the study population by the information presented. In the remaining 8 studies athletes were of mixed level. Details of this can be found in Appendix 10.

40 of the primary research articles included in the review used quantitative methods of data collection (51.9% of the 77 primary articles). There were 25 qualitative articles (32.5% of primary research articles). Within these qualitative studies, most employed semi-structured interviews and focus groups. There were only 12 primary research articles that utilized mixed methods (15.6%). Of these, only 3 articles utilized questionnaires and the use of a traditional qualitative method (e.g., interviews) in combination (M. D. Bird et al., 2020; Habeeb et al., 2022; Jewett et al., 2021). Of the qualitative studies on student-athletes, they were all conducted in the US and Canada (n = 8, n = 2). There was only 1 study on UK student-athletes, but this was quantitative. Details of these studies are provided in Appendix 6 Spreadsheet of all

Use of Validated Measures in Mixed Methods or Quantitative Studies. Table 4 shows the number of primary articles and interventions that included the use of a validated help-seeking measure in their study. For those that did not include a valid help-seeking measure, the authors either created their own measure or used data from an existing dataset such as the NCHA (National College Health Assessment). Of both the quantitative and mixed methods primary articles and interventions, 57.8% of the studies included the use of a validated measure of help-seeking, whereas 42.2% did not.

Table 4

The Use of Validated Measures in Mixed Methods and Quantitative Primary Research Articles and

Interventions

Use of a Validated Measure or not	Publications (n, %) (Out of 64 Mixed Methods or Quantitative Primary Articles and Interventions)		
	Primary Articles	Interventions	Total
Includes the use of validated quantitative measure of help-seeking	30 (57.7%)	7 (58.3%)	37 (57.8%)
Made their own measure of help-seeking or use of large survey data	22 (42.3%)	5 (41.7%)	27 (42.2%)
Total	52 (100%)	12 (100%)	64 (100%)

*Note. D*etails of the data collection methods for each study can be found in Appendix 6.

Content Analysis of Included Papers: Access, Attitudes, and Experiences Toward Help-Seeking for

Mental Health

Of all 92 included studies, attitudes were investigated the most (79.3%), followed by

experiences (50%), and then access (29.3%). Further details of the individual studies that focused on

access, attitudes, or experiences, including how these numbers were calculated, can be found in

Appendix 11. As shown in Table 5, of the primary research articles, 77.9% investigated attitudes, 53.2%

experiences, and 29.9% access. Within intervention studies, 83.3% studied the impact of the

intervention on attitudes towards help-seeking, 25% on experiences, and 16.7% on access. Within these

results, Table 6 shows a further breakdown of studies including the number of studies that investigated

the components in isolation and together. Few studies investigated access to help-seeking in isolation

(4.3%). Attitudes was the most investigated component of help-seeking in isolation, in 34.8% of all

included studies. Experiences of mental health help-seeking was studied in solitude in 13.0% of studies.

Table 5

Total Counts of Access, Attitudes, Experiences, and Formal and Semi-Formal Sources of Support

Type of article	Publications (n, %)				
	Access	Attitudes	Experiences	Formal	Semi-formal
Total for primary articles	23 (29.9)	60 (77.9)	41 (53.2)	62 (80.5)	23 (29.9)
Total for interventions	2 (16.7)	10 (83.3)	3 (25)	11 (91.7)	3 (25)
Total for systematic reviews	2	3	2	-	-

Table 6

Number of Studies Looking at Access, Attitudes, and Experiences of Help-Seeking

Component of Help-Seeking	Publications (n, %) (Out of All 92 Papers)			
	Primary Research Articles	Interventions	Systematic Reviews	Total
Access	3 (3.9)	1 (8.3)	0 (0)	4 (4.3)
Attitudes	25 (32.5)	7 (58.1)	0 (0)	32 (34.8)
Experiences	11 (14.3)	1 (8.3)	0 (0)	12 (13.0)
Access and attitudes	8 (10.4)	1 (8.3)	1 (33.3)	10 (10.9)
Access and experiences	1 (1.3)	0 (0)	0 (0)	1 (1.1)
Attitudes and experiences	16 (20.8)	2 (16.7)	1 (33.3)	19 (20.7)
Access, attitudes and experiences	11 (14.3)	0 (0)	1 (33.3)	12 (13.0)
Unclear	2 (2.6)	0 (0)	0 (0)	2 (2.2)
Total	77 (100)	12 (100)	3 (100)	92 (100)

Note. Further details of studies and the way it was calculated can be found in Appendix 11.

Content Analysis: Formal and Semi-Formal Sources of Support. Table 5 provides the number of studies that investigated formal and semi-formal sources of support. Of all the primary articles and interventions, 82% researched help-seeking from formal sources of support, and 29.2% included the investigation of semi-formal sources of support (details of individuals studies and how this was

calculated can be found in Appendix 11. Table 7 shows which of these studies looked at formal and

semi-formal sources in isolation or combined, and in which studies it was unclear from the abstract,

aims, or data collection method. In over 50% (n = 49) of primary research articles and interventions,

formal sources were investigated in isolation. In comparison just 2 articles researched semi-formal

sources in isolation. Notably, these 2 articles were both primary research papers. Formal and semi-

formal sources were researched in combination in 27% of primary research articles and interventions. In

15.7% of studies, it was unclear from the abstract of the paper, aims of the paper, and data collection

method. The breakdown of studies that focused on formal or semi-formal sources of support can be

found in Appendix 11.

Table 7

Number of Studies Investigating Formal and Semi-Formal Sources of Support

Formal and/or Semi-Formal Source of Support	Publications (n, %) (Out of 89 Primary Articles and Interventions)		
	Primary Articles	Interventions	Total
Formal	41 (53.2)	8 (66.7)	49 (55.1)
Semi-formal	2 (2.6)	0 (0)	2 (2.2)
Formal and semi-formal	21 (27.3)	3 (25)	24 (27.0)
Unclear	13 (16.9)	1 (8.3)	14 (15.7)
Total	77 (100)	12 (100)	89 (100)

Note. Formal and semi-formal sources were only extracted from primary research articles, and

interventions.

Discussion

The aim of this scoping review was to assess and map the literature on athletes' access to, attitudes and intentions, and experiences of interacting with semi-formal and formal sources of support. Resultantly, this review aimed to highlight current gaps within this literature base, give suggestions for further research, and show the benefit of using help-seeking frameworks to shape and analyze the results of this scoping review.

Overview of Included Studies

There were 92 articles included in the review with the first publication on help-seeking in athletes in 2005 (J. C. Watson, 2005). There were significantly more primary research articles (n = 77) than interventions (n = 12). The rate of athlete help-seeking literature has increased since 2015, with 68 of the primary research articles published between 2015 and 2023. It is understandable that there are fewer interventions as primary research provides evidence to support an interventions development (French et al., 2012; Gitlin, 2013). It was apparent that all the primary research studies and interventions were conducted in developed and often Westernized nations, and over half in the USA. In these developed countries the mental healthcare and access to services is often better than low and middle-income countries (Rathod et al., 2017). Just over 60% of the included primary articles and interventions were on student-athletes. A significant number of these were conducted on US student-athletes. Similarly, this has been found in a systematic scoping review of student-athlete mental health, whereby 67.3% of the 159 studies were on US student-athletes (Kegelaers et al., 2022).

45% of primary articles and interventions did not report any details on the ethnicity of athletes. In a recent literature review a lack of reporting on ethnicity has also been found in articles published in high-impact medical journals, with only 35% of the selected articles reporting ethnicity (Buttery et al., 2022). Most studies used quantitative data collection methods but within this there was variance in the measures used with over 40% of the mixed methods and quantitative primary articles and interventions

not using a validated help-seeking measure (either the measure was created by authors, or they used measures from an existing dataset such as the NCHA). It is evident that these findings are similar to other help-seeking research. For example, in a systematic review of the use of help-seeking measures in adolescent mental health research only 24% of studies used existing measures (Divin et al., 2018). The utilization of different measures impacted the selection of access, attitudes, and experiences, and formal and semi-formal sources of support.

Content Analysis of Included Papers: The Benefit of Using Help-Seeking Frameworks to Shape and Analyze the Results

The content analysis of studies in the review was benefitted by the use of Rickwood and colleagues help-seeking frameworks (Rickwood et al., 2005; Rickwood & Thomas, 2012). They also highlight the importance of understanding the quantity of research that has investigated the different components of access, attitudes, and experiences, and formal and semi-formal sources of support to understand where future research needs to focus and what needs to be targeted in interventions. Access was the least investigated component and very few studies explored access in isolation. In Way et al's. (2020) study, the student-athletes expressed a need for the availability of services specific to student-athletes. Attitudes was investigated the most and also in isolation, in comparison to access and experiences. For example, several of the studies used the validated measure: Attitudes Toward Seeking Professional Psychological Help Scale by Fischer and Turner (1970). Attitudes also encompassed self-stigma and public stigma towards help-seeking (Komiya et al., 2000; Vogel et al., 2006). As indicated in Rickwood et al's. (2005) help-seeking framework, "availability of sources of help" (step 3) predisposes "willingness to seek out and disclose to sources" (step 4). Therefore, it is important that research is focused on access as well as attitudes, because even if an individual has a positive attitude towards help-seeking they cannot seek support if the help is not accessible to them. Experiences was investigated in half of included studies and this was commonly investigated alongside attitudes. This was explored in

several qualitative and mixed methods primary articles, particularly through interviews. For example, in

Åkesdotter et al's. (2023) study they explored elite athletes' help-seeking journeys through life story

interviews. Similarly, Jewett et al. (2021) explored the interactions between athletes and clinicians when

they sought help. It is important to understand athletes experiences of help-seeking for mental health as

this can elicit further information on access and attitudes, and how athletes opinions may have been

formed, particularly as negative past experiences serves as a barrier to help-seeking (Gulliver, Griffiths,

& Christensen, 2012). It is important to understand the quantity of existing research on the components

of access, attitudes, and experiences to understand where future research should be focused.

Overwhelmingly more studies investigated formal sources of support as evidenced by the

frequent use of Fisher and Turner's (1970) Attitudes Toward Seeking Professional Psychological Help

Scale. A few of the studies referred to a specific formal source of support such as experiences and

attitudes towards counselling (Abela et al., 2021; M. D. Bird et al., 2018; R. M. Daltry et al., 2023). Only 2

primary research articles investigated athletes help-seeking from semi-formal sources, and these studies

referred to coaches as a source of support (Bissett & Tamminen, 2022; Dixon et al., 2022). Underpinning

the analysis with these frameworks has provided a novel contribution to the literature because help-

seeking research has previously lacked the use of theory. They have also helped to shape the avenues

for further research, which will be discussed next.

Limitations

There are a few limitations to this scoping review. Notably only papers published in English were included owing to limitations in the reviewers involved. The quality of the articles was not assessed or commented on in anyway, although this is not within the aims of a scoping review (Arksey & O'Malley, 2005). Owing to the number of studies included in the review, it was not feasible to also include results of studies beyond stating whether they were referring to access, attitudes, or experiences and formal or semi-formal sources support. However, given the nature of scoping reviews and the aims of this scoping review, this was appropriate. Only papers from the perspective of athletes were included. Beyond the opinion of athletes', literature has focused on the perspective of other individuals on supporting athletes' mental health. For example, both Lebrun et al. (2020) and Mazzer and Rickwood (2015) investigated the experiences of coaches and their perceived role in supporting young athletes mental health.

Future Research Directions

Overview of Included Studies

This scoping review has highlighted gaps for systematic reviews within athlete help-seeking. Given that only 3 of the 92 included studies were systematic reviews the athlete help-seeking literature would benefit from further reviews. The existing reviews were published in 2018, 2019 and 2020, and a significant proportion of the primary articles were published since then (45.5%), there is clearly a need for further systematic reviews to include this literature. This scoping review has helped to identify further topics for systematic reviews, which is one of the aims of this type of methodology (Arksey & O'Malley, 2005), and will be discussed in the next section. Given that most of the studies were on athletes in more developed and westernized nations, it is apparent that further research is required within less developed countries. Research indicates that levels of mental health stigma may be greater in less developed countries than developed nations (Lauber & Rössler, 2007; Mascayano et al., 2015;

Seeman et al., 2016). Reasons for this include cultural factors such as shame and power differences between therapists and patients (Javed et al., 2021). Given that the USA made up over half of the primary articles and interventions, there is still a need for further research in developed countries across Europe such as the UK.

Furthermore, given the lack of reporting of ethnicity in studies, further research should be sure to include this, to allow comparisons to be made where appropriate and to identify ethnic groups that may be more at risk of reduced help-seeking in athletes. This is important as research indicates that ethnic minorities can experience greater stigma (Jimenez et al., 2013; Rao et al., 2007) and reduced help-seeking (El-Khoury et al., 2004; McMiller & Weisz, 1996; Takeuchi et al., 1988). There were also issues around the terminology used to describe ethnicity, often with the term "race" used in replacement. Therefore, future research needs to specify race or ethnicity and how it is defined in their study to allow for comparisons between studies to be made (Ford & Kelly, 2005).

The comparability of quantitative studies is currently limited owing to the variety of help-seeking measures used. Therefore, the field of sport psychology needs to reach a consensus on validated help-seeking measures to be used within this growing area of research. Given that a significant number of primary articles used quantitative methods of data collection, there is a need for more qualitative studies and mixed methods studies to investigate help-seeking in athletes to gain a more in-depth understanding of help-seeking experiences.

Content Analysis of Included Papers

This scoping review shows that access, attitudes, and experiences for mental health help-seeking have all been covered within this literature base, but greater research is required on access as this is the least investigated. Further research should also ensure that they define what aspect of help-seeking they are investigating. It is suggested that further research should ground this within a help-seeking framework or theory such as Rickwood and colleagues (Rickwood et al., 2005; Rickwood &

Thomas, 2012) as this will ensure that comparisons between future research can be made more easily, and therefore the literature can be advanced more quickly. This scoping review only included articles referring to formal and semi-formal sources of support and did not include articles that investigated athletes' perspectives on informal sources of support and self-help, which are also likely to be utilized by athletes. Given that the scope of the review was already significant when only including formal and semi-formal sources, only these articles were included. However, it is evident that more research is required on athletes' interactions with semi-formal sources of support including the attitude that athletes have towards them, and experiences of interacting with them if they have done so. This is important to understand as semi-formal sources of support (e.g., coaches and academic tutors) may be more readily available to athletes and interact with them more frequently. Irrespective of the source of support investigated it is recommended that further research be clear in what source of support they are referring to. As mentioned in Rickwood and Thomas' (2012) help-seeking measurement framework, it is important to identify the source being investigated. In 15% of primary articles and interventions the source of support being referred to was not clear from the abstract, aims, or explanation of the data collection method. Therefore, within the athlete help-seeking literature, the sources of support need to be better defined. As mentioned above further systematic reviews are needed on this topic. This scoping review has highlighted the categories of help-seeking literature that exist (access, attitudes, experiences, and formal and semi-formal support) and so future systematic reviews should base their more refined research questions around these categories. The perspective of individuals that interact with and provide mental health support to athletes are also important and this literature should be investigated in future reviews.

Conclusion

This was the first scoping review conducted on the athlete mental health help-seeking literature which was appropriate given the relatively new literature base and limited systematic reviews. This

scoping review included 92 studies which mapped the literature on athletes' access to, attitudes towards, and experiences of help-seeking for mental health from formal and semi-formal sources of support. The benefit of utilizing help-seeking frameworks to aid the conduct of a scoping review was highlighted. Overall, most literature was focused on attitudes towards help-seeking and formal sources of support. Over half of the articles were conducted in the USA and student-athletes were the most investigated population group. Quantitative methods of data collection were the most popular, but not all of these studies used validated help-seeking measures. This scoping review has highlighted several future research directions including the need for more qualitative studies on athletes' outside of the USA and greater research on athletes' views on semi-formal sources of support. Importantly, aligned with one of the functions of scoping reviews, topics for further systematic reviews were highlighted. The next chapter in this thesis will outline the use of PPI in this thesis, how it has informed the scoping review, and how both in conjunction led to the protocol for a qualitative study.

Chapter 3: PPI – Reporting on the Use of PPI Using the GRIPP2 Short-Form

Introduction

PPI is traditionally used in health research, and lacks use within sports science (Cockcroft, 2020; Smith et al., 2023). PPI can encompass consultation, collaboration, or co-production. The NIHR explain the difference between these terms, as situated within PPI. Consultation is when members of the public are asked for their views, and these inform the decisions made by the researchers. Collaboration is where there is an ongoing partnership between the researcher and the public, and research decisions are shared (e.g., during dissemination). Finally, co-production is when the power and responsibility is shared between the researcher and the public, from the start to the end of the project (National Institute for Health and Care Research, 2021d). During this project, consultation and collaboration has been used and within these there are many ways that patients and the public can be involved.

The NIHR explain the different ways that PPI can occur within consultation and collaboration. This includes identifying and prioritizing research (e.g., helping to prioritize research questions), designing and managing research (e.g., considering ethical concerns and solutions), analyzing and interpreting results (e.g., checking the conclusions the researchers have reached from a public perspective) and disseminating research (e.g., creating dissemination plans with the researchers) (National Institute for Health and Care Research, 2021b). During this project the PPI group were involved in all 4 of these stages, which will be explained in this chapter. Involving patients and the public in research has many advantages, both for the research and the individuals who are involved. It ensures that research is relevant to those that it affects and therefore improves the quality of research. Importantly, involving patients and the public improves the dissemination of research findings by helping to develop the strategies to disseminate (Agyei-Manu et al., 2023; National Institute for Health and Care Research, 2021e). Patients/the public can also benefit by being involved in research as they can gain greater knowledge about a research topic and it can make individuals feel empowered, by

giving them a say in a research agenda (Agyei-Manu et al., 2023; National Institute for Health and Care Research, 2021c). Overall, there are many ways and benefits to involving patients and the public in research. However, the reporting of such involvement has been debated.

In the past, PPI has lacked consistent reporting and therefore led to the development of the GRIPP checklist, followed by the GRIPP2 short and long forms (Jones et al., 2021; Staniszewska et al., 2011, 2017). However, the use of these checklists has been questioned (J. Jones et al., 2021; Scholz & Bevan, 2021). The GRIPP2 forms may be seen as administrative task completed prior to publication, and does not promote reflexive reporting of the use of PPI (e.g., existing power imbalances). It has been suggested that the discussion of power imbalances should be included as part of the critical perspective (Scholz & Bevan, 2021). The long form has been reported to be complicated and repetitive in nature in comparison to the short form (J. Jones et al., 2021). The reporting of PPI as part of this project has used the GRIPP2 short form, as PPI was a secondary aim of this project (Staniszewska et al., 2017). However, to address some of the limitations of the short form, the long form was also consulted particularly to facilitate the reflection and critical perspective which is included in the general discussion chapter of this thesis (chapter 5). Given that the use of PPI is lacking in sports science, it was important to report it to encourage future use of PPI in the discipline.

Aims

The primary aims of the PPI used as part of this project were to consult and collaborate with student-athletes to: 1) identify and prioritize research questions at the beginning of the broader project, 2) help to analyze and interpret results from the scoping review conducted as part of the wider project, 3) inform a dissemination plan for the scoping review, and 4) design a qualitative study with the MSc student (KB). A secondary aim was to show how PPI could be used in sports psychology research and reflect on its use within athlete mental health research.

Methods

Sampling, Recruitment, and Participant Characteristics

Student-athletes were recruited to be part of the PPI group to collaborate with and consult throughout the project. It was decided that student-athletes with experience of mental health help-seeking were to make up the PPI group as this was the focus of the project. Student-athletes were recruited through circulating a poster (see Appendix 12) asking them for their input on the project. As specified in the recruitment poster student-athletes were defined as those who currently, or in the past: a) participated in a university sports team, and b) are (or were) a higher education student. The recruitment poster was created and disseminated via the social media platforms: Facebook and Twitter. The MSc student (KB) also emailed mental health charities for student-athletes to share throughout their network as well as internal university email lists to students. The recruitment poster was also sent out to university sport contacts such as the guild sports officer and a sports team that the MSc student had contact with. Bias in recruitment was avoided by sharing it widely across the university and also by other means to reach student-athletes at other universities. However, since the MSc student (KB) was a student-athlete herself and was already connected with other student-athletes on her personal social media, it meant that the MSc knew some of the athletes recruited. However, everyone who wished to participate was included meaning that the individuals included that the MSc student knew were not included at the expense of other student-athletes. Once individuals got in contact following recruitment, the MSc student (KB) sent them a role profile which detailed their involvement and asked if they would still like to participate having read it. This role profile can be seen in Appendix 13. 5-6 student-athletes were involved at each stage of the PPI. The plan was to have 6 student-athletes participate in all three stages of the PPI. However, owing to availability, this was not the case. Three student-athletes took part in all 3 stages, 1 athlete in 2 stages, and 3 athletes in 1 of the stages.

Data was not collected on participant characteristics. However, from the groups conducted it was evident that there was a mix of sexes and the type of sports they were involved with. As specified in the role profile they had to currently (or have recently been) a university student and an athlete within university sport i.e., competing in BUCS or for their college/school.

Stages of PPI

There were three main stages to the PPI. The plan was to use focus groups however given availability difficulties, some of the individuals took part through interviews. These focus groups/interviews were organized by using an anonymous doodle poll or Microsoft form. Each focus group/interview lasted a maximum of 1 hour 15-minutes each, and in line with NIHR recommendations the participants were paid £25 in a voucher for each focus group/interview (total £75 for all 3) which were paid after each stage of PPI (National Institute for Health and Care Research, 2023). This was funded by the public engagement fund at the University of Birmingham. Throughout the focus groups the MSc student (KB) conducting the PPI reinforced that the student-athletes were the expert and wanted them to impact the research that would be carried out, which aligned with the transformative paradigm (Mertens, 2007). This was to reduce the power imbalance between the MSc student and student-athletes in the PPI group (National Institute for Health and Care Research, 2021d). Where possible, a facilitator was also present to contribute to discussions, make notes and ask additional questions.

PPI Phase 1 – Shaping the Research Question. The first of the focus groups occurred at the end of April 2022 with an additional interview at the start of July 2022. Firstly, the student-athletes were involved at an early stage of the research during the formation of the project and initial ideas. The aim of this first stage was to shape the research question. Firstly, a background to the study was provided to student-athletes including the prevalence of mental health issues in athletes, the definition of help-seeking, Rickwood et al's. (2005) help-seeking framework, and common barriers to help-seeking for

mental health. Ground rules for the groups were also set. This was followed by an explanation of the importance of their input as the PPI group and the current thoughts for a qualitative study. They were asked 5 main questions and follow up questions which can be found in Appendix 14. The 5 main questions were:

- Where do student-athletes go to support their mental health?

- What are the most important things we need to ask those who have experience supporting student-athletes with their mental health?

- From your perspective of a student-athlete with lived experience, who do you think I should interview from the healthcare and higher education systems?

- From the literature it seems like there are various accessibility issues (i.e., a lack of physical access and knowledge of how to access). What do you think?

- Going back to this help-seeking framework that I presented earlier on and based on our discussions, is there anything else missing from this framework?

PPI Phase 2 – Analysis of Results and Dissemination Plan. The second stage of the PPI was conducted at the end of April 2023. This was to gain feedback on the results of the scoping review and their views on further areas of research required. The PPI group also provided feedback on the dissemination of results including who it should be disseminated to, and how. Once the different forms of dissemination are produced, the PPI group will be providing written feedback. This will help the language and format of dissemination, so it is more accessible to those that it affects. Examples of the questions asked during the second stage were:

- Lots of the studies in the scoping review focused on attitudes and less on access and experiences. What do you think about this? Do you think attitudes is the most important?

- Most studies are quantitative or mostly quantitative with some open questions. What do you think about this?

- Some studies focused on a specific source of support, but others looked at general help-seeking. If studies focused on one, it was generally a formal source such as counselling. What do you think about this?

- With regards to dissemination, who are the most important people to be aware of this research? This could include organizations, universities, or specific sectors.

- If I were to write a blog post to disseminate the findings to the public, what points do you think would be important to get across?

The full list of questions asked during the second stage are available in Appendix 14

Questions Asked in PPI Focus Groups 1, 2 and 3

PPI Phase 3 – Planning a Qualitative Study. The final stage of PPI also occurred at the end of April 2023. In these focus groups the student-athletes provided feedback on a qualitative protocol (e.g., the methods to be used) and designed the interview guide with the MSc student. Examples of questions asked during the third and final stage of PPI were:

- What are your thoughts on the more creative component of help-seeking mapping? Do you have any other suggestions on creative components that might work well to engage people?

- Do you think you would prefer a template or a blank piece of paper when doing the help-seeking mapping?

- What are your thoughts on a walking interview?

- How do you think I should manage participant and also researchers' safety?

Further details of questions asked during this focus group are available in Appendix 14 and the interview guide created with the MSc student are provided in Appendix 16. Each stage of PPI provided invaluable feedback for the overall project and the results of these 3 PPI phases are reported in the following section.

Results

        The results from all three stages are presented below, including the key findings and how the

PPI impacted the project overall, particularly Chapter 4.

PPI Phase 1 – Shaping the Research Question

        During the first stage of the interviews/focus groups, the complexity of the topic became

apparent. The PPI group highlighted the significant range of sources of support available to student-

athletes in the UK, but also the differences in the availability of these sources depending upon the level

of the athlete, the sport and the impact of academic background on their understanding of mental

health. Through discussions of Rickwood et al's. (2005) help-seeking framework it was apparent that

overall the components of this framework were accepted by the student-athletes. However, the order

of the components and the addition of others were discussed as well. This provided support for a

qualitative study on help-seeking and the use of mapping to understand the process of help-seeking in

student-athletes. It also provided support for the development of definitions of access, attitudes, and

experiences to inform the scoping review as there were discussions on what some of these terms meant

to the student-athletes.

PPI Phase 2 – Analysis of Results and Dissemination Plan

        The second focus groups/interviews supported the interpretation of the results of the scoping

review and informed the future research recommendations as a result. This included a need for more

research on semi-formal sources of support; studies that research access, attitudes, and experiences

together; and the benefit of qualitative data collection methods to investigate help-seeking experiences.

This provided support for the qualitative study protocol which will investigate access, attitudes, and

experiences towards semi-formal and formal sources of support. The PPI group also discussed who it

should be disseminated to (e.g., different sporting bodies) and how the blog post should cover key

takeaway points for student-athletes and sources of support. It became apparent that written feedback

on these forms of dissemination would be beneficial which will be sought once they have been

produced.

PPI Phase 3 – Planning a Qualitative Study

The third focus groups played a pivotal role in planning the qualitative study (chapter 4). They

expressed their views on the data collection methods and the logistics of such methods. For example,

which locations would be appropriate for the walking interviews to take place and the equipment that

would be helpful to conduct the mapping of help-seeking. The PPI group also co-created the interview

guide for the qualitative study with the MSc student (KB), which covered introduction questions,

questions on access to support, attitudes towards help-seeking, and experiences of help-seeking. This

ensured that the wording of questions was appropriate and relevant. They also gave important advice

on how to phrase questions differently depending upon how comfortable the individual participating in

the interview might be.

Discussion and Conclusions

Overall, the PPI contributed to the shape of the broader project however the impact varied

across different stages. The PPI group did not shape the scoping review research question or aims as this

was already decided before the first focus groups took place. However, they did provide support for the

creation of the definitions of access, attitudes, and experiences to inform the analysis in the scoping

review, supported with the interpretation of results, and future research recommendations. The impact

of the PPI group on the protocol for the qualitative study was greater, as they were involved in the

design of the data collection and formation of the interview guide. As a whole, the PPI group had an

impact from the early stages to the end of the project.

Given that the student-athletes were involved across most of the project, this benefitted their

overall participation. It was apparent that their engagement in the second and third focus groups was

improved as they had an understanding of the project, and had engaged in the first focus group. This

was also because rapport was built up between the participants and the MSc student (KB), and the MSc student had built confidence in conducting the focus groups/interviews. The MSc student already had pre-existing connections to some of those involved in the PPI group. Although it could be argued that having these pre-existing connections could lead to more socially desirable answers, this was less likely owing to the nature of the questions asked in the PPI which did not require disclosure of their past experiences. In contrast, these pre-existing connections likely facilitated this rapport building and therefore benefited the engagement and participation of the individuals. The engagement and impact of the PPI group was also likely greater because they were all university students at either an undergraduate or postgraduate level, meaning that they had a good understanding of research methods and design. The monetary reward for taking part likely facilitated their positive attitude towards participation.

At the beginning of each focus group/interview the PPI group received a background to the questions that were going to be asked and what was needed from them during the focus group. This was beneficial as it prompted thinking and helped them to answer the questions that followed. However, some of the questions were phrased in a way that implied that the decision had already been made, which may have limited the student-athletes' from expressing their true opinions. Another factor that may have limited knowledge sharing of the PPI group was the difficulty in getting availability to match up meaning that the maximum size of the focus groups was 2 student-athletes, and some had to participate in interviews. Focus groups are beneficial because they can enhance the elaboration of answers (Heary & Hennessy, 2006), and so the use of interviews and small focus groups may have limited this benefit. However, the smaller group sizes meant that each individual had more time to contribute and give in depth answers.

Conclusion

This chapter has outlined the use of PPI that shaped the overall project including the interpretation of results from the scoping review and the design of a qualitative study. Furthermore, the benefits of the PPI were discussed as well as challenges and factors that may have impacted their involvement. Importantly, this chapter aligns with the need for greater reporting of PPI to progress its use in research, and the recommendation for its use within sport psychology. The next chapter is a protocol for a qualitative study that was co-created with the PPI group in phase 3.

Chapter 4: Student-Athletes Access to, Attitudes Towards, and Experiences of Help-Seeking for Mental

Health from Formal and Semi-Formal Sources of Support: A qualitative Study Protocol

Introduction

Student-Athletes and Help-Seeking

The current literature base on athlete help-seeking has investigated barriers and facilitators to

help-seeking for mental health (Gulliver, Griffiths, & Christensen, 2012; Lõpez & Levy, 2013; Moreland et

al., 2018). Barriers include access difficulties such as lack of availability of mental health support, and not

having enough time to access support (Gulliver, Griffiths, & Christensen, 2012). Athletes have also

expressed negative attitudes towards help-seeking. Quantitative studies have shown that stigma is

correlated with more negative attitudes towards seeking help (Hilliard et al., 2022; Kroshus, 2017). One

study on student-athletes found that public stigma was correlated with self-stigma, and in turn greater

self-stigma was correlated with more negative attitudes towards help-seeking (Hilliard et al., 2019b).

Finally, barriers to help-seeking have also been found to include negative past experiences, whilst

positive past experiences serve as a facilitator (Gulliver, Griffiths, & Christensen, 2012). This research on

athlete help-seeking has covered different sub-populations (e.g., student-athletes, elite athletes).

Student-athletes are a particularly important sub-group within the athlete help-seeking

literature. In the UK, there are 100,000 student-athletes who compete in BUCS (British Universities and

Colleges Sport) (British Universities and Colleges Sport Limited, 2022) and in the USA there are over

520,000 NCAA (National Collegiate Athletic Association) student-athletes (National Collegiate Athletic

Association, 2022, p. 90). These student-athletes are experiencing a dual-career as they have competing

demands from both the higher education system and sport (Condello et al., 2019). The expectations to

perform in both the academic context and sport has been found to cause stress in student-athletes

(Young et al., 2022). For example, Harris and Maher (2022) found that student-athletes experienced

difficulty in "juggling academic, athletic, and social demands" (p.5). It is evident that these expectations

and stressors are causing mental health symptoms and disorders in student-athletes, which require mental health support.

Quantitative studies have investigated the prevalence of mental health difficulties and rates of help-seeking in student-athletes, suggesting that there may be a gap between those experiencing symptoms and those seeking support. Research has shown varying levels of mental health symptoms and conditions in student-athletes (Drew & Matthews, 2019; Edwards et al., 2021; Kraus & Tibbetts, 2022; Sarac et al., 2018). In Drew and Matthews (2019) study, 27% and 34.1% of student-athletes reported elevated symptoms of depression and anxiety, respectively. Similarly, in Kraus and Tibbets (2022) study, 33% of the student-athletes experienced moderate to severe symptoms of depression, and 28.5% moderate to severe anxiety symptoms. When looking at the prevalence of mental health conditions in student-athletes, Edwards et al. (2022) found that 19.0% of 508,672 varsity athletes had been diagnosed or treated for a mental health disorder in the previous 12 months. Similarly, in Edwards and Froehle's (2023) study of 2,167 student-athletes, 19.3% reported a prior mental health diagnosis. Within the student-athletes who had received a diagnosis, only 52.4% of varsity athletes and 64.3% of club/intramural athletes had received treatment. This shows that there is a gap between the student-athletes experiencing mental health difficulties, and those receiving treatment. There is a variety of sources of support that student-athletes can seek support from, and treatment if required.

Student-athletes are in a unique position given that they are situated in both the higher education system and sport. Consequently, they have access to a variety of sources of support for their mental health, such as from sport, the education system, and healthcare. Qualitative studies have explored student-athlete perspectives, barriers, and experiences of seeking help from different sources across these contexts (Bissett & Tamminen, 2022; Delenardo & Terrion, 2014; Ryan et al., 2022; Young et al., 2022). In Ryan et al's. (2022) study, they explored baseball and softball student-athletes' barriers to seeking help and their opinion on what services they required for their mental health. Barriers

mentioned included stigma and the need to appear tough. The athletes mentioned that it was important

for them to be able to seek help from a variety of sources (e.g., a sport psychologist), but the awareness

of such services differed across the athletes. Similarly, Young et al. (2022) explored student-athletes'

perceptions of the accessibly of support, and their experiences of interacting with counselors and

coaches. Student-athletes identified both internal (e.g., coaches, athletic trainers, dieticians, and sports

psychologists) and external sources (e.g., family, friends, and personal psychology services) of support.

Although there were positive and negative perceptions of the mental health resources provided to

student-athletes, one of the negative views was that their role as a student-athlete was not always

understood by therapists and counselors. However, as demonstrated within Chapter 2 of this thesis,

these qualitative studies have only been done within US and Canadian student-athletes.

Contribution of this Study

To my knowledge, there have been no qualitative studies on help-seeking in UK student-

athletes. Therefore, this paper will outline a protocol for a qualitative study to be conducted on UK

student-athletes. This qualitative study will provide a novel contribution to the literature as it will

provide a more detailed understanding of student-athlete help-seeking beyond quantitative studies.

This study will provide an understanding of student-athlete help-seeking experiences from any formal or

semi-formal sources of support that they may have interacted with. This will help to understand the

formal and semi-formal sources of support student-athletes are getting help from across the higher

education system, sport, and healthcare. It will highlight the individuals that are most important to

student-athletes for mental health support and the ones that need to improve the support they provide

to student-athletes. This can contribute to policy and practice in supporting student-athlete mental

health across different contexts including healthcare and the education system.

Aims

The purpose of this qualitative study is to gain an in-depth understanding of student-athletes

access to, attitudes towards, and experiences of seeking help for their mental health from formal and

semi-formal sources of support that are situated with the healthcare system (public or private), higher education, and sport.

This study aims to understand:

1. Student-athletes views on access

    a. Student-athletes' ability to physically access formal and semi-formal sources of mental health support

    b. Student-athletes' knowledge of how to access formal and semi-formal sources of mental health support

2. Student-athletes' attitudes

    a. Student-athletes' attitudes towards help-seeking for mental health

    b. Student-athletes' preferences for mental health support from formal and semi-formal sources

    c. Student-athletes' perceptions of formal and semi-formal sources of support

3. Student-athletes' experiences

    a. Student-athletes' experiences of formal and semi-formal sources of support

    b. How student-athletes' experiences impact their attitudes towards help-seeking

Methods

The Fit of this Protocol Within the Wider Project: Scoping Review, PPI, and Theoretical Focus

This protocol has been developed as part of the wider project that encompassed a scoping review (chapter 2) alongside working with the PPI group of student-athletes which has been discussed in the previous chapter (chapter 3). This is displayed in Figure 3. These different components together provided great insight into the development of this qualitative protocol. The scoping review showed that to date more help-seeking studies had used quantitative data collection methods than qualitative. The

PPI group expressed the importance of qualitative data collection methods for more in-depth answers and particularly important to understand student-athlete experiences of help-seeking. This provided support for the development of a protocol for a qualitative study. Furthermore, the scoping review showed that few studies researched all components of access, attitudes, and experiences together. When discussing this with the PPI group, they expressed that all 3 components (access, attitudes, and experiences) are important to be researched in student-athletes. Thus, as shown by the aims, this qualitative study will investigate student-athletes views on access, attitudes, and experiences. The scoping review highlighted that the current help-seeking literature base is mostly from the USA (over half of the studies). As discussed in Chapter 2, few articles were conducted in the UK/Great Britain or England, and only 1 of these was on student-athletes. The only qualitative studies conducted on student-athletes were from the USA or Canada. Therefore, there is a clear gap for a qualitative study on UK student-athletes.

As discussed in the previous chapter, the PPI group has been essential in the formation of this protocol. They participated in focus groups and interviews to provide feedback on the data collection methods and the production of the interview guide. This PPI has been used in combination with help-seeking frameworks to inform this wider project. In keeping with the rest of this project, this qualitative protocol has been influenced by Rickwood et al's. (2005) conceptual help-seeking framework and Rickwood and Thomas' (2012) conceptual measurement framework. The decisions involved in this wider project and qualitative protocol have been underpinned by the MSc student's methodological position.

Figure 3

A Diagram to Show How the Wider Project has Led to the Development of this Qualitative Protocol
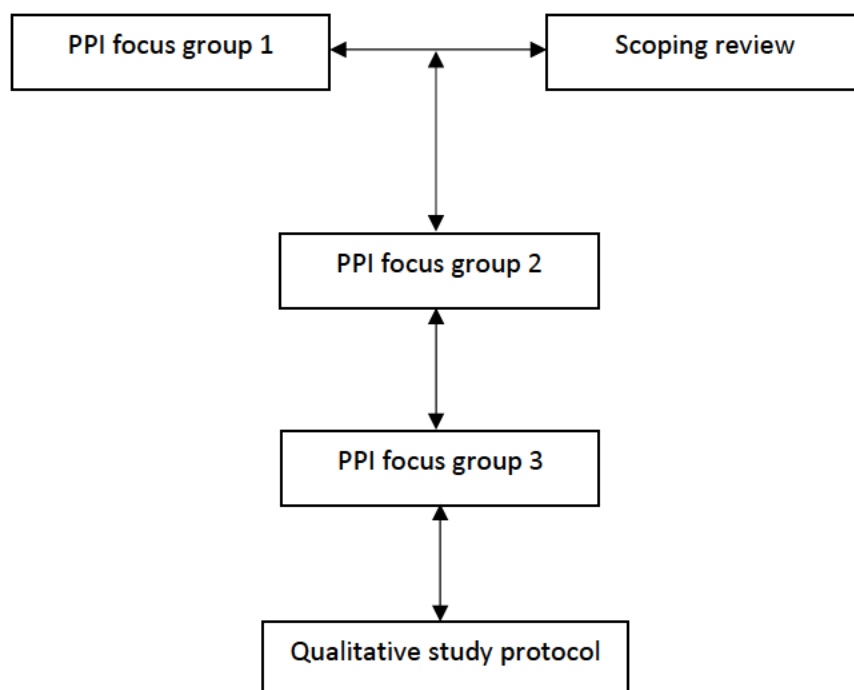
Methodological Position

As has been discussed in detail in Chapter 1, the thesis and therefore this qualitative protocol

has been underpinned by a pragmatic approach and transformative paradigm (Mertens, 2007; D.

Morgan L., 2014; Yvonne Feilzer, 2010). The authors' insider perspective has also influenced the

methods used in this qualitative protocol.

The Participants

UK student-athletes' will be interviewed in this qualitative study. Student-athletes will be

included if they are English speaking and are competing in a BUCS team for their UK-based university

(i.e., the competitions run by the national governing body for higher education sport). They must have

previously sought help for a mental health difficulty, disorder, or illness from formal or semi-formal

sources of support from healthcare, the higher education system, or sport. To participate, they must be

aged 18-25 years old as recruitment will largely take place within Birmingham where there is a specific

0-25 mental health service (Forward Thinking Birmingham, 2023). Conversely, student-athletes will be

excluded if they do not speak English and do not compete in a BUCS team. They cannot be included if

they have no experience of seeking help for a mental health issue because this study seeks to

understand help-seeking experiences, as well as attitudes, and access.

Sampling and Recruitment

This study will utilize purposive sampling (Etikan, 2016) which will be used to engage athletes

from different sports, levels of competition, and different degrees of study. This decision has been

informed by the results of the PPI group. For example, mental health literacy may differ between more

health-related degrees (e.g., sports science and physiotherapy) than others. Furthermore, athletes at a

higher level may have access to greater levels of support. To understand potential differences and to

make results more generalisable to the entire student-athlete population the purposive sampling will be

used to ensure that there is an even split between these different categories. These student-athletes

will be recruited through university sports clubs via university social media (e.g., sports teams pages and university pages) and university email lists. When recruiting via social media, comments will be disabled meaning that individuals cannot tag others in these recruitment posts as individuals may not wish to disclose that they have sought help for mental health difficulties.

Data Collection: Mapping of Help-Seeking and Walking Interviews

The methodological approach taken is narrative research whereby this study will seek to understand participants personal stories of help-seeking from their perspective (Overcash, 2003). This qualitative and narrative approach will be collected in two stages which will be comprised of: 1) mapping of help-seeking, and 2) a walking interview. The reason for the two stages and particular methods is to get a more in-depth understanding of athletes' experiences of help-seeking. Since individuals process differently, they may prefer one method to another but the hope is that the same level of contribution and data can be retrieved from all participants. These methods will be as flexible as possible to cater for different needs of the participants such as different neurodiverse conditions (e.g., dyslexia, dyspraxia, ADHD, and autism) or physical disabilities. This aligns with the transformative paradigm which states that modifications "may be necessary to collect valid data from various groups" (Mertens, 2007, p. 220). The insider status of the MSc student (having ADHD and autism herself) influenced the decision to use these methods and ensured that the data collection methods were as inclusive as possible within the scope of the study.

Mapping of Help-Seeking. Mapping of help-seeking will be the first stage to the data collection. Since this may be the first time that the athlete has processed their help-seeking journey this approach will be as flexible as possible (e.g., option to use a template) which will be explained in the following section. The aim of the mapping is to gain an understanding of an athletes' mental health help-seeking journey including when they first experienced mental health concerns, when they first sought help, and who they have sought help from. To complete this task, they will all be given a sheet explaining the aims

of the mapping, with example question prompts. It will be made clear that this task is not a test of their

knowledge and there is no right or wrong way to create their map. The MSc student (KB) will also be

present to answer any questions should they arise. The use of a mapping method has previously been

used to understand adolescents' health and illness experience in elite sport (Schubring et al., 2019) and

to understand resilience in marginalized groups (Kolar et al., 2015), which showed to be beneficial in

understanding important events. Similarly to these studies, questions and prompts will be used. They

will include:

- When did you first notice you were having mental health concerns?

- When did you decide to seek help?

- How long was the time period from noticing symptoms to when you first sought help?

- Did you have any difficulties with accessing support?

- Who did you seek help from? Was there a particular order to the sources that you sought help

  from?

- What were your experiences of engaging with the sources of support?

To complete this task the athletes will be given access to different pieces of equipment, including A3

paper (unlimited amounts), sellotape, fine liner-coloured pens, post it notes, a ruler, pencils, biro pens,

and arrow stickers. An optional template will also be offered in addition to the information sheet should

the participants require it, as it is recognized some individuals may find this task more challenging than

others. An example of this template can be found in Appendix 15. Should it be required for accessibility,

this task can be done digitally using PowerPoint or any other software a participant would like to use.

Similarly, if the student-athlete would prefer to do it in their own home, or cannot travel to campus,

they are able to do it via zoom with the MSc student (KB). In this case the equipment will be posted to

the participant.

Walking Interviews. The second part to this qualitative study will be walking interviews. These will be semi-structured in nature and build upon information provided in the student-athletes help-seeking map. These interviews will last between 60 and 90 minutes. Given that this study involves interviewing participants who may have a variety of mental health conditions, a walking interview is an appropriate method. As well as the positive reactions towards walking interviews by the PPI group (e.g., a form of active recovery and more relaxing than sitting face to face), research has suggested several benefits of walking interviews. For example, walking interviews have been found to last longer than sedentary interviews, with more natural breaks in conversation (Evans & Jones, 2011). This is beneficial as it allows the participant to consider what they will say next (Kinney, 2017). Furthermore, for many individuals talking may be easier whilst walking. For example, in a study considering the use of walking interviews with autistic individuals it was found that this method made the autistic individuals feel more comfortable, as they did not need to make eye contact with the interviewer (Marcotte et al., 2022). Therefore, walking interviews may also be more comfortable for others with a variety of mental health conditions, who could be participating in this study.

Previous research has discussed how walking interviews can be useful to understand a person's experience and perspective on a particular place, and can therefore enhance the data collection process (Evans & Jones, 2011). In the case of this study, as it is not about an individual's interactions with place, the specific location is not as important. However, through discussions with the PPI group it became apparent that doing the walking interview in a place away from campus would be more appropriate, given the sensitive nature of discussions. Considering the benefit of walking in nature for well-being and mental health (Marselle et al., 2013; Olafsdottir et al., 2020), it was decided that walking in nature would be beneficial for these interviews. For example, in Bourneville Park, Cannon Hill or Winterbourne Gardens (Birmingham based locations). To make the walking interview accessible, and so not to exclude any individuals, alternative options to the walking interview will be offered. For example, if the

participant is not located in Birmingham, or would prefer it, a virtual walking interview will be offered. In

In this case the participant and interviewer will be on the phone to each other but will walk where they

like. If walking is not an option for a participant, then they will be offered to meet at an outdoor space

with seating in nature to conduct the interview. These interviews will be recorded using a Dictaphone or

in the case of a virtual interview via a phone call on zoom which would be audio recorded.

Given that the walking interviews will be conducted in a public place, away from campus, the

safety of both the researcher and participant must be considered. These considerations have been

created in consultation with the PPI group. Firstly, a pre-defined walking route will be selected from the

locations mentioned above. These routes will involve laps of a shorter circuit to enable a participant to

stop or withdraw at any point. In Birmingham the locations selected will be familiar to the participants

but away from campus. The MSc student will tell their supervisors the date, time and route of the walk,

and the participant will be encouraged to do the same (e.g., by letting a trusted friend know). Both the

participant and the MSc student (KB) will be required to have their mobile phone with them, and the

MSc student will share their location with a supervisor.

Interview Guide Created by the PPI Group. As discussed, the interview guide for this qualitative

study has been co-created with the PPI group. The questions will cover student-athletes' views on

access to mental health support, their attitudes towards support, and their experiences of help-seeking

and interacting with mental health support. Although these questions are separated into access,

attitudes, and experiences, it is recognised that there is cross over between the questions so they may

fit in more than one category, and the interview may not follow this exact structure. This will follow

introduction questions which aim to make participants feel as comfortable as possible and find a

common ground between the MSc student and participants. The full interview guide can be found in

Appendix 16. As recommended by the PPI group, the phrasing of these questions can be made less

direct if the person appears uncomfortable. For example, the use of 3rd person such as "how do you

think someone....?" and giving fake scenarios to elicit responses. For example, "a student-athlete has been feeling down and wants to go and seek help. Who do you think they should go to?"

This is a list of sample questions from the interview guide:

Introduction questions:

- Have you done an interview before?

- What sport do you do?

- Have you ever been diagnosed with a mental health condition?

Questions on access to mental health support:

- What do you understand by the term access to mental health support?

- What sources of mental health support are available to student-athletes?

- Do you feel like you can physically access support for your mental health? Has mental health support been available to you when you have needed it?

    o Have you ever struggled to access support when you have needed it?

Questions on experiences of seeking mental health support:

- What do you understand by experiences of seeking support for mental health?

- Who did you seek support from in the past?

- When did you first realize that you were experiencing mental health difficulties?

- When did you first seek support?

- What were the support characteristics that made them a good source of support?

- Did the source of support understand the context of sport?

Questions on attitudes towards mental health support:

- What do you understand by the term attitudes to help-seeking?

- What are your attitudes towards help-seeking for your mental health?

- Is your overall attitude positive/negative regards to the systems and support available to you? Why?

- What barriers are there to seeking help?

- What is your preferred source of support? Give examples of formal/informal sources

Paying Participants

The participants will be compensated for their time with a monetary or voucher reward for their participation in this research project as per NIHR guidelines on paying participants (National Institute for Health and Care Research, 2023). Payment can also help to recruit participants from different socio-economic backgrounds which arguably makes research more ethical (Różyńska, 2022). Furthermore, participants have recognised the benefits of payment to enable more "equitable participation", (p. 129) and also to recognise participants contribution of their time (Russell et al., 2000). Taking a pragmatic approach, participants will be paid as they are student-athletes who may not be able to participate otherwise.

Data Analysis

The data produced from this study will be analyzed using directed content analysis in a deductive fashion (Hsieh & Shannon, 2005). The data will be analyzed deductively using Rickwood and colleagues' help-seeking frameworks (Rickwood et al., 2005; Rickwood & Thomas, 2012). Having presented Rickwood et al's. (2005) help-seeking framework to the PPI group, overall they were satisfied with this framework as a representation of help-seeking, although there were some discussions around the order of the components. The help-seeking maps created by the participants will show their process of help-seeking and allow comparison to the existing frameworks. The following steps for data analysis have been informed by two papers (Elo & Kyngäs, 2008; Gale et al., 2013). The recorded interviews will firstly be transcribed. Following verbatim transcription of the interviews, the MSc student will get familiar with and start to make sense of the data. A coding matrix will be developed in excel informed by

Rickwood and colleagues help-seeking frameworks (Rickwood et al., 2005; Rickwood & Thomas, 2012) and the MSc student and a supervisor will code the first few transcripts deductively using the matrix and then compare results. For any data that does not fit neatly into the frameworks an 'other' category will be created. The remainder of the coding of the transcripts will be completed by the MSc student. For data that does not fit the frameworks and is in the 'other' category, it will be interpreted and analyzed with the creation of additional coding groups. The data from the help-seeking maps and interviews will then be presented using concept mapping (Daley, 2004), utilizing the help-seeking frameworks as a basis and then with any further categories added appropriately. Through this concept mapping, the data will be reduced to enable the representation of the data in a succinct way (Daley, 2004).

Ethics and Dissemination

Since the topic of discussion is a sensitive and potentially triggering one, distress of participants may arise. To manage this, the information sheet given to participants prior to giving consent will give a detailed explanation of what is to be discussed. The participants will be asked if there are any topics that they do not want to be discussed or questioned on, and if this is the case, the MSc student will avoid asking questions on that topic. The participants will have the right to withdraw at any point of the study should they wish to. This will be made clear in the information sheet and at the start to both parts of the qualitative study. Since the walking interview will be located away from campus, imposing the right to withdraw could be more challenging. This is the reason for choosing to do smaller circuits to enable this to be easier for the participant to leave when they would like to. The information sheet will also provide a list of mental health resources that the student-athlete can contact following the interview should they require it. This will include immediate support such as helplines, as well as who to contact for longer term support. This will also be provided to the participant at the end of each of stage of data collection.

The dissemination of the qualitative study will include both academic and non-academic formats. For example, an academic publication, conference presentation, and a blog post. The dissemination will be targeted at universities and their sports clubs. For example, contact will be made with the well-being department and emailed to individual sports clubs.

Conclusions

This chapter has outlined the protocol for a qualitative study on UK student-athletes mental health help-seeking which will be the first of its kind. This protocol has been informed by the wider project that it is situated within, using the results from a scoping review and feedback from the PPI group. Specifically, student-athletes views on access to mental health support, attitudes towards help-seeking, and experiences of help-seeking will be investigated through conducting help-seeking mapping and walking interviews which have been planned by the PPI group.

Chapter 5: General Discussion

Summary and Contributions of the Findings of this Thesis

There were several important findings of this thesis. The following section has framed the summary of these findings in line with the aims of this thesis that were first set out in the introduction. These aims were to: 1) show the benefits of using both Rickwood and colleagues help-seeking framework and measurement framework in conjunction with each other, 2) show the benefit of using both frameworks to frame research questions, data extraction and analysis of the scoping review, and in the discussion of results, 3) provide definitions of help-seeking access, attitudes, and experiences, and situate these definitions in the literature, 4) conduct the first scoping review to synthesize the evidence on athlete help-seeking from formal and semi-formal sources of support, 5) show the variety of help-seeking measures and if validated measures are being used, 6) show the benefit of using PPI in the athlete help-seeking literature, 7) show the benefit of reporting PPI, 8) show the benefit of writing a protocol for a qualitative study in conjunction with PPI. The findings produced from these aims have made several theoretical, methodological, and empirical contributions to the literature which will be discussed in the sub-headings below.

The Benefit of Rickwood and Colleagues (2005, 2012) Help-Seeking Frameworks

The first aim of this thesis was to show the benefit of using Rickwood and colleagues help-seeking frameworks (Rickwood et al., 2005; Rickwood & Thomas, 2012) in conjunction with each other and the benefits of using these two frameworks throughout this thesis to aid the formation of research questions, data analysis, and the discussion of results. Alongside this, a second aim was to show the benefit of defining access, attitudes, and experiences and situate these definitions within the literature. Firstly, Rickwood and colleagues frameworks (Rickwood et al., 2005; Rickwood & Thomas, 2012) aided the formation of the scoping review research question and inclusion/exclusion criteria of studies to be included in the scoping review. For example, for the scoping review title of 'Athletes access to, attitudes

towards, and experiences of help-seeking for mental health' the 'access' component was informed by Rickwood et al's. (2005) framework where the third stage is the availability of sources of help. In Rickwood and Thomas' (2012) measurement framework they suggest that there are four different sources of support for mental health (formal, semi-formal, informal, and self-help). For the purpose of the scoping review, articles were only included if they referred to formal or semi-formal sources of support, and informal or self-help were excluded. It was beneficial to use these frameworks for the research question and inclusion/exclusion criteria because the criteria were already well defined which helped inform decisions on the inclusion of articles in the review and meant that the research question was grounded in evidence in the form of theory. This is similar to how theory can guide the development of an intervention (Cummins, 2022; Noar & Zimmerman, 2005). Previous help-seeking research has used the theory of planned behavior and the Health Belief Model, and these have also been applied in the athlete help-seeking literature (M. D. Bird et al., 2020; Habeeb et al., 2022). To my knowledge, these frameworks have not been applied to a scoping or systematic review within the athlete help-seeking literature. The use of these frameworks in such ways have made important methodological contributions.

These frameworks benefited the analysis of studies included in the review. Both frameworks aided the definitions of access, attitudes, and experiences. For example, timeframe was specified in line with Rickwood and Thomas' (2012) conceptual measurement framework which helped to define attitudes as having a present or future focus and experiences as referring to the past. Previously these terms have not been well defined within the athlete help-seeking literature. For instance, research on attitudes has included reference to stigma and preferences for help-seeking (M. D. Bird et al., 2018; Lõpez & Levy, 2013). However, these are generally indicated by the measures used as opposed to definitions put forward by authors. Clearly defined concepts in the literature are important to enable the understanding of differences between concepts that are closely related (Podsakoff et al., 2016) and

in the case of this thesis has enabled more accurate analysis of papers included in the scoping review.

The terms were defined using the help-seeking frameworks, theory, and previous research (Ajzen, 1991;

Gulliver, Griffiths, & Christensen, 2012; Rickwood et al., 2005; Rickwood & Thomas, 2012). It highlights

the importance of defining these terms within the help-seeking literature going forwards to enable

comparisons between studies. This is both an important theoretical and empirical contribution to the

literature.

Systematic and Scoping Reviews in the Athlete Mental Health Help-Seeking Literature

Given the more novel research method of scoping reviews and their intended use, the aim of

Chapter 2 was to conduct a scoping review on mental health help-seeking in athletes. Scoping reviews

have become a popular methodology within health research (Levac et al., 2010). They are intended to

answer broad research questions and can be used prior to a systematic review to understand its

feasibility (Arksey & O'Malley, 2005). To my knowledge, there was yet to be a scoping review conducted

within the athlete help-seeking literature. Therefore, it was appropriate to conduct a scoping review on

this topic as the research question on athletes' access to, attitudes towards, and experiences of help-

seeking for mental health from formal and semi-formal sources was broad. The scoping review found 92

articles on athletes' help-seeking for mental health which mostly focused on athletes' attitudes towards

help-seeking and formal sources of support. Previous systematic reviews on athletes' views on help-

seeking for mental health were published in 2018 and 2019 and included 21 and 52, respectively

(Castaldelli-Maia et al., 2019; Moreland et al., 2018). These systematic reviews did not categorize results

by access, attitudes, and experiences, which was a novel empirical contribution of the scoping review

conducted as part of this thesis.

Quantitative Measurements of Help-Seeking

Another aim of this thesis was to understand if validated help-seeking measures are being used

within the athlete mental health help-seeking literature base. It became apparent that a variety of

validated and non-validated help-seeking measures have been used within the athlete help-seeking

literature. Such a variety of measures can make comparisons of results between studies difficult.

Highlighting this makes a methodological contribution as it shows the need for the use of existing and

validated measures which has also been identified in a systematic review on help-seeking measures

(Divin et al., 2018).

Patient and Public Involvement and Protocol for a Qualitative Study

In combination with the scoping review, this thesis aimed to show the benefit of more novel and

open science research methods and their contribution to the athlete mental health literature. The use of

PPI makes methodological contributions as it is not commonly used in sports science but has been

recommended recently (Cockcroft, 2020; Smith et al., 2023). The writing of a qualitative protocol in

combination with the PPI group shows the advantages of using PPI and the benefit of writing a protocol

for a rigorous study. The writing of the protocol also aligns with the open science agenda (Dienlin et al.,

2021). Drawing on the GRIPP2 long form (Staniszewska et al., 2017) the next few paragraphs are the

MSc student's reflections on using PPI as part of this project, referring to the barriers and enablers of

implementing it.

At the outset of deciding to use PPI as part of this project there were both barriers and enablers

to the conduct of PPI. The MSc student (KB) was influenced by previous experience working on the

Therapies for Long COVID (TLC) study whereby PPI was an integral part, which the MSc student was

involved in (Haroon et al., 2022). The TLC project was the MSc students' (KB) first experience of using PPI

and the only approach that they had been exposed to. Thus, a similar approach was taken. For example,

phase 1 of the PPI as part of this project was similar to the focus group carried out for a systematic

review as part of the TLC project (Chandan et al., 2022), which led to the use of a PowerPoint

presentation followed by questions for the group. Arguably without this experience, the MSc student

(KB) would have been unlikely to have used PPI as part of this project. Colleagues from this group also

provided advice on various aspects of PPI as part of this research such as the development of the recruitment poster, how to best recruit, and how to write a role profile (Mum-PreDICT, 2023). However, as the author had only been exposed to PPI as part of the TLC study, and only had an awareness of guidelines for the use of PPI within health research, this limited the methods used for involvement of PPI as part of this project.

Furthermore, there is no guidance created for conducting PPI within sports science, or specifically for use within sport psychology. Current guidance by the NIHR and UK standards for public involvement is for research conducted within the NHS, and health and social care, and therefore is not specific to the sport context (National Institute for Health and Care Research, 2021f; UK Standards for Public Involvement, 2023b). Likewise, there is a lack of examples and literature reflecting on the use of PPI in sports science, which has also been reported by others (Cockcroft, 2020; Smith et al., 2023). Thus, the use of PPI in this project had to be informed by research and guidelines that may not be completely applicable to sport psychology research.

The Need to be Flexible. As with many research projects, the scope of the project changed and therefore so did the use of PPI. From the first stage of PPI, it was apparent that the topic was more complex than originally thought, and therefore it was deemed appropriate for the PPI group to be involved in planning a qualitative study. This highlights a benefit of PPI as it challenged the "researchers aims and assumptions" (p.2) which in the long term will improve the relevance of the research project (NHS Health Research Authority / INVOLVE, 2016). Therefore, it was beneficial to be flexible in the approach taken so that the PPI group could be used in the most relevant way. At the same time, the timescales and those involved also needed to change. This aligns with the pragmatic approach taken to the overall research project.

As a consequence of the PPI group being involved in the analysis of the scoping review results, the second and third stages of PPI had to take part at a later date, once the review had been completed.

This meant that some of the participants originally involved could no longer take part, meaning that recruitment of student-athletes needed to occur once again. From one focus group to the next, and within each stage, the MSc student added questions based on prior focus groups, aligned with an iterative approach (Clarke, V. [@drvicclarke], 2022) and the pragmatic approach that underpins the project (D. Morgan L., 2014; Yvonne Feilzer, 2010). This meant that additional responses could be drawn out of the focus groups by adapting to the information that had already been provided and building upon that.

MSc student as an Insider. As was discussed in the introduction to this thesis, the author has previously been a student-athlete at this university. The hope is that this may have reduced some of the power differentials between the participants and the MSc student (National Institute for Health and Care Research, 2021d). The insider status of the MSc student meant that they were able to contribute to, and ask more questions as they understood the system well. However, as the MSc student did not disclose their own mental health experiences, power differentials were still existent between the MSc student and the PPI group. This has been discussed in a paper reflecting on the use of PPI within mental health research which stated that: "Some lived experience expertise within the research team remained undisclosed, concealed behind a job title" (The PARTNERS2 writing collective, 2020, p. 6) which is also the case in this project.

Kept Momentum and Made the Research feel Meaningful for the MSc Student. Having a PPI group involved from the beginning of the project gave greater meaning to the project. Given that the project was largely a review, with a lack of interaction with participants, the PPI group gave greater meaning to what was being read in the review and why it was being done. For the MSc student (KB), it created feelings of excitement and positivity about the chosen topic of research and the impact that it could have. Other researchers have also experienced similar feelings from using PPI (Boylan et al., 2019). Furthermore, using PPI made the MSc student feel like they were doing the right thing by aligning with

research priorities and recommendations (Boylan et al., 2019; Cockcroft, 2020; National Institute for Health and Care Research, 2021f; Smith et al., 2023) with the benefit of producing a more valuable and informed study. Again, others have experienced these feelings as pressure is being applied to use PPI more widely (Boylan et al., 2019). Overall, using PPI as part of the project provided motivation to meet milestones and do the research on this topic.

Length of the Project. Owing to the length of the MSc (maximum 2 years), this served as a hinderance to the involvement of PPI and what steps of the research process the student-athletes could be involved in. It has been repeatedly reported by researchers that PPI is time and resource intensive which can limit PPI and put researchers off from using it (Boylan et al., 2019). It did not dissuade the MSc student from using PPI as part of this project, but they recognize that time and resources provided limitations. For example, PPI was being used alongside other research and was only carried out by the MSc student (KB). The constraints were evident at recruitment where it was not possible to identify a more diverse group of participants which is recognized in the UK Standards for Public Involvement guidelines (UK Standards for Public Involvement, 2023a). Given the way that participants were recruited and the limited number of individuals that could be involved, it is likely that more engaged participants came forward to be involved in PPI as opposed to those who might face more barriers to involvement. Therefore, their experiences may be different to those that are harder to reach. With more time, more individuals could have been recruited and time could have been invested into having a more diverse sample of individuals. The results of the overall project, including the PPI have wide practical implications.

Practical Implications

This research has several practical implications for different groups at different levels. For the purpose of this discussion the implications for athletes; the formal and semi-formal sources that

athletes may utilize for mental health support; public health and policy; sport governing bodies, and mental health charities will be discussed. This is not an exhaustive list, however.

Implications for Athletes and Formal and Semi-Formal Sources of Support

Importantly for athletes, this research has given them recognition as a population group that require mental health support. Athletes have expressed that it is helpful if sources of support have an understanding of the sport context, and the stressors that they may face (Jewett et al., 2021). This thesis has given them recognition and also a platform for their voice to be heard through the use of PPI.

As the focus of this thesis was on formal and semi-formal sources of support, it has highlighted the sources that athletes' may seek support from for their mental health. This includes the formal and semi-formal sources available from healthcare, the sporting context, and the higher education system. This research shows that these sources of support have a role to play in supporting athletes' mental health. For example, athletes have expressed help-seeking for mental health concerns from coaches (Bissett & Tamminen, 2022), counsellors (Abela et al., 2021; M. D. Bird et al., 2018), and clinical psychologists (Jewett et al., 2021). Knowing that athletes have sought help from formal and semi-formal sources has implications across these different contexts.

Implications for Public Health, Sport Governing Bodies, and the Higher Education System

To aid formal and semi-formal sources of support in providing mental health support to athletes' requires action at a systems level and in policy. Given that athletes can access formal and semi-formal sources of support through healthcare, sport, and higher education, these systems have a role to play in supporting the individuals on the ground (e.g., providing mental health training) to support athletes.

Firstly, an important step is to recognize athletes within public health and its policies. In the context of the UK, primary care clinicians (i.e., General Practitioner) are often the first port of call for individuals' seeking mental health support (England, 2017; Mind, 2018). Furthermore, secondary care

provides mental health care through individuals such as psychiatrists and clinical psychologists.

Therefore, public health policies such as the NICE guidelines need to recognize athletes' as a separate

group for mental health services, and create guidelines around their treatment as they have done for

groups such as mothers and those with learning disabilities (National Institute for Health and Care

Excellence, 2016, 2017).

Furthermore, sport national governing bodies have an important role to play in caring for

athlete mental health. Specifically, policies are needed to tackle poor accessibility, poor attitudes

towards help-seeking for mental health, and improving the experience of athletes seeking help. To do

this, they should provide training to individuals who play a role in the support of athlete mental health

such as coaches, managers, and physiotherapists. For example, physiotherapists have reported that elite

athletes have disclosed psychological issues to them and sought their support (Charmant et al., 2021).

This highlights the need for national governing bodies to invest in athlete mental health and training for

those in the support environment, beyond the current focus on increasing physical activity for mental

health such as by Sport England in the UK (Sport England, n.d.). Sport and physical activity are good for

mental health but this thesis and research shows that there is a need to go beyond this, as those who

are highly physically active still have mental health challenges.

Implications for Charities

An important source of funding and support are mental health charities including those that are

specific for athletes such as State of Mind, Sport in Mind, Sporting Wellness and Switch the Play (Sport in

Mind, n.d.; Sporting Wellness, 2023; State of Mind, 2019; Switch the Play Foundation, 2023). This

research provides evidence to support the existence and funding of these charities. It supports the

collaboration between sport governing bodies and these charities to provide training and support to

athletes. It also supports the collaboration of research between universities and charities to ensure the

rigour of research conducted. Beyond charities specific to athletes, this research also highlights to

mental health charities for the general population that athletes have specific support needs, and they may need to provide campaigns specific to athletes as they face greater barriers than the general population.

Strengths and Limitations of this Thesis

There are several important strengths of this thesis. Firstly, the use of novel methods that have not traditionally been used in sport psychology. To my knowledge, this is the only scoping review that has been conducted on mental health help-seeking in athletes, a method that is traditionally used in health focused research. Similarly, the use of PPI is lacking in sports psychology (Cockcroft, 2020; Smith et al., 2023) and the reporting of PPI has also been limited in previous health research (Staniszewska et al., 2017). Therefore, its use as part of this project and its reporting using the GRIPP2 short form is a key strength of this thesis. Finally, the writing of a qualitative protocol with the novel data collection methods of help-seeking mapping and walking interviews has shown the benefit of writing a detailed protocol and justifying decisions for the use of such methods. Finally, the use of conceptual frameworks to underpin these chapters and methods is a strength of this thesis as the use of frameworks or theories in help-seeking research has been reported to be limited (Rickwood et al., 2005).

There were a few limitations to this project. Firstly, the focus of this research was only on formal and semi-formal sources of support. Therefore, research on informal sources of support such as friends and family, and athletes use of self-help was not covered. These are likely important mental health supports for athletes so should be considered in further research, which is discussed next. The PPI group was not a very diverse which is recommend in UK Standards for Public Involvement guidelines (UK Standards for Public Involvement, 2023a). In the scoping review the results of included studies were not reported as part of data extraction and therefore were not included in the analysis. However, such detail is not required in scoping reviews.

Recommendations for Future Research

This thesis has identified gaps for further research. Firstly, the athlete help-seeking literature would benefit from further systematic reviews to encompass research conducted more recently. As systematic reviews aim to answer more detailed research questions (Munn et al., 2018) it is recommended that systematic reviews focus on access, attitudes, or experiences towards formal or semi-formal sources of support so that more detailed results can be reported and analyzed. Following this, further primary research should be done on athletes in countries outside of the USA, and in less developed countries as research in these countries is limited. Further interventions should be developed following systematic reviews and primary research to improve athletes' access to mental health support and their attitudes and experiences going forwards.

Through conducting the scoping review, it became apparent that within the athlete help-seeking research there are related but distinct categories within this body of literature. For instance, papers on attitudes towards sports psychologists, which have previously been included in two of the athlete mental health help-seeking systematic reviews included in the scoping review for this project (Castaldelli-Maia et al., 2019; Moreland et al., 2018). However, it is apparent that attitudes towards sports psychologists is distinct from mental health help-seeking, as often these articles refer to seeking help for sport performance problems as opposed to mental health (S. Martin et al., 2004; S. B. Martin, 2005). Another category identified but not included within the scoping review conducted as part of this thesis was the impact of social support on the well-being of athletes. For example, it was found that athletes who had supportive teammate friendships were less likely to have eating psychopathology (Scott et al., 2019). Similarly, Gouttebarge et al (2016) found that lower levels of social support were associated with symptoms of common mental disorders (distress, anxiety/depression, sleep disturbance, adverse alcohol use, and eating disorders) (Gouttebarge et al., 2017). Finally, in female student-athletes it was found that greater levels of social support from teammates was correlated with

lower levels of depression and sports helplessness (Hagiwara et al., 2017). However, this literature is not referring to help-seeking from informal sources but is highlighting the protective effect of social support on mental health. This is an important area of literature, but future research should ensure it is distinct from the athlete help-seeking literature particularly when conducting reviews.

Importantly, further research should continue to employ PPI when doing research on athlete mental health so that athletes become recognized as a public health group that requires mental health support. This will increase the likelihood of athletes' inclusion in public health policy such as the NICE guidelines (National Institute for Health and Care Excellence, 2023a). Protocols should continue to be written to increase the similarity between health research methods and sport psychology, and to promote open science.

Conclusions

In conclusion, this thesis has made several empirical, theoretical, and methodological contributions to the literature through employing the use of more novel research methods including those that have traditionally been used in health research. The scoping review (Chapter 2) of 92 articles provided a map of the literature on athletes' access to, attitudes towards, and experiences of help-seeking for mental health from formal and semi-formal sources, which produced several empirical contributions for further research. The results of the scoping review in combination with feedback from the PPI provided the rationale for a qualitative study. Aligned with the open science agenda a protocol for a qualitative study (Chapter 4) was produced with significant input from the PPI group. The use of PPI has made an important methodological contribution as it is not commonly used within sports science. In line with recommended guidance, the PPI was reported using the GRIPP2 short form which discussed the outcomes of the PPI and reflections of its use. Further research should continue to use these methods to close the gap between health research and sport psychology, particularly in the area of athlete mental health.

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Appendices

Appendix 1

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews

(PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	34
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	N/A
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	34-41
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	41-42, 44
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	43
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	45-46
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	47
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Appendix 3
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	48-49
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	52-54
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	Appendix 5
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	54-55

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Appendix 1 Continued

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	50-51
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	Appendix 6, Appendix Appendix 11
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	Appendix Appendix 11
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	56-62
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	63-65
Limitations	20	Discuss the limitations of the scoping review process.	66
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	66-69
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	N/A

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.
* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.
† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).
‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.
§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.

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Appendix 2

Additional Exclusion Criteria Included in the Review

Additional exclusion criteria	Details & justification
Papers on physical injury	Papers that focused on physical injury and help-seeking were excluded unless it was specifically in relation to mental health help-seeking following injury (e.g., papers that looked at social support during rehabilitation from injury). This is a different research question and population group to what this reviewed intended to look at.
Percentage of athletes that sought help	Papers that just included data on the percentage of athletes that sought help were excluded. For example, a paper saying that "20% of athletes sought help for their mental health" doesn't tell us anything about access, attitudes or experiences in relation to mental health help-seeking. However, if a paper compared athletes to non-athletes for rates of help-seeking or said that 20% wanted to seek help but only 10% did then it was included as this indicates help-seeking experiences and attitudes.
Social support and mental health	Papers that looked at the relationship between social support and mental health were excluded these papers are not specifically focused on formal and semi-formal sources of support.
Not explicitly about help-seeking for mental health	We had to be strict and exclude papers that were not explicitly focused on help seeking for mental health. I found this difficult as wanted to include some of these papers as they were interesting. But if they were looking at mental health in athletes more generally and just included a small part on treatment then the paper was excluded as it was not explicitly focused on help-seeking. For example, only 1 or 2 athletes discuss support.
Papers on concussion	There were a significant number of papers on concussion that were returned at title and abstract screening. Unless the paper were to specify help-seeking for mental health following a concussion then it was excluded. Despite some of the papers mentioning mental health symptoms they were excluded because it wasn't specifically help seeking in relation to mental health. This is focused on a separate research question and population group.
Narrative reviews, conference proceedings & case studies	Narrative reviews, conference proceedings and case studies were excluded as there either wasn't enough information to extract or not systematic and rigorous enough as a method.
Attitudes towards sport psychologists	Papers that looked at attitudes towards sport psychologists were excluded because this is a separate body of literature which looks at athletes attitudes to interacting with sport psychologists for sport performance as well as mental health. They are not focused enough on mental health to be included in the review. However, this body of literature can certainly be used to inform the help-seeking literature (this point is discussed in the discussion section).

Appendix 3

Search Strategy Including Databases Searched, Search Queries Restrictions Applied and Number of

Searches Returned

Database	Search Query	Restrictions applied	2022 search search Number of hits	2023 search Number of hits
Embase (via OVID)	athlet*.ti,ab,kw,sh. AND mental health.ti,ab,kw,sh. OR mental illness*.ti,ab,kw,sh. OR mental disorder*.ti,ab,kw,sh. OR well being.ti,ab,kw,sh. OR wellbeing.ti,ab,kw,sh. AND help seeking.ti,ab,kw,sh. OR seeking help.ti,ab,kw,sh. OR help.ti,ab,kw,sh. OR treatment seeking.ti,ab,kw,sh. OR seeking treatment.ti,ab,kw,sh. OR support.ti,ab,kw,sh. OR mental health service*.ti,ab,kw,sh. OR health service*.ti,ab,kw,sh. OR mental health care.ti,ab,kw,sh. OR mental healthcare.ti,ab,kw,sh. OR health care.ti,ab,kw,sh. OR healthcare.ti,ab,kw,sh. OR treatment seeking behavior.ti,ab,kw,sh. OR help seeking behavior.ti,ab,kw,sh.	English language Remove preprint records Review, short survey, article, letter, note, editorial	428	556
APA PsychArticles Full Text (via OVID)	athlet*.ti,ab,kw. AND mental health.ti,ab,kw. OR mental illness*.ti,ab,kw. OR mental disorder*.ti,ab,kw. OR well being.ti,ab,kw. OR wellbeing.ti,ab,kw. AND help seeking.ti,ab,kw. OR seeking help.ti,ab,kw. OR help.ti,ab,kw. OR treatment seeking.ti,ab,kw. OR seeking treatment.ti,ab,kw. OR support.ti,ab,kw. OR mental health service*.ti,ab,kw. OR health service*.ti,ab,kw. OR mental health care.ti,ab,kw. OR mental healthcare.ti,ab,kw. OR health care.ti,ab,kw. OR healthcare.ti,ab,kw. OR treatment seeking behavior.ti,ab,kw. OR help seeking behavior.ti,ab,kw.		24	34

Appendix 3 continued

APA PsychINFO (via OVID)	athlet*.ti,ab,id,sh. AND mental health.ti,ab,id,sh. OR mental illness*.ti,ab,id,sh. OR mental disorder*.ti,ab,id,sh. OR well being.ti,ab,id,sh. OR wellbeing.ti,ab,id,sh. AND help seeking.ti,ab,id,sh. OR seeking help.ti,ab,id,sh. OR help.ti,ab,id,sh. OR treatment seeking.ti,ab,id,sh. OR seeking treatment.ti,ab,id,sh. OR support.ti,ab,id,sh. OR mental health service*.ti,ab,id,sh. OR health service*.ti,ab,id,sh. OR mental health care.ti,ab,id,sh. OR mental healthcare.ti,ab,id,sh. OR health care.ti,ab,id,sh. OR healthcare.ti,ab,id,sh. OR treatment seeking behavior.ti,ab,id,sh. OR help seeking behavior.ti,ab,id,sh.	Peer reviewed English language Journal, peer-reviewed journal or peer-reviewed status unknown	347	
Medline: 1) Ovid MEDLINE(R) 2017-2022* 2) Ovid MEDLINE(R) In-Process, In-Data-Review & Other Non-Indexed Citations 1946-2022* 3) Ovid MEDLINE(R) In-Process and In-Data-Review 1946-2022* 4) Ovid MEDLINE(R) 1946-2022* (via OVID)	athlet*.ti,ab,kw,sh. AND mental health.ti,ab,kw,sh. OR mental illness*.ti,ab,kw,sh. OR mental disorder*.ti,ab,kw,sh. OR well being.ti,ab,kw,sh. OR wellbeing.ti,ab,kw,sh. AND help seeking.ti,ab,kw,sh. OR seeking help.ti,ab,kw,sh. OR help.ti,ab,kw,sh. OR treatment seeking.ti,ab,kw,sh. OR seeking treatment.ti,ab,kw,sh. OR support.ti,ab,kw,sh. OR mental health service*.ti,ab,kw,sh. OR health service*.ti,ab,kw,sh. OR mental health care.ti,ab,kw,sh. OR mental healthcare.ti,ab,kw,sh. OR health care.ti,ab,kw,sh. OR healthcare.ti,ab,kw,sh. OR treatment seeking behavior.ti,ab,kw,sh. OR help seeking behavior.ti,ab,kw,sh.	English language	1) 152 2) 421 3) 5 4) 317	1) 199 2) 534 3) 1 4) 385

Appendix 3 Continued

Web of Science Core Collection	athlet* AND mental health OR mental illness* OR mental disorder* OR well being OR wellbeing AND help seeking OR seeking help OR help OR treatment seeking OR seeking treatment OR support OR mental health service* OR health service* OR mental health care OR mental healthcare OR health care OR healthcare OR treatment seeking behavior OR help seeking behavior	Topic search (TS=) Exclude: book chapters, meeting abstracts & corrections	1,245	1,567
Proquest: 1) Health & Medical Collection 2) Education Database 3) Nursing & Allied Health 4) Psychology Database 5) Public Health Database 6) Sports Medicine & Education Index 7) Education Collection	athlet* AND mental health OR mental illness* OR mental disorder* OR well being OR wellbeing AND help seeking OR seeking help OR help OR treatment seeking OR seeking treatment OR support OR mental health service* OR health service* OR mental health care OR mental healthcare OR health care OR healthcare OR treatment seeking behavior OR help seeking behavior	Peer reviewed Scholarly journals English language	1) 736 2) 198 3) 610 4) 338 5) 215 6) 833 7) 316	1) 923 2) 234 3) 758 4) 402 5) 273 6) 964 7) 364
CINAHL (via EBSCO)	athlet* OR athlete AND mental health OR mental illness* OR mental disorder* OR well being OR wellbeing AND help seeking OR seeking help OR help OR treatment seeking OR seeking treatment OR support OR mental health service* OR health service* OR mental health care OR mental healthcare OR health care OR healthcare OR treatment seeking behavior OR help seeking behavior	Peer reviewed Academic journals English language	484	566

Appendix 3 Continued

Sport Discus (via EBSCO)	athlet* OR athlete AND mental health OR mental illness* OR mental disorder* OR well being OR wellbeing AND help seeking OR seeking help OR help OR treatment seeking OR seeking treatment OR support OR mental health service* OR health service* OR mental health care OR mental healthcare OR health care OR healthcare OR treatment seeking behavior OR help seeking behavior	Peer reviewed Academic journals English language	721	865
Scopus	athlet* AND "mental health" OR mental illness* OR mental disorder* OR "well being" OR "wellbeing" AND "help seeking" OR "seeking help" OR "help" OR "treatment seeking" OR "seeking treatment" OR "support" OR mental health service* OR health service* OR "mental health care" OR "mental healthcare" OR "health care" OR "healthcare" OR "treatment seeking behavior" OR "help seeking behavior"	TITLE-ABS-KEY Document type: article, review, editorial, short survey, note, letter Publication stage: final Language: English Source type: Journal	1,103	1,426

Note. Each search term was searched individually and then combined within the database. E.g. 1 OR 2 OR 3, or 17 AND 18 AND 19

Appendix 4

Decisions Made for Data Extraction Form

Component of data extraction form	*Details of clarifications or decisions made*
Overall	If more than one group was studied (e.g. athletes and coaches), only extract data from the athlete perspective.
Gap in the literature	Keep the gaps specific to help-seeking for mental health. If they don't clearly state the gap, then the gap can be interpreted from what they say.
Details of study population	Not extracting the year of university that the athletes are in.
Details of study population	For numbers and percentages – can calculate either from each other if not given.
Inclusion and exclusion criteria	Include implied inclusion and exclusion criteria even if not stated explicitly.
Aims	Not extracting the specific hypothesis suggested by authors, only the specific aims. Unless the hypothesis are the only aims written by the authors.
Data collection method	Quantitative methods: Only include the details of the questionnaire if it has been adapted or is a new measure created by the authors. If not, just include the name of the questionnaire and what it measures. Qualitative methods: For qualitative type of thematic analysis just state analysis but no further details e.g. just state Braun and Clarke thematic analysis.
Results	Qualitative: Do not extract quotes unless it is needed to explain the authors point and add clarification. Quantitative: Do not need to give p values and statistical data, just if there were significant differences.
Limitations and future research directions	Don't given practical recommendations, just future research directions. Connect limitations and future research directions by numbers if required.

Appendix 5

Change to Data Extraction Form for Scoping Review

Initial data extraction form following calibration	Refined data extraction form & *justifications*
Title of paper / abstract / report that data are extracted from	Title of paper / abstract / report that data are extracted from
Authors (Include corresponding author & email address)	Authors (Include corresponding author & email address)
Year of publication	Year of publication
Type of study (Systematic review, scoping review, primary research article, intervention)	Type of study (Systematic review, scoping review, primary research article, intervention)
Gap in the literature that the study fills	*Gap removed because they are not always clear and keeping in the aims of the study will show what gap the study is filling.*
Aims of the study	Aims of the study
Patient & Public Involvement Was PPI used? If so, how?	*It wasn't always clear from studies if PPI was used, as the term PPI was rarely used.* *Given that the focus of the extractions were refined, without reading the whole paper it was difficult to locate whether PPI (or a form of PPI) was implemented.*
Type of study (Primary research article, intervention, systematic/scoping review)	Type of study (Primary research article, intervention, systematic/scoping review)
Primary research article:	**Primary research article:**
Location of study participants (e.g. country, city, institution)	Location of study participants (e.g. country, city, institution)
Size of study population	Size of study population
Details of study population (description & details) • Age (mean & SD) • Gender (number & %) • Sport (if applicable number & %) • Level of competition (e.g. elite, university) (if applicable number & %) • Ethnicity (number & %)	Details of study population (description & details_ • Age (mean & SD) • Gender (number & %) • Sport - mix or single sport (name single sport if applicable) – *not as much detail as originally required* • Level of competition (e.g. elite, university) (if applicable number & %) • Ethnicity (number & %)
Inclusion & exclusion criteria	*Not in a main aims of the scoping review.*
Recruitment: Method of recruitment of participants (e.g. phone, email, poster)	*Detail not required for a scoping review and decided this is not a discussion point.*

Appendix 5 Continued

Data collection method (qualitative, quantitative, mixed methods)	Data collection method (qualitative, quantitative, mixed methods)
Do they focus on access, attitudes or experiences? (tick box) • Access (incl. knowledge of access, physical access) • Attitudes (incl. perspectives) • Experiences	Do they focus on access, attitudes or experiences? (tick box) • Access (incl. knowledge of access, physical access) • Attitudes (incl. perspectives) • Experiences
What formal or semi-formal source of support are they referring to? Formal sources: e.g. university counsellors & welfare officers (higher education), & GP, psychologist and psychiatrist (healthcare) Semi-formal: e.g. university lecturer, academic tutor (higher education), sports coach, sports manager (in sport context), physiotherapist & dietitian (healthcare)	Is the paper referring to formal or semi-formal sources of support? *Does not require level of detail but just formal or semi-formal* Formal sources: e.g. university counsellors & welfare officers (higher education), & GP, psychologist and psychiatrist (healthcare) Semi-formal: e.g. university lecturer, academic tutor (higher education), sports coach, sports manager (in sport context), physiotherapist & dietitian (healthcare)
Details of data collection method (in relation to access, attitudes or experiences) • For quantitative: questionnaires used & outcomes of interest • For qualitative: duration/number of interviews, details of questions asked & who conducted the interview	Details of data collection method (in relation to access, attitudes or experiences) • For quantitative: questionnaires used & outcomes of interest • For qualitative: details of questions asked (*not going to compare details of data collection methods so previous level of detail not required*)
Results Key findings that relate to the aims of the scoping review In relation to access, attitudes or experiences for semi-formal or formal sources of support. What are the results of the method they used?	*This level of detail is not required as it is a scoping review, not a systematic.* *Owing to the number of papers in this review, it wasn't feasible to do this during the timeframe. This fits in with the methodological recommendations that talks about refinement due to feasibility and time.*
Limitations and/or gaps identified	*This level of detail is not required for each individual paper for a scoping review.* *We will use the results from the first 25 papers for discussion points.*
Future research directions	*This level of detail is not required for each individual paper for a scoping review.* *We will use the results from the first 25 papers for discussion points.*

Appendix 5 Continued

Systematic/scoping review	Systematic/scoping review
Location of study participants for each study (e.g. country, city, institution) Example: Australia (n = 1), USA (n = 3) and UK (n = 1)	*Most relevant articles from systematic reviews will be included as primary articles so this does not need to be extracted.*
Inclusion & exclusion criteria: Inclusion criteria Exclusion critieria	*Not going to discuss this level of detail in the scoping review.*
Number of studies included	Number of studies included
Size of study population Total number of participants from all included studies	*Do not need this level of detail, as we are just going to report how many help-seeking systematic reviews there are.*
Details of study population Overall information if they provide it (description and details) • Age (mean & SD) • Gender (number & %) • Sport (if applicable number & %) • Level of competition (e.g. elite, university) (if applicable number & %) • Ethnicity (number & %)	*Do not need this level of detail, as we are just going to report how many help-seeking systematic reviews there are.*
Results Key findings that relate to the aims of the scoping review How many studies report on access, attitudes or experiences in relation to formal or semi-formal sources of support? Don't report on things that aren't relevant. If no studies report on access, attitudes or experiences, report that.	Results Does the review focus on access, attitudes or experiences? (Just state, no details) *Do not need this level of detail, as we are just going to report how many help-seeking systematic reviews there are.* *Only stating whether the paper focuses on access, attitudes or experiences.*
Limitations and/or gaps identified By the authors of this systematic/scoping review	*Do not need this level of detail, as we are just going to report how many help-seeking systematic reviews there are.*
Future directions identified Identified by the authors of this systematic/scoping review	*Do not need this level of detail, as we are just going to report how many help-seeking systematic reviews there are.*
Quality assessment Did the authors do a quality assessment? • Yes • No	Quality assessment Did the authors do a quality assessment? • Yes • No
What were the results of the quality assessment?	*Do not need this level of detail, as we are just going to report how many help-seeking systematic reviews there are.*

Appendix 5 Continued

Intervention studies	Intervention studies
Location Location of study (e.g. country, city, institution)	Location Location of study (e.g. country, city, institution)
Inclusion & exclusion criteria	*Not in a main aims of the scoping review.*
Study population: • Number & percentage of patients allocated to intervention • Number and percentage of participants allocated to comparator/control group	Study population: • Number & percentage of patients allocated to intervention • Number and percentage of participants allocated to comparator/control group
Study population (for intervention group, control group & overall baseline characteristics) • Age (mean & SD) • Gender (number & %) • Sport (if applicable number & %) • Level of competition (e.g. elite, university) (if applicable number & %) • Ethnicity (number & %)	Study population (for intervention group only) – *not providing baseline characteristics for control or overall as it is not a systematic review of interventions so that level of detail is not required. Only the baseline characteristics of the intervention group are provided as then it allows comparison to primary articles.* • Age (mean & SD) • Gender (number & %) • Sport (mix or specific sport if applicable) - *not as much detail as originally required* • Level of competition (e.g. elite, university) (if applicable number & %) • Ethnicity (number & %)
Description of intervention/exposure Description of the content of the intervention • What source of support are they referring to in their intervention? E.g. semi-formal or formal sources of support? • Did they develop a new intervention, or use an existing one? • How was the intervention developed? • What are the components of the intervention? What topics are covered? Description of intervention delivery • Frequency of intervention • Duration of intervention • Intensity of duration (if applicable)	Description of intervention/exposure Description of the content of the intervention • What source of support are they referring to in their intervention? E.g. semi-formal or formal sources of support?

Appendix 5 Continued

Describe the comparator. Was there a comparison group? If so, what did they do?	Describe the comparator. Was there a comparison group?
Goals & outcomes What is being treated in the intervention? What is the goal of the intervention? What is the intervention trying to improve in relation to access, attitudes or experiences? What are the main outcome(s) of the intervention & how is it measured?	Goals & outcomes What is being treated in the intervention? Is the intervention trying to improve help-seeking in relation to access, attitudes or experiences? (No details just state) What are the main outcome(s) of the intervention & how is it measured?
Results Key findings that relate to the aim of the scoping review Is the focus on access/attitudes/experiences? What are the results of the intervention in relation to the outcome measures?	
Limitations and/or gaps identified	
Future research directions	
Reference List Other studies of interest for the review indicated in the study reference list	Reference List Other studies of interest for the review indicated in the study reference list

Note. Italics indicate rationale for removal from extraction form

Appendix 6

Spreadsheet of all Papers and Raw Extracted Data

This is attached as a separate excel file named: Appendix 6

Note. There may be differences in the data extracted owing to changes in the data extraction form as

discussed in the methods section of the scoping review (p.53).

Appendix 7

Year of Publication of All Articles Included in the Review

Year of publication	Publications (n, %)			
	Primary research articles	Interventions	Systematic reviews	Total
2005	1 (1.3)	0 (0)	0 (0)	1 (1.1)
2006	1 (1.3)	0 (0)	0 (0)	1 (1.1)
2009	1 (1.3)	0 (0)	0 (0)	1 (1.1)
2012	2 (2.6)	1 (8.3)	0 (0)	3 (3.3)
2013	2 (2.6)	0 (0)	0 (0)	2 (2.2)
2014	2 (2.6)	1 (8.3)	0 (0)	3 (3.3)
2015	0 (0)	1 (8.3)	0 (0)	1 (1.1)
2016	5 (6.5)	0 (0)	0 (0)	5 (5.4)
2017	6 (7.8)	1 (8.3)	0 (0)	7 (7.6)
2018	5 (6.5)	0 (0)	1 (33.3)	6 (6.5)
2019	7 (9.1)	1 (8.3)	1 (33.3)	9 (9.8)
2020	10 (13.0)	1 (8.3)	1 (33.3)	12 (13.0)
2021	7 (9.1)	3 (25)	0 (0)	10 (10.9)
2022	16 (20.8)	2 (16.7)	0 (0)	18 (19.6)
2023	12 (14.3)	1 (8.3)	0 (0)	13 (14.1)
	77 (100)	12 (100)	3 (100)	92 (100)

Note. The year of publication are the publication date of the printed article where available

Appendix 8

Geographic Location of Included Studies

Geographic location (country)	Publications (n, %)		
	Primary research articles	Interventions	Total
Australia	2 (2.6)	2 (16.7)	4 (4.3)
Canada	5 (6.5)	0 (0)	5 (5.4)
England	2 (2.6)	0 (0)	2 (2.2)
Germany	2 (2.6)	0 (0)	2 (2.2)
Iceland	1 (1.3)	0 (0)	1 (1.1)
Ireland	4 (5.2)	1 (8.3)	5 (5.4)
Japan	2 (2.6)	1 (8.3)	3 (3.2)
Malaysia	1 (1.3)	0 (0)	1 (1.1)
Malta	1 (1.3)	0 (0)	1 (1.1)
Aotearoa New Zealand	1 (1.3)	0 (0)	1 (1.1)
Sweden	2 (2.6)	0 (0)	2 (2.2)
UK or Great Britain	6 (7.8)	1 (8.3)	7 (7.6)
USA	43 (55.8)	5 (41.7)	48 (52.2)
Mix	5 (6.5)	1 (8.3)	6 (6.5)
Unclear	0 (0)	1 (8.3)	1 (1.1)
Total	77 (100)	12 (100)	89 (100)

Appendix 9

The Reporting of Ethnicity in Primary Articles and Interventions Included in the Review

Ethnicity reported	Publications (n, %)		
	Primary articles	Interventions	Primary articles + interventions
Yes (with statistics)	41 (53.2)	4 (33.3)	45 (50.6)
Yes (no statistics)	3 (3.9)	0 (0)	3 (3.4)
No	32 (41.6)	8 (66.7)	40 (44.9)
Unclear	1 (1.3)	0 (0)	1 (1.1)
Total	77 (100)	12 (100)	89 (100)

Appendix 10

The Study Population Investigated in Primary Articles and Interventions Included in the Review

Study population	Publications (n, %)		
	Primary research articles	Interventions	Primary articles + interventions
Student-athletes	47 (61.0)	7 (58.3)	54 (60.7)
Elite athletes	24 (31.2)	3 (25)	27 (30.3)
Mix level	6 (7.8)	2 (16.7)	8 (9.0)
Total	77 (100)	12 (100)	89 (100)

Note.   Elite athletes were either as defined by the author or through interpretation of the study population.

Appendix 11

Content Analysis of Included Studies

Author (s), Year and totals	Access	Attitudes	Experiences	Formal	Semi-formal
			Primary research articles		
(Abela et al., 2021)		✓	✓	✓	
(Agnew et al., 2018)			✓	-	-
(Åkesdotter et al., 2023)		✓	✓	✓	
(Åkesdotter et al., 2020)	-	-	-	✓	
(Anchuri et al., 2020)			✓	✓	✓
(Barnard, 2016)		✓		✓	
(Biggin et al., 2017)		✓		✓	✓
(M. D. Bird et al., 2020)			✓	✓	
(M. D. Bird et al., 2018)	✓	✓		✓	✓
(M. D. Bird et al., 2021)		✓		✓	
(Bissett & Tamminen, 2022)		✓	✓		✓
(Crawford et al., 2023)	✓	✓	✓	-	-
(Cutler & Dwyer, 2020)		✓		✓	✓
(R. M. Daltry et al., 2023)			✓	✓	✓
(R. Daltry et al., 2018)		✓	✓	✓	
(Delenardo & Terrion, 2014)		✓	✓	-	-
(Dixon et al., 2022)		✓			✓
(Drew & Matthews, 2019)			✓	✓	✓
(Edwards & Froehle, 2023)			✓	✓	✓
(Edwards et al., 2023)		✓	✓	-	-
(Edwards et al., 2022)		✓	✓	✓	
(Foong & Kwan, 2021)	-	-	-	-	-

Appendix 11 Continued

Author (s), Year and totals	Access	Attitudes	Experiences	Formal	Semi-formal
			Primary research articles		
(Giovannetti et al., 2019)	✓	✓	✓	✓	✓
(Gulliver, Griffiths, & Christensen, 2012)	✓	✓	✓	✓	
(Habeeb et al., 2022)		✓		✓	✓
(Harris & Maher, 2022)	✓	✓	✓	✓	
(Hatteberg, 2020)		✓	✓	-	-
(Hilliard et al., 2019a)		✓		✓	
(Hilliard et al., 2019b)		✓		✓	
(Hilliard et al., 2022)		✓		✓	
(Jewett et al., 2021)		✓	✓	✓	
(T. V. Jones, 2016)		✓		✓	
(Junge & Prinz, 2019)			✓	✓	
(Kilcullen et al., 2022)			✓	✓	
(King et al., 2023)	✓	✓	✓	✓	
(Kola-Palmer et al., 2020)	✓	✓	✓	✓	✓
(Kraus & Tibbetts, 2022)	✓	✓	✓	✓	✓
(Kroshus, 2017)		✓		✓	
(Leimer et al., 2014)		✓	✓	✓	
(Lõpez & Levy, 2013)		✓		✓	
(Marsters et al., 2021)		✓		✓	✓
(S. J. Martin & Anderson, 2020)		✓		✓	✓
(McArdle & Moore, 2013)	✓	✓	✓	✓	✓
(McGraw et al., 2018)			✓	-	-
(McLoughlin et al., 2023)		✓	✓	✓	
(M. Moore, 2017)		✓		✓	
(M. A. Moore, 2016)	✓			✓	

Appendix 11 Continued

Author (s), Year and totals	Access	Attitudes	Experiences	Formal	Semi-formal
	Primary research articles				
(Neumann et al., 2023)		✓		✓	✓
(Noguchi et al., 2022)	✓	✓	✓	-	-
(O'Keeffe et al., 2022)	✓	✓	✓	✓	
(Oftadeh-Moghadam & Gorczynski, 2022)	✓	✓		✓	✓
(Ogden et al., 2023)		✓	✓	-	-
(Ojio et al., 2021)		✓		✓	
(Perry et al., 2022)	✓	✓		✓	✓
(Plateau et al., 2017)		✓	✓	✓	
(Poucher et al., 2023)	✓		✓	-	-
(Prinz et al., 2016)			✓	✓	
(Ramaeker & Petrie, 2019)		✓		✓	
(Ryan et al., 2022)	✓	✓		-	-
(Sasso et al., 2022)		✓	✓	✓	✓
(Steinfeldt & Steinfeldt, 2012)		✓		✓	
(Steinfeldt et al., 2009)		✓		✓	
(Tabet et al., 2021)		✓		✓	
(Tahtinen & Kristjansdottir, 2019)		✓	✓	✓	
(Tran, 2022)	✓	✓	✓	✓	
(Van Ramele et al., 2017)	✓			✓	✓
(Wahto et al., 2016)		✓		✓	
(Wasylkiw & Clairo, 2018)		✓		✓	
(D. R. Watson et al., 2023)		✓		✓	
(J. C. Watson, 2005)		✓		✓	
(J. C. Watson, 2006)	✓	✓		✓	
(Way et al., 2020)	✓			✓	✓

Appendix 11 Continued

Author (s), Year and totals	Access	Attitudes	Experiences	Formal	Semi-formal
			Primary research articles		
(Wilkerson et al., 2020)		✓	✓	✓	
(Wilkins et al., 2020)	✓	✓		✓	
(Wood et al., 2017)			✓	-	-
(Yoon & Petrie, 2023)	✓	✓	✓	✓	✓
(Young et al., 2022)	✓	✓	✓	✓	✓
Total for primary articles (n, %):	23 (29.9)	60 (77.9)	41 (53.2)	62 (80.5)	23 (29.9)
			Intervention studies		
(Beauchemin, 2014)		✓		✓	
(Chow et al., 2021)	✓	✓		✓	
(Confectioner et al., 2021)		✓		✓	✓
(Donachie & Hill, 2022)		✓		✓	
(Donohue et al., 2021)		✓		✓	
(Gulliver, Griffiths, Christensen, et al., 2012)		✓	✓	✓	
(C. Jones et al., 2022)		✓		✓	✓
(Kaneko et al., 2019)			✓	✓	
(Kern et al., 2017)		✓		-	-
(S. J. Martin et al., 2020)		✓	✓	✓	✓
(O'Keeffe et al., 2023)		✓		✓	
(Van Raalte et al., 2015)	✓			✓	
Total for interventions (n, %):	2 (16.7)	10 (83.3)	3 (25)	11 (91.7)	3 (25)

Appendix 11 Continued

	Systematic reviews				
(Bu et al., 2020)		✓	✓	X*	X*
(Castaldelli-Maia et al., 2019)	✓	✓	✓	X*	X*
(Moreland et al., 2018)	✓	✓		X*	X*
Total for systematic reviews (n, %):	2	3	2		
Author (s), Year and totals	Access	Attitudes	Experiences	Formal	Semi-formal
Total for all articles (primary articles, interventions and systematic reviews):**	27 (29.3)	73 (79.3)	46 (50)	73* (82)	26* (29.2)

*Note. *Total for all articles for semi-formal and formal sources of support is for primary articles and interventions only as this information was not extracted for systematic reviews.

** Totals and also percentages shown. For access, attitudes and experiences percentages are of the 92 total articles, but for formal and semi-formal sources of support out of the 89 primary articles and interventions. It does not take into account those that were unclear in showing access, attitudes or experiences, or formal or semi-formal sources of support.

Appendix 12

PPI Recruitment Poster

Appendix 13

PPI Role Profile

<u>FOCUS GROUPS FOR STUDENT-ATHLETES</u>

Are you a university student AND an athlete?

Have you sought help for your mental health?

Do you want to be a part of informing research on student-athlete mental health?

We're developing a research study to look at how student-athletes access and experience help for their mental health within higher education and the healthcare system.

We want the research to be shaped by those who it will affect. So, we want you to join our patient and public involvement (PPI) focus groups to help us to design the project.

We are looking for individuals who:

- Currently are (*or have recently been*) a university student and an athlete within university sport e.g. compete in BUCS or for your College/School.
- You have had experience of seeking help for your mental health from a formal service e.g. within university, from healthcare or from a charity.

What is Patient and Public Involvement (PPI)?

It is when patients or the public do research **with** researchers. Patients and the public can be involved in different stages of the research process including: designing the research question, helping to design the study, and undertaking the research (e.g. conducting interviews, running focus groups).

What is the purpose of your PPI role?

- Your PPI role would be to shape the research we plan to do, including:
  - Giving us feedback on the suitability of the research question;
  - Helping us to design questions that will be used to interview student-athletes; **and**
  - Helping us to decide how the results of research are shared with academics, the public, and professionals (e.g. university staff and clinicians)
- *You do not need to share your own personal experiences of mental health and seeking help in the focus groups*
  - *The aim of the focus groups is about designing the research;*
  - *Your experiences will provide you with an important perspective when designing the research with us;* ***but***
  - *You **do not** need to share details of these experiences in the focus groups*

Appendix 13 Continued

What are you being asked to do as part of your PPI role?

Time commitment: Three 1 hour 15-minute focus groups.

Participation in online focus groups conducted via zoom: You will engage in an online group discussion which is called a Focus Group. The Focus Group will be hosted on Zoom. The focus groups will include yourself and two other student-athletes and the discussion will be facilitated by the researcher conducting this study (Kirsty Brown). The focus groups will also be attended by another researcher who will help to facilitate, summarise and take notes.

When?

- Focus group 1: *February-April 2022*
- Focus group 2: *July-September 2022*
- Focus group 3: *October-December 2022*
- *The specific time and date will be scheduled to suit everyone's availability*

Payment

You will be awarded a **£75** voucher for partaking in our PPI group.

This will be paid in three instalments: £25 after each of the 3 focus groups

What are the benefits of you participating in this PPI role?

There are no direct benefits to you taking part in the PPI focus groups, but you will have the opportunity to shape research that has the potential to impact mental health services provided to student-athletes.

What are the possible disadvantages and risks of taking part?

We do not envisage any direct disadvantages or risks of taking part. Due to the nature of the research topic on mental health experiences, we are aware that emotionally sensitive and triggering topics may be discussed, and you may become distressed.

If this does happen, you will be urged to take a break from the focus group and reminded that you are able to withdraw from the focus group at any point without any consequences.

What you say and how much you say is completely up to you. You can choose not to answer a question without giving a reason.

We have also provided numbers and links to services below, should you feel that you need to access additional support following the focus groups.

Appendix 13 Continued

What if you need additional support?

We will be discussing potentially emotionally sensitive and triggering topics. If you find anything distressing and require additional support, we recommend the following services:

- **For immediate support** contact the Samaritans on 116 123 or call NHS mental health services on 111.
- **For non-emergencies**, visit https://www.elefriends.org.uk/for resources and a supportive online community. There are also a number of NHS recommended apps for managing wellbeing, such as Catch It or Cove.
- **For UoB student specific support**, you can contact the Student Hub (https://intranet.birmingham.ac.uk/student/student-hub/hub-services.aspx#s) or your Wellbeing officer (https://intranet.birmingham.ac.uk/student/your-wellbeing/wellbeing-officers.aspx), or contact UB Heard 24/7 by calling: 08003685819 (https://intranet.birmingham.ac.uk/student/your-wellbeing/mental-health/ubheard.aspx)

What will happen to the information you provide in the focus groups?

With permission from yourself and other participants in the focus groups, the meetings will be **audio** recorded only.

Your data will be stored safely and securely, in line with the General Data Protection Regulation (GDPR) (2018). Zoom recordings will be transferred to the University of Birmingham's OneDrive (the University's password protected cloud system) and deleted from Zoom once the recording is made available. Once the recordings are no longer being accessed, they will be transferred to UBIRA e-data repository.

If you share anything and I am concerned about your welfare, then I may have to share it with my supervisors or the appropriate services within university.

Can you drop-out at any point? Can you withdraw your data?

You can drop-out at any point leading up to, or during the focus groups. You will be reimbursed for the time you have participated in the focus group regardless of if you choose to drop-out.

Owing to the nature of the focus groups, once you have shared your opinion in the focus groups you cannot withdraw your data.

How do I get involved?

If you would like to take part, or have any further questions about this beforehand or after participating in the focus groups, please contact:

Kirsty Brown

Thank you for your help!

Appendix 14

Questions Asked in PPI Focus Groups 1, 2 and 3

<u>**Focus group 1:**</u>

Where do student-athletes go to support their mental health?

- What support is available to student-athletes on campus?
- Are any of these sources of support specific to student-athletes? Or are they all aimed at students in general?
- What seems to be the most popular sources of support? At least popular?
- Of those places that you mentioned, what are the most important ones, and where should we focus our attention in the research?
- Does where the athlete go seem to differ based on the level of the athlete? E.g. scholar, top BUCS teams, vs lower teams?
- If you play sport outside of university, does the support differ to where you go as a student-athlete inside university?
- Is the experience the same across all sports? Do all student-athletes have similar access to support?
- Do sources of support change as you go through university? Are there more important sources at different times? Do your perceptions of support change?
- Do the sources of support differ between team and individual sports?
- Are student-athletes more likely to go to teammates, friends and family than these formal sources of support?
- Would you consider going to your lecturer or personal tutor for support for mental health? Why?

What are the most important things we need to ask those who have experience supporting student-athletes with their mental health?

- I mentioned I was potentially going to interview GPs or possibly university staff. What do you think I need to ask them?
- Is it important to know whether they have a sporty background?
- Is it important to know if they have had any specific training to understand the unique needs of student-athletes mental health?
- Is it important to know what interactions they have had with student-athletes in providing mental health support?

From your perspective of student-athlete with lived experience, who do you think I should interview from the healthcare and higher education systems?

- I've got a potential list of who I want to interview from the healthcare system, and higher education, but from your knowledge of student-athletes with lived experience, what do you think?
- Who are most likely to interact with student-athletes struggling with their mental health?
- Why do you think those people?

Appendix 14 Continued

From the literature it seems like there are various accessibility issues. What do you think?

- These accessibility issues include lack of physical access to services and also a lack of knowledge as to how to access services.
- How does this resonate with your experiences, and the experiences of others that you know?
- Is there anything that I am missing here that the literature hasn't gotten to yet, but you know from your own experiences?
- Do you think it's easier for student-athletes to access support inside or outside of the university?
- Do you think the knowledge of accessing these services is better for student-athletes inside university or better knowledge of services outside of university?
- Do you think there's a misunderstanding of the roles of sources of support? For example, role of personal academic tutors, welfare officers, GP etc for mental health support?
- Does knowledge of access seem to differ depending upon the subject the student is studying? For example, health degrees vs arts degrees?
- Does the knowledge of the tutors and lecturers at university impact your knowledge on accessing support as well?
- Do you think that in student-athletes or students in general there is a misunderstanding of the roles of mental health support? Does your view on welfare officers or personal tutors differ compared to your friends for example?

Going back to this help-seeking framework that I presented earlier on and based on our discussions, is there anything else missing from this framework?

- What do you think of the different components of these help-seeking frameworks? Considering your own experiences down this framework capture your experiences?
- Are there any other steps or components that you'd like to add?
- Of these steps, which ones do you think are the most important?
- Are there any that you would remove, or would like to move around?

Focus group 2:

Lots of studies focusing on attitudes – less on access and experiences

- What do you think about this?
    - To what extent do you think attitudes is the most important?
- Do you think that focusing on access and experiences, particularly in a student-athlete context is as important?
    - Why do you think this?
- There were hardly any studies that looked at access, attitudes and experiences all together – do you think it would be beneficial to look at all 3 in a study?

Appendix 14 Continued

Most studies are quantitative or mostly quantitative with some open questions

- What suggestions for future research do you think there should be?
- What do you think of this?
- Do you think I should recommend for qualitative studies where student-athletes are interviewed?
    - What do you think the benefits would be of interviewing student-athletes?

Formal and semi-formal sources of support:

- Some studies focused on a specific source of support but other looked at general help-seeking
- If studies focused on one it was generally formal sources e.g. counselling
- What do you think about this?
- Would you rather studies looked at specific sources of support or general help-seeking in student-athletes?
- There were few studies on specific sources of semi-formal support (e.g. coaches, physiotherapists, lecturers). What do you think of this?

Dissemination:

- Who are the most important people to be aware of this?
    - E.g. organizations, university policy, which sectors?
- If I were to present it to academics at a conference, what would you like to get across from this study?
- If I were to write a blog post to disseminate the findings to the public, what points do you think would be important to get across?
    - Would you like what is to be disseminated to be different between athletes and other people you have suggested?

Focus group 3:

I'd like you to inform the design of a mixed methods or qualitative study and also the interview guide (I.e. the questions that I ask) for the interview component

I'd like there to be 2 components to the qualitative study – a more creative component and then an interview.

The creative or written component

- What I mean by this is basically something a bit different compared to more traditional focus groups or interviews
- Create methods could include drawing, painting, collage making or video-making
- I know creative methods aren't for everyone and some people prefer writing their thoughts so it could be more of a journal style

Appendix 14 Continued
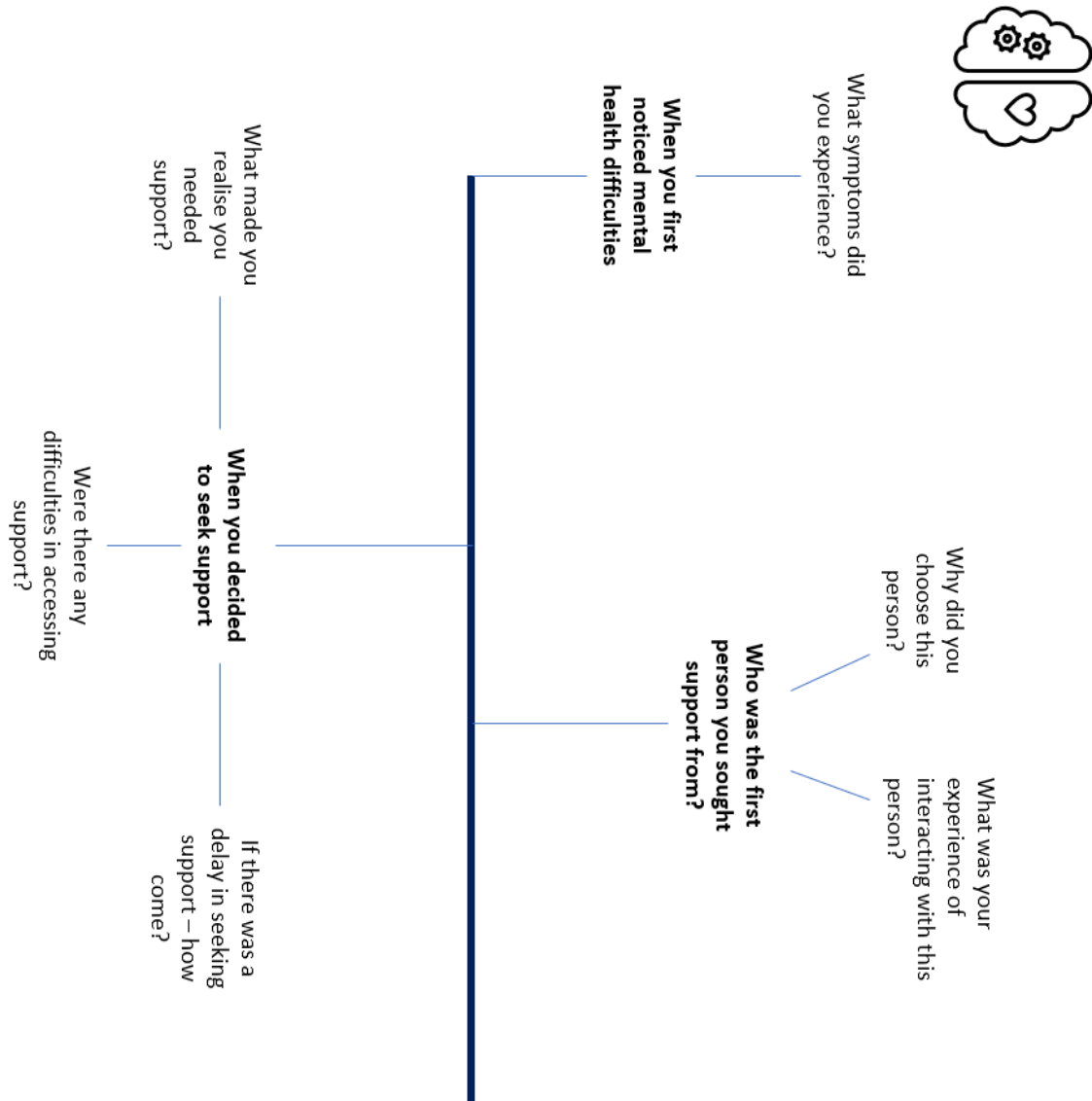
The creative component

- My thoughts are getting an individual to use mapping on their help-seeking experiences
  - o By mapping I mean giving an individual a blank piece of paper or potentially a timeline if easier, and get them to draw out/write their help-seeking experiences
  - o This could focus more on what led them to seek help or what happened after they sought help for the first time
  - o It's up to the individual how they approach it!
- What are your thoughts on this? Do you have any other suggestions on creative components that might work well to engage people?
- What sources of equipment might enable people to be more creative or do this activity?
- Do you think you'd prefer a template or a blank piece of paper?
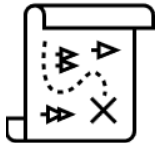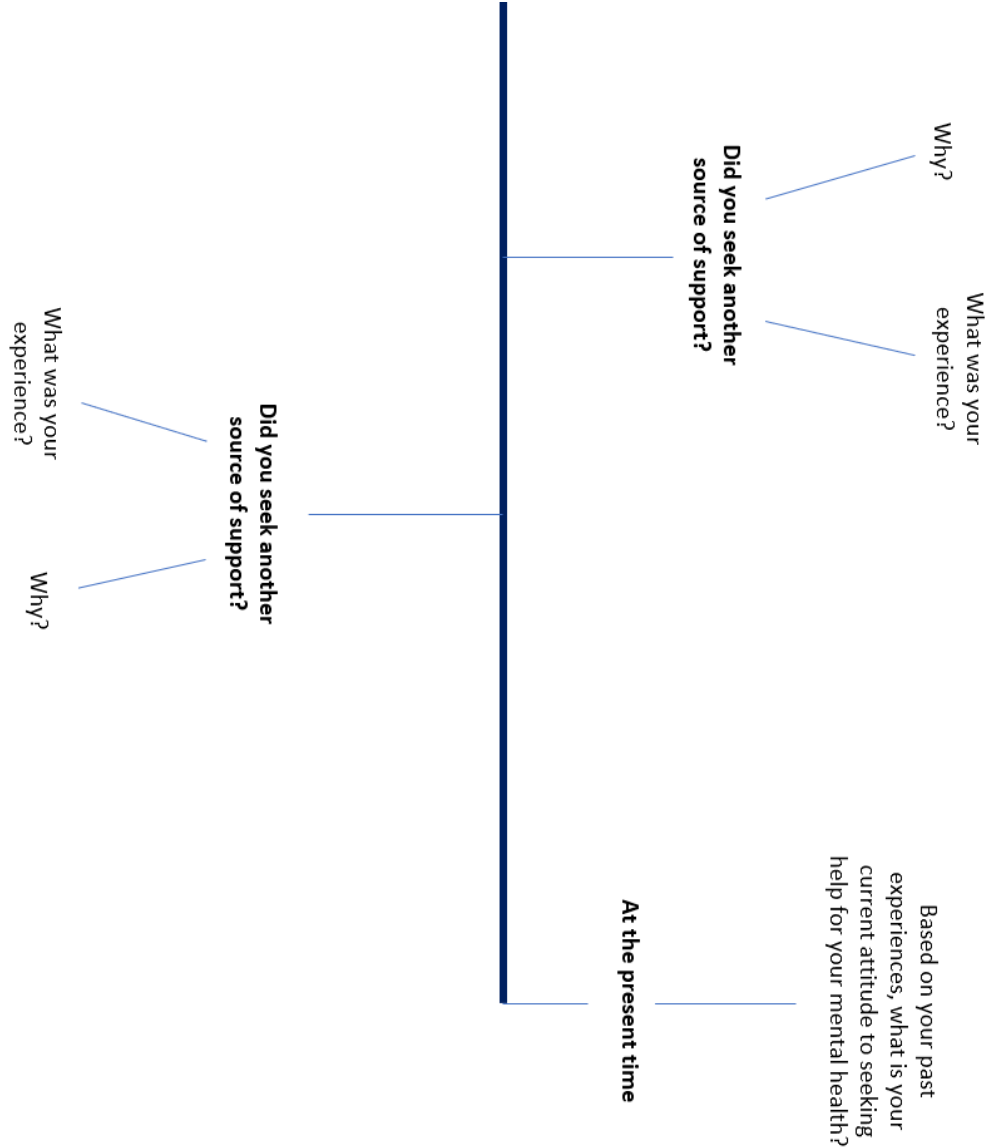
Type of interview

- Walking interview:
- What are your thoughts on a walking interview?
- Would you prefer a walking interview? Or not?
- If you think walking interviews are a good idea, do you have any suggestions for where to walk? As sometimes walking interviews involve going to a particular place to understand relationships between people and places. Obviously this is less about their views on a place but experiences which could be quite sensitive for the individual so I'm interested in what you think
- How do you think I should manage participant and also researchers safety?
  - o E.g. having a pre-defined route, location tracking on, option to request an uber at any point
- What do you think about virtual walks? I.e. phone call and walk wherever you are?

- Voice notes:
- What are your views on voice notes? What do you think of using WhatsApp voice notes as a method?
- Do you think people would give shorter or longer answers with voice notes?

Appendix 15

Template for Help-Seeking Mapping

What symptoms did you experience?

When you first noticed mental health difficulties

What made you realise you needed support?

Were there any difficulties in accessing support?

When you decided to seek support

If there was a delay in seeking support – how come?

Who was the first person you sought support from?

Why did you choose this person?

What was your experience of interacting with this person?

Appendix 15 Continued

Why?

What was your
experience?

**Did you seek another
source of support?**

What was your
experience?

**Did you seek another
source of support?**

Why?

Based on your past
experiences, what is your
current attitude to seeking
help for your mental health?

At the present time

Appendix 16

Interview Guide for Qualitative Study

Introduction questions:

- Have you done an interview before?

- What sport do you do?

- How many years have you played this sport?

- What degree are you doing?

- Have you ever been diagnosed with a mental health condition?

- How long have you suffered with mental health issues?

Questions on access to mental health support:

- What do you understand by the term access to mental health support?

- What sources of mental health support are available to student-athletes?

- Do you feel like you can physically access support for your mental health? Has been health

  support been available to you when you have needed it?

  o Have you ever struggled to access support when you've needed it?

- Do you feel like you are aware of the different sources of support available to student-athletes?

- Who have you sought help from for your mental health in the past? Specifically formal and

  semi-formal sources of support within sport, higher education and healthcare

- What do you perceive as barriers and enablers to accessing support?

Questions on experiences of seeking mental health support:

- What do you understand by experiences of seeking support for mental health?

- Who did you seek support from in the past?

Appendix 16 Continued

- Overall have these experiences been positive or negative? How was this experience?

- How well do different sources of support give you advice/differ in their support?

- What was the most effective source for you seeking mental health support?

- How easy or difficult did you find it to seek help for your mental health? How comfortable were you with this source of support?

- How willing were you to open up to this source of support?

  - Did your level of disclosure differ depending upon the source of support? E.g., how deep did you go with your personal tutor vs GP?

- When did you first realise you were experiencing mental health difficulties?

- When did you first seek support?

- How long did take you to seek support from the onset of symptoms? What was the gap in time from when they experienced issues to when they sought help?

- Have you used the same source multiple times or tried various types of support over time?

  - Were you put off by any sources and went to someone else?

- What were the support characteristics that made them a good source of support?

  - How well did they listen to you?

  - Did they give you advice or just listen and let you vent?

- Did the source of support understand the context of sport?

- What did they learn from your experiences?

  - Did it actually help/work?

  - Are they using anything from it now?

- What prevented you from seeking help? Timelines and context – what came prior/after the event/around the event?

Appendix 16 Continued

Questions on attitudes towards mental health support:

- What do you understand by the term attitudes to help-seeking?

- What are your attitudes towards help-seeking for your mental health?

- Is your overall attitude positive/negative regards to the systems and support available to you? Why?

- What barriers are there to seeking help?

- What is your preferred source of support? Give examples of formal/informal sources

    o What are the reasons for this?

- Which sources of mental health support do you think are most effective to support student-athlete mental health?

- Which sources of mental health support have you not used, and why?

- Is there anyone you wish you could speak to about your mental health but don't feel comfortable to?

- Do you feel a negative stigma towards seeking help for mental health support?

    o If so, what would you do to break the negative stigma?

- How would you want to be approached by someone about your mental health?

- What do you view the role of different sources of support to be? For example, what is the role of your personal academic tutor vs a welfare officer?

- What would be the ideal characteristics or qualities in the next person you speak to?

- Based on the experiences you've had, do you think you need more support going forwards?

- Would you do anything differently in help-seeking in the future?

- What would you like to see different/want changing if you were to use this method again to improve your mental health?

Appendix 16 Continued

- How integral is the sport to your mental health?

- How strong is your athletic identity? How important is your sport to you?

  - How does this impact your mental health?

  - Are you impacted if you have a bad game or race? Does that affect your mental health?

- How much do you enjoy the social aspect of your sport?

- In an ideal scenario, how would you want someone to react if you sought help for your mental health?

- Does it make you less willing to seek help for your mental health if you have heard that someone else has had a negative experience?