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Sagar-Ouriaghli, Ilyas

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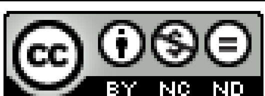

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The Development and Pilot Testing of Gender-Sensitive Mental Health Interventions Targeting Help-Seeking for Male Students.

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Thesis submitted to King's College London, University of London, for the degree of Doctor of Philosophy (PhD)

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Abstract

Background: Common mental health conditions such as depression and anxiety affect 25%-30% of adults worldwide. Of those experiencing a common mental health condition, only 6%-27% seek or receive any kind of mental health treatment. Traditionally, men are more reluctant to seek help or receive appropriate treatment for mental health conditions contributing to their three times greater risk of suicide. This pattern is most concerning for male students, as suicide is the leading cause of death for 20-34-year-olds, making up 30% of avoidable deaths. Barriers such as mental health stigma, conformity to masculine norms, mental health literacy, age, sexual orientation, and unsuitable mental health services can provide explanations as to why men and male students do not seek help for their mental health. Such findings have led to recommendations and preliminary evidence on how best to engage men with mental health support. However, there remains a paucity of research that explains how successful interventions are developed or outlines the key components used within effective interventions. Subsequently, there is a dearth of research to inform intervention content and the development process. This presents difficulties with replication, refinement, and attempts to improve our understanding of what would comprise effective interventions that could engage men and male students. Certainly, new methods and comprehensive research studies are required to develop novel interventions that meet the needs of male students who may need appropriate support.

Methods: The Medical Research Council's framework for developing a complex intervention led to the development of detailed, theoretically informed, and replicable interventions for male-students. The first two stages of this framework have been followed, encompassing firstly, development and secondly, feasibility and piloting. This process included four studies: (1) a systematic review identified the specific behaviour change techniques that are embedded within previous mental health help-seeking interventions for men, (2) a qualitative focus group study explored male students' views and recommendations for the design and programme content for mental health interventions to improve male student engagement, (3) a synthesis of the systematic review, focus group results, and published literature regarding men and male student's help-seeking behaviours was employed to develop a

theoretical framework about how to design effective and acceptable interventions for male students, and finally (4) a feasibility study of three pilot gender-sensitive mental health interventions for male students was conducted to assess the acceptability and uptake of the proposed interventions.

Results: The first study comprising the systematic review identified through the use of BCTs seven key processes that are used with men's help-seeking interventions that encourage help-seeking. These were: the use of role-models to convey information, psycho-educational material to improve mental health knowledge, assistance with recognising and managing symptoms, active problem-solving tasks, motivating behaviour change, sign posting services and finally, content that builds on positive male traits (e.g., responsibility and strength). The second focus group study using thematic analysis revealed that key factors were: protecting male vulnerability, providing a masculine narrative of help-seeking, the intervention format, knowing when and how to seek help, and sensitive engagement strategies were important factors to consider when trying to encourage male students to seek help. The third study developed a theoretical framework using the Medical Research Council's framework for developing and evaluating complex interventions from the synthesis of the systematic review, focus groups, and published literature, which highlights the specific factors relevant to help-seeking in men and how these can be mapped onto a model of behaviour change to identify the specific techniques needed to facilitate help-seeking. Lastly, three gender-sensitive pilot interventions that incorporate the specific techniques needed to facilitate help-seeking for male students were developed and evaluated. All three gender-sensitive interventions were rated favourably and were equally acceptable, but findings indicate that the third informal drop-in intervention may be a more promising approach in order to engage hard-to-reach male students who have greater barriers to seeking help. Because this was a small feasibility study that did not follow-up further help-seeking of male students, further examination through the use of a randomised controlled trial is needed to formally test this promising approach.

Conclusion: This PhD successfully addressed and provided a detailed explanation and guidance on how to develop acceptable gender-sensitive interventions that are tailored towards engaging male students with mental health difficulties. The important factors that

need to be considered and embedded within mental health interventions to make them more acceptable and engaging for male students were identified and three pilot gender-sensitive interventions were developed and tested for feasibility and acceptability. These detailed intervention development processes can be more easily replicated, refined, and adapted to assist with designing more acceptable mental health interventions for male students. Further development and testing of the pilot interventions for engaging male university students are now warranted. Novel contributions to improving our understanding of men's help-seeking through the use of a systemic model of male help-seeking which incorporates male students' characteristics, attitudes as well as pre-existing mental health services for men are proposed.

Table of Contents

Abstract **2**

Table of Contents **5**

Table of Figures **6**

Table of Tables **7**

List of Abbreviations **9**

Acknowledgements **11**

Publications **12**

Chapter 1: **13**

Introduction 13

Chapter 2: **48**

Improving Mental Health Service Utilisation Amongst Men: A Systematic Review and Synthesis of Behaviour Change Techniques (BCTs) Within Interventions Targeting Help-Seeking 48

Chapter 3: **83**

Engaging Male Students with Mental Health Support: A Qualitative Focus Group Study 83

Chapter 4: **112**

Improving Mental Health Help-Seeking Behaviours for Male Students: A Framework for Developing a Complex Intervention 112

Chapter 5: **145**

A Series of Gender-Sensitive Mental Health Pilot Interventions for University Male Students: targeting uptake, acceptability, help-seeking, and mental outcomes 145

Chapter 6: **176**

Discussion 176

References **212**

Appendices **255**

Table of Figures

Figure 2.1. PRISMA flow chart. 59

Figure 2.2. EPHPP Checklist criteria for each study. 60

Figure 2.3. Synthesis of BCTs into processes and their relevance to the current 75

Figure 3.1. Recruitment flow chart. 91

Table 3.1. Participants' demographic information. 92

Figure 3.2. Overview of themes and sub-themes to improve mental health help-seeking for male students. 94

Figure 4.1. Medical Research Council's (MRC's) four key stages for developing and evaluating an intervention. 118

Figure 4.2. Access to care model. 123

Figure 4.3. Overview of themes and sub-themes identified from focus groups. 130

Figure 4.4. Capability, Opportunity, and Motivation model of Behaviour (COM-B) System. 134

Figure 5.1. Recruitment flow chart across all three pilot interventions. 159

Figure 6.1. A Theoretical Model of Male Help-Seeking. 187

Figure 6.2. An Intervention Model to Facilitate Help-seeking. 191

Figure 6.3. MRC's four key stages for developing and evaluating a complex intervention .... **Error! Bookmark not defined.**

Table of Tables

Table 1.1 Examples of various Male-Sensitive Mental Health Initiatives. 40

Table 2.1. Table summarising characteristics of included studies.. 62

Table 2.2. Table summarising the identified behaviour change techniques (BCTs) and outcomes of eligible interventions. 66

Table 2.3. Examples and frequency of behavioural change techniques (BCTs) used within the engagement strategies, RCTs/Pilot RCTs and retrospective review. 70

Table 4.1. Summary of 17 factors influencing male students help-seeking for psychological support from various sources.. 133

Table 4.2. Mapping of help-seeking factors to COM-B system of behaviour. 136

Table 4.3. Example intervention for male students to improve mental health help-seeking, including Behavioural Change Techniques (BCTs). 139

Table 5.1. Summary of the intervention content, BCTs utilised, and the delivery method across the three gender-sensitive interventions. 154

Table 5.2. Summary of participants demographics split by intervention. 160

Table 5.3. Verbal feedback obtained from the TFAQ. 162

Table 5.4. Summary of Means, SD and One-Way ANOVA for all interventions scores for acceptability. 163

Table 5.5. Summary of Means, SD and One-Way ANOVA for all intervention’s baseline scores for help-seeking attitudes, mental health status, self-stigma, and conformity to masculine norms. 166

Table 5.6. Frequency and percentages of where participants sought help in the last 2 weeks at baseline, post, 2-week follow up and 4-week follow up for all interventions. 168

Table 5.7. Summary of Means (SD) and test for significance (t-tests) for post-, 2-week, and 4-week follow up change in scores for help-seeking attitudes and mental health status. 169

Table 6.1. Male-friendly Service Checklist. 193

List of Abbreviations

AHSQ	Actual Help-Seeking Questionnaire
ANOVA	Analysis of Variance
APA	American Psychiatric Association
APEASE	Affordability, Practicability, Effectiveness/cost-effectiveness, Acceptability, Side-effects/safety, Equity criteria.
ATSPPH-SF	Attitudes Towards Seeking Professional Psychological Help Scale Short Form
ATSPPH-LF	Attitudes Towards Seeking Professional Psychological Help Scale Long Form
BCW	Behaviour Change Wheel
BDI	Beck Depression Inventory
BCT	Behaviour Change Technique
BCTTv1	Behaviour Change Technique Taxonomy
CBT	Cognitive Behavioural Therapy
CMNI-46	Conformity to Masculine Norms Inventory - 46
COM-B	Capability, Opportunity, and Motivation model of Behaviour Change
CONSORT	Consolidated Standards for Reporting Trials
DSM	Diagnostic and Statistical Manual of Mental Disorders
EPHPP	The Effective Public Health Practice Project
GHSQ	General Help-Seeking Questionnaire
GP	General Practitioner
GRC	Gender Role Conflict
GUIDED	Guidance for Reporting Intervention Development Studies in Health Research Checklist
HSBS	Help-Seeking Behaviour Scale
IAPT	Improving Access to Psychological Therapies
ICD	International Classification of Diseases
KCL	King’s College London
K10	Kessler’s Psychological Distress Scale
LGBTQ+	Lesbian, Gay, Bisexual, Transgender, Queer, or Questioning
MDRS-22	Male Depression Risk Scale

MHAES	Mental Health Ad Effectiveness Scale
MI	Motivational Interviewing
MRC	Medical Research Council
n	Number
NHS	National Health Service
NICE	National Institute of Health and Care Excellence
OR	Odds Ratio
PHQ-9	Patient Health Questionnaire
PPI	Patient and Public Involvement
PPPM	Positive Psychology/Positive Masculinity
PRISMA	Preferred Reporting for Systematic Reviews and Meta-Analyses
PTSD	Post-Traumatic Stress Disorder
QALY	Quality Adjusted Life Year
RCT	Randomised Controlled Trial
SD	Standard Deviation
SSOSH	Self-Stigma of Seeking-Help scale
TAU	Treatment As Usual
TEI-SF	Treatment Evaluation Inventory Short Form
TFAQ	Theoretical Framework of Acceptability Questionnaire
TIDieR	The Template for Intervention Description and Replication Checklist
TREND	The Transparent Reporting of Evaluations with Non-Randomised Designs
US	United States
UK	United Kingdom
WENWBS	Warwick-Edinburgh Mental Well-Being Scale
WHO	The World Health Organization
YPMHAG	Young Persons Mental Health Advisory Group
95% CI	95% Confidence Interval

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Lastly, I would like to dedicate this work to all the men who are struggling with their mental health, to those who have lost brothers, fathers, sons, or friends due to difficulties with their mental health. This work is dedicated to you, enabling society to do better for our men, and to not always use the term 'man up' when they are faced with challenges. I only hope that my thesis can move our healthcare services forward.

Publications

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Sagar-Ouriaghli, I., Godfrey, E., Bridge, L., Meade, L., and Brown, J.S.L. (2019). Improving Mental Health Service Utilization Among Men: A Systematic Review and Synthesis of Behavior Change Techniques Within Interventions Targeting Help-Seeking. *American Journal of Men's Health, 1-18*. https://doi.org/10.1177/1557988319857009. **(Chapter 2)**

Sagar-Ouriaghli, I., Brown, J.S.L., Tailor, V., and Godfrey E. (2020). Engaging Male Students with Mental Health Support: A Qualitative Focus Group Study. *BMC Public Health,* 20, 1159. https://doi.org/10.1186/s12889-020-09269-1. **(Chapter 3)**

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Other published work completed during the time of PhD.

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Men's Views on Mental Health and How They Deal With it. (2020). By **Ilyas Sagar-Ouriaghli**. https://www.youtube.com/watch?v=OK05kUDtC4w

Chapter 1:

Introduction

Statement of the Problem 14

Mental Health 15

Men's Mental Health 16

Male Suicide 17

Student Mental Health 18

Help-Seeking 21

Help-Seeking Barriers 22

Stigma 22

Conformity to Masculine Norms 24

Mental Health Literacy 27

Age, Ethnicity, & Sexual Orientation 29

Genderless Mental Health Services 32

The Need for Male-Sensitive Approaches 35

Current Recommendations 36

Current Approaches 39

Aims and Hypothesis 45

Statement of the Problem

Around a quarter of the global population experience a common mental health disorder such as depression and anxiety, at least once in their lifetime (Steel, et al., 2014; World Health Organization, 2017a). In countries like the United Kingdom (UK), only a third of people who meet a diagnosis receive mental health treatment (McManus, Bebbington, Jenkins, & Brugha, 2016). Broadly speaking, mental health prevalence among men and women are relatively similar (McManus et al., 2016). Common mental health disorders such as anxiety and depression are more common amongst women, whereas behavioural problems, substance misuse and developmental difficulties such as autism spectrum disorder and attention-deficit hyperactivity-disorder are more common amongst men (Baker, 2018a; Baker, 2020; McHugh, Votaw, Sugarman, & Greenfield, 2018; Kim et al., 2011).

Not receiving mental health treatment in the context of a mental health disorder can contribute to more serious outcomes such as suicide. However, despite the similar prevalence rates of mental health difficulties, suicide is 3.5 times more likely to occur in men (Chang, Yip, & Chen, 2019; World Health Organization, 2002). For younger men, including students, suicide is the leading cause of death, making up 30% of avoidable deaths (Baker, 2020). This phenomenon is often attributed to differences in help-seeking, whereby men and male students are less likely to use mental health services and seek psychological support (Yousaf, Popat, & Hunter, 2015; Pedrelli, Borsari, Lipson, Heinze, & Eisenberg, 2016). Barriers to help-seeking have been explored in a large number of studies. Factors such as stigma, conformity to masculine norms, mental health literacy, various demographic factors, and the types of services offered are widely cited when it comes to explaining why men do not seek help (Clement, et al., 2015; Addis & Mahalik, 2003; Jorm, 2012; Howard, Ehrlich, Gamlen, & Oram, 2017). Numerous recommendations have been made on how to better engage men and develop male-sensitive mental health initiatives to address this issue. Although some preliminary research into male-specific programmes has been conducted, details pertaining to their effectiveness, acceptability, or development have not always been fully reported. Subsequently, a paucity in evidence-based recommendations and research that informs the development of complex behaviour change interventions to effectively engage men with mental health support remains.

Mental Health

The World Health Organization (WHO) defines mental health as “a state of well-being where one acknowledges one’s own abilities, works productively, and is able to manage normal stresses of life allowing them to make a contribution to their community” (World Health Organization, 2005). Mental health encapsulates a range of diagnoses with the most common being depression and anxiety (World Health Organization, 2017b). Depression can be defined as a “sadness, loss of interest or pleasure, feelings of guilt, low-self-worth, disrupted sleep or appetite, tiredness, poor concentration, and recurrent thoughts of death or suicidal ideation” (World Health Organization, 2017b). The definition by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), states that five or more symptoms must be present during the same 2-week period and at least one of the symptoms should be depressed mood or loss of pleasure (American Psychiatric Association, 2013). Anxiety disorders are characterised by chronic feelings of anxiety and fear which are difficult to control and are present for at least 6-months (World Health Organization, 2017b; American Psychiatric Association, 2013).

Common mental health disorders occur in 25% - 30% of the global population (Steel, et al., 2014; World Health Organization, 2017b), although some evidence suggests that up to 57% of the population may experience a mental health condition at least once in their lifetime (Moffitt, et al., 2010). Within the UK, one in six people over the age of 16 report having symptoms of a common mental disorder (Baker, 2018a; Baker, 2020; McManus, et al., 2016; Bebbington & McManus, 2020).

When managing mental health, a wide range of available services and treatment options are available, especially in high-income countries. However, the vast majority of those people experiencing a mental health condition fail to receive or seek the help they need. Only between 6% - 27% of people within high-income countries such as those within Europe, Australia, and the UK receive mental health treatment (Alonso, et al., 2004; Slade, et al., 2009; McManus, et al., 2016), and is often much lower for low- and middle-income countries (World Health Organization, 2013). Although treatment use is slightly higher for those with severe mental health difficulties such as major depression and psychosis, the vast majority still fail to receive treatment (World Health Organization, 2013). When looking at individual countries, roughly only 41% of adults in the United States (US) who fulfil a formal diagnosis in accordance to the DSM-5 received some form of treatment across a 12-month period (Wang, et al., 2005). Similarly, in the UK, about 33% (95% CI [35.8% - 41.3%]) of people who meet

the diagnostic criteria for a common mental health disorder receive treatment (McManus, et al., 2016). This problem is made worse as those who do receive treatment often receive poor quality care, inadequate support or fail to have their needs met (World Health Organization, 2013; Forbes, Crome, Sunderland, & Wuthrich, 2017). Individuals experiencing psychological distress or mental health difficulties are often faced with a range of barriers. These are numerous and the most common are attitudinal barriers like preferring to manage on their own, inadequate treatment or the lack of support, not feeling comfortable when speaking about personal problems, lack of knowledge about available services and mental health symptoms, and mental health stigma (Forbes, et al., 2017; Luitel, Jordans, Kohrt, Rathod, & Komproe, 2017; Haugen, McCrillis, Smid, & Nijdam, 2017; Negash, Khan, Medhin, Wondimagegn, & Araya, 2020; Staiger, Waldmann, Rüsch, & Krumm, 2017; Salaheddin & Mason, 2016).

Men's Mental Health

The rates of mental health problems among men and women are very similar (McManus, et al., 2016). However, the types of problems are different. Common mental health disorders are consistently reported to be more prevalent amongst women compared to men for every age group (Baker, 2018a; Baker, 2020; Moffitt, et al., 2010). In 2014, men were three times less likely to experience a common mental health disorder compared to women of the same age (McManus, et al., 2016). Although prevalence rates may be more complex, the disparity seen between men and women is not exclusive to the UK and is consistently reported around the world (World Health Organization, 2002). However, men have different mental health problems, such as behaviour problems, alcohol, and drug problems. In this context, men have higher prevalence rates for alcohol use disorders, problematic drinking behaviours, and binge drinking compared to women (World Health Organization, 2002; McHugh, Votaw, Sugarman, & Greenfield, 2018). Similarly, men are at greater risk of substance abuse such as heroin and nonmedical opioids (Marsh, Park, Lin, & Bersamira, 2018). For younger boys, prevalence of developmental difficulties such as autism spectrum disorder, attention-deficit hyperactivity disorder, learning disabilities as well as speech, language and communication problems are much higher (Kim, et al., 2011; Hansen, Oerbeck, Skirbekk, Petrovski, & Kristensen, 2018; Wilkins, 2010).

All mental health disorders are associated with a reduction in health and quality of life. For instance, depression led to a total of 50million years lived with disability, whilst anxiety contributed to a total of 24.6million years lived with disability in 2015 (World Health Organization, 2017b). Both alcohol and substance use disorders are also associated with negative outcomes such as, liver disease, cancer, cardiovascular diseases, reduced well-being, and an overall increased risk of mortality (Burton, et al., 2016; Appleton, James, & Larsen, 2018). Similarly, mental health diagnoses are strongly associated with suicidal thoughts, self-harm and suicidal attempts (Baker, 2018a; Baker, 2020). In 2018, 6,507 suicides were registered in the UK representing the first increase since 2013 (Office for National Statistics, 2018). 75% (4,903) of the completed suicides were among men which is a pattern that has been present since the 1990's (Office for National Statistics, 2018).

Male Suicide

Men have been consistently shown to have a higher suicide rate than women and are 3 times more likely to take their own life (Baker, 2018a; Baker, 2020; McManus, et al., 2016; Office for National Statistics, 2018). Suicide is most common in men aged between 40 and 49 and those over 90 (Baker, 2018a; Baker, 2020; Office for National Statistics, 2018). Although suicide rates are lower in younger men (i.e. below 40), suicide still represents a significant problem for this younger age group. Younger men aged 20-34 have overall lower mortality rates which results in suicide being the leading cause of death in this age bracket (Baker 2018a; Baker, 2020). For younger males aged 20-34, suicides make up 30% of avoidable deaths (Baker, 2018a, Baker, 2020). These suicide rates may be due to the method of suicide attempts with 59.4% of male suicides completed by hanging, suffocation, or strangulation as opposed to 45.0% for female suicides (Office for National Statistics, 2018). Conversely, 36% of female suicides and only 17.9% of male suicides are due to poisoning (Office for National Statistics, 2018). Indeed, these differences in methods highlight that men are more likely to use lethal means when compared to women, thus increasing the chances of successfully completing suicide, reducing the opportunity for intervention and prevention (Mergl, et al., 2015).

The gender differences seen in suicide are not exclusive to the UK, with men being twice as likely to die by suicide around the world (Chang, Yip, & Chen, 2019). Suicide is more common in low- and middle-income countries, accounting for 78% of total suicides in 2015

(World Health Organization, 2017b). However, the gender disparity between men and women appears to be substantially greater in Europe or high-income countries (World Health Organization, 2018; World Health Organization, 2002). In the UK, men are 3.5 times more likely to die by suicide compared to their female counterparts (Chang, Yip, & Chen, 2019; World Health Organization, 2002).

However, perhaps surprisingly, men are less likely to have thoughts of taking their own life and present to hospital less frequently for self-harm (Mental Health Foundation, 2016). For younger individuals, aged 16-24, self-harming and suicidal thoughts are notably more prevalent in women occurring in 20% - 35% as opposed to just 10% - 20% of men (Baker, 2018a; Baker, 2020; Mental Health Foundation, 2016). However, this pattern changes with age and across specific age groups. For those over 35, self-harm and suicidal thoughts do not differ between men and women (Mental Health Foundation, 2016; Baker, 2018a, Baker, 2020). Nonetheless, self-harming and suicidal thoughts are consistently reported to be either less or equally common amongst men for any age group compared to women. Given this, it would be expected for suicide to be more common amongst women. However, this is not the case as suicide is disproportionally higher in men. This indicates that self-harming and suicidal thoughts fail to explain suicide, suggesting there are other contributory factors.

Student Mental Health

As outlined previously, suicide is the biggest killer among men aged 20-34 (Baker, 2018a; Baker, 2020). In 2019, 34% of UK 18-year-olds entered higher education at a university (UCAS, 2019). This age coincides with peak onset for common mental health disorders. For all anxiety disorders, mean age of onset occurs at 19-21 years of age for both males and females (de Lijster, et al., 2017; Cía, et al., 2018; Kessler, et al., 2007), whilst mean age of onset for other mood disorders including depression shares a similar trend emerging in early teens up to 29 years of age (Cía, et al., 2018; Kessler, et al., 2007). The peak onset period for non-suicidal self-injury is thought to be around 14-15 years old, although 21% typically engage in at least one episode by the age of 25 (Amarendra, et al., 2018). Considering these points, emerging mental health difficulties overlap heavily with a student population, highlighting the additional concern and risk students (particularly male students) face in comparison to older adults. Furthermore, the emergence of mental health difficulties coupled with the struggles of university such as academic performance, leaving home, and loss of family support can

contribute to greater emotional distress, impaired well-being, and greater risk of dropping out (Thorley, 2017; Hjorth, et al., 2016; Sosu & Pheunpha, 2019). University experiences present a unique set of challenges that do not occur within a non-student population (including older adults). To extend this further, student loans are associated with poorer mental health and psychological functioning (Walesmann, Gee & Genitile, 2014). This effect remains present irrespective of other economic (income and parental net worth) and demographic factors (educational attainment and occupation) (Walesmann et al., 2014). Additionally, as students move away from home and experience a range of social, structural and behavioural changes in their daily life, feelings of loneliness may arise. Loneliness amongst students is positively associated with depression, stress, anxiety and negative mental health outcomes over time (Diehl, Jansen, Ischanova, & Hilger-Kolb, 2018; Richardson, Elliot, & Roberts, 2017). Another key factor that is unique to university students is exam/academic related pressures. Alongside loneliness, assessment stress is also significantly associated with an increased risk of depression and anxiety (McIntyre et al., 2018). Indeed, academic stress places heavy demands on psychological resources (McIntyre et al., 2018). Given that students are faced with a unique set of contextual factors such as emerging mental health difficulties, student loans, increased risk of loneliness, and additional academic stressors when compared to non-students and older adults, there is an increased risk and clinical need students have in regard to mental health risk. Although mental health problems are not unique only to university students, most mental health problems manifest in adolescence and early adulthood (de Lijster, et al., 2017; Cía, et al., 2018; Kessler, et al., 2007). With 40-50% of young people applying to university in 2021, this is a sizeable population making up over 600,000 students and over 250,000 males (UCAS, 2021; Coughlan, 2019) – further emphasising the clinical need for this population group.

Instances where support related to the transition to university, academic support, improving resilience, and fostering social connection can help improve university retention rates, irrespective of mental health status (Eisenberg, Lipson, & Posselt, 2016). Typically, 25% - 35% of students experience a diagnosable mental health condition, with significantly more female students meeting the criteria for a common mental health condition whilst at university (Auerbach, et al., 2016; Auerbach, et al., 2018).

There are conflicting results about whether common mental health conditions are more prevalent within a student population. Evans et al., (2018) point towards a mental

health 'crisis' most notably within the post-graduate student population, (PhD's and Master's students) as they are 6 times more likely to experience a common mental health condition compared to the general population. Similarly, UK national data suggests that there are higher rates of common mental health difficulties than initially disclosed to universities (5% - 10%), up to 33.9% amongst undergraduate students (Office for National Statistics, 2020). There is also a concerning rise in the number of students disclosing a mental health condition. Since 2010 there has been a fivefold increase in the number of students reporting a mental health condition to their university (Office for National Statistics, 2020) and there has been an increase in the number of students experiencing suicidal thoughts, behaviours, and self-harm (Siversten, et al., 2019). This pattern has also been observed in the US, where twice as many students reported having a common mental health condition from 2007 to 2018 (Duffy, Twenge, & Joiner, 2019). Given these points, it stresses the need and importance to focus more efforts on supporting and providing mental health initiatives to students (particularly male students) as opposed to non-students and older adults.

Nonetheless, this increase may be due to recent students being more likely to report distress compared to past generations. Mental health is more widely discussed and may be reflected by more positive attitudes towards mental health (Eisenberg, 2019). Further evidence highlights that university students do not necessarily have a higher incidence of mental health problems compared to the non-students (Macaskill, 2013; Hjorth, et al., 2016). A more recent study also found a similar pattern for non-students, where an increase in common mental health disorders, suicide attempts, and self-harm was observed between 2007 and 2014 (McManus & Gunnell, 2020). Although this study was representative of the household population in the UK, a sample size of only 122 students may be too small to be sufficiently powered to detect significant differences between students and non-students (McManus & Gunnell, 2020). These findings in the context of other research provides some indication that student mental health may not be worse than non-students but must be interpreted cautiously. Despite these findings, even in instances where mental health prevalence does not differ between student and non-student populations, students are still at greater risk as they are significantly less likely to seek help and receive mental health treatment, particularly for alcohol or drug misuse (Blanco et al., 2008).

Another noteworthy point is that significantly more female students disclose suicidal thoughts, self-harming, or having a mental health condition, yet the paradoxical pattern of

greater male students' suicide remains. In 2015 and 2016, 69% and 65% of suicides were completed by male students, respectively (Thorley, 2017; Office for National Statistics, 2017). This phenomenon has been present year on year suggesting it is likely to continue. To resolve this issue and reduce the disparity between male and female student suicides, we must first look at potential reasons that could account for this continuing trend.

Help-Seeking

One of the most widely cited explanations for disproportionally higher suicide rates and poorer outcomes amongst men and male students is their lower rates in help-seeking and service use (i.e. help-seeking behaviours). Irrespective of gender, young adults, and thus the student population, are the most likely age group to report not having any of their needs met or partially met. The majority of university students do not receive any treatment for their mental health difficulties at all (Eisenberg, Golberstein, & Gollust, 2007; Forbes, et al., 2017). The WHO's mental health surveys which are conducted across 21 countries provide the most reasonable estimate as only 16.4% of students with a common mental health condition receive minimally adequate treatment in a 12-month period (Auerbach, et al., 2016). However, this data is based on retrospective mental health assessments, which is likely to introduce recall bias and substantial errors (Auerbach, et al., 2016). Note here that this is substantially lower when compared to older adults, as 28% of adults receive treatment that meets their mental health needs (Han, Compton, Gfroerer, & McKeon, 2014). Highlighting the greater demand for encouraging help-seeking and providing mental health support to male students. Similarly, the WHO's mental health survey suffers from small sample sizes across the individual countries, resulting in high variability and wide confidence intervals for this estimation (Auerbach, et al., 2016). Indeed, this may suggest that mental health service use is much lower. One UK study sampling over 1,000 students reported that as little as 5.1% of students received any kind of mental health treatment at all (Macaskill, 2013). Once again, this data is cross-sectional and mental health service use may vary over time indicating that longitudinal research is needed to provide further insight.

Of the students who do seek help, male students are again disproportionality under-represented. Consistent findings emphasise that male students engage with mental health services significantly less compared to female students for various mental health disorders such as depression, anxiety, and heavy drinking (Pedrelli, et al., 2016; Eisenberg, Golberstein,

& Gollust, 2007). For greater context, one US study found male students were 2.32 times less likely to be treated for a common mental health condition compared to female students (Seehuus, Moeller, & Peisch, 2019). Another explanation for low help-seeking behaviours and service use are pre-existing attitudes towards mental health services (i.e. help-seeking attitudes). A meta-analysis including 27 studies with a small methodological study bias (e.g. study population, time of help-seeking, response rate, and quality of reporting) conducted by Schnyder et al., (2017) revealed that those with negative attitudes towards help-seeking were significantly discouraged from actively seeking help (OR = 0.80, 95% CI 0.73 – 0.88). Again, male students hold more negative attitudes to help-seeking and are less likely to display positive help-seeking for common mental health issues such as depression (Wendt & Shafer, 2016; Brenner, et al., 2018; Clough, Nazareth, Day, & Casey, 2019). Both the combination of service use (i.e., help-seeking behaviours) and help-seeking attitudes can reduce male students' opportunity for treatment, prevention, and intervention. This trend continues into adulthood, where men over the age of 21 (i.e., no longer students) have fewer help-seeking behaviours and more negative help-seeking attitudes compared to their female counterparts (Yousaf, Popat, & Hunter, 2015; Gonzalez, Alegría, Prihoda, Copeland, & Zeber, 2011).

Although poor help-seeking partly explains why male students are at a greater-risk of suicide, it does not shed light as to why help-seeking behaviours and attitudes are more negative in men and male students. These are thought to be influenced by additional barriers and other factors that have been extensively researched within a student population. These include stigma, conformity to masculine norms, mental health literacy, age, ethnicity, sexual orientation, and the availability and types of treatment provided.

Help-Seeking Barriers

Stigma

One of the most widely discussed barriers for accessing mental health support is stigma. Stigmatising attitudes derive from misconceptions of mental health and about those with a mental health condition. These subsequently contribute to three key negative stereotypes of individuals with a mental health diagnosis (Corrigan & Watson, 2002). Firstly, people with mental illness are dangerous and should be feared and excluded from society. Secondly, those with a mental health condition are irresponsible and key life decisions should be made by

others. And thirdly, people with a mental health condition are childlike and need to be cared for (Corrigan & Watson, 2002). Stigma can be further divided into public and self-stigma.

Public stigma is the discrimination directed against people with a mental illness from the general population who endorse particular stereotypes (Corrigan, Rafacz, & Rüsch, 2011). Public stigma has been widely discussed as it can negatively influence both help-seeking attitudes and subsequent help-seeking behaviours, and has been shown to be higher in males (Pedersen & Paves, 2014; Topkaya, 2014; Vogel, Bitman, Hammer, & Wade, 2013). This has also been observed in younger adolescents (14-18 years old), and those before university, whereby those endorsing high public stigma held more negative attitudes to seeking mental health support (Shechtman, Vogel, Strass, & Heath, 2018; Nearchou, et al., 2018). This has led to mass campaigns and the development and evaluation of interventions targeting public stigma (Corrigan & Shapiro, 2010; Evans-Lacko, Corker, Williams, Henderson, & Thornicroft, 2014). However, evidence indicates that self-stigma may be a stronger predictor of help-seeking and that public stigma has no direct association with help-seeking attitudes and intentions at all (Topkaya, 2014; Lally, ó Conghaile, Quigley, Bainbridge, & McDonald, 2013; Eisenberg, Downs, Golberstein, & Zivin, 2009; Golberstein, Eisenberg, & Gollust, 2009).

Self-stigma is characterised as the harm to self-esteem arising from the internalisation of mental illness stereotypes, whereby the pre-conceived ideas of mental illness influence the perception of oneself (Corrigan, Rafacz, & Rüsch, 2011). Those who experience high levels of self-stigma are less likely to seek help for mental health (Vogel, Wade, & Haake, 2006; Topkaya, 2014; Lannin, Vogel, Brenner, Abraham, & Heath, 2016). Although self-stigma is a stronger predictor for help-seeking than public stigma, public stigma can indirectly reduce one's willingness to seek support by contributing to greater endorsement of self-stigmatising beliefs (Vogel, et al., 2013; Vogel, Wade, & Hackler, 2007). This association between public- and self-stigma is stronger amongst males indicating that they are more likely to internalise public stigma (Vogel, Wade, & Hackler, 2007; Eisenberg, et al., 2009). Although stigma has been at the forefront of much help-seeking research, it may not be the 'golden bullet' we have been searching for. A widely cited and influential systematic review of stigma and help-seeking highlights it as only the fourth highest barrier to help-seeking, with disclosure concerns ranked as the most common barrier (Clement, et al., 2015). Similarly, other factors such as ethnicity, age, gender, and profession appeared to be heavily linked with the experience of stigma (Clement, et al., 2015). Furthermore, other factors interplay with self-

stigma and help-seeking among men such as conformity to masculine norms (Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011).

Conformity to Masculine Norms

Another widely cited reason for the differences in help-seeking between males and females is due to gender role socialisation. Gender role socialisation is based on the notion that men and women learn attitudes and behaviours from cultural values, norms, and ideologies to help understand and learn what it means to be men and women (Addis & Mahalik, 2003). Hegemonic masculinity is a powerful ideology that is embedded within a power structure that contributes to a series of patterns of behaviours, including role expectations and one's identity, that enables men's power and dominance over women (Connell & Messerschmidt, 2005; Messerschmidt, 2019). This is distinct from other forms of non-hegemonic masculinity or other sub-ordinated forms of masculinity that do not seek to obtain power over women (Messerschmidt, 2019). Although only a minority of men may adopt hegemonic masculinity, it is still regarded as a normative mentally and the majority of men often use it as a yardstick to measure their own masculinity (Connell & Messerschmidt, 2005). Subsequently, hegemonic masculinity is often perpetuated and reinforced through local communities and mass media. However, such messages do not necessarily represent the lives of actual men and results in men exhibiting contradictions between hegemonic masculine ideals and their actual behaviour (Connell & Messerschmidt, 2005). Modern representations of hegemonic masculinities are diverse; however, the key component is that they all legitimise unequal gender relations between men and women and between other types of masculinity. These stereotypes and exaggerated ideals shape what are and are often not socially acceptable behaviours for men (Messerschmidt, 2019; Addis & Mahalik, 2003). These traditional stereotypes and hegemonic masculine values dictate ideals of stoicism, invulnerability, competitiveness, self-reliance, emotional inexpressive, and independence for men (Addis & Mahalik, 2003; Connell & Messerschmidt, 2005).

Resulting from the endorsement of hegemonic masculinity and the restrictive gender roles it imposes, negative consequences to the individual or others can arise which is referred to as Gender Role Conflict (GRC) (Addis & Mahalik, 2003; Levant, 2011). For example, GRC in a mental health context may result in greater conformity to specific traits such as self-reliance which is associated with an increased risk of suicide, greater self-stigmatising beliefs, and

greater reluctance to reach out to friends when experiencing difficulties (Pirkis, Spittal, Keogh, Mousaferiadis, & Currier, 2017). Similarly, men may attempt to hide their clinical symptoms due to pressures of having to fit in and fear of being perceived as weak, pushing them towards self-medicating from drugs and alcohol to help alleviate psychological distress (Creighton, Oliffe, Ogrodniczuk, & Frank, 2017). GRC contributes to a reduced well-being as well as higher levels of depression, stress, and aggression (Fragoso & Kashubeck, 2000; Berke, Reidy, Miller, & Zeichner, 2016; Kaya, Iwamoto, Brady, Clinton, & Grivel, 2019).

As mentioned briefly, GRC can contribute to greater reluctance to reach out to friends for support (Pirkis, et al., 2017). Broadly speaking, adult males who endorse hegemonic masculine values have a tendency to be inflexible and avoid negative affective experiences - referred to as experiential avoidance. GRC contributes to experiential avoidance, resulting in adverse consequences for their well-being (Spendelow & Joubert, 2018). Put simply, experiential avoidance is the preference to delay or avoid seeking help for mental health. This relationship between GRC and help-seeking is also well supported as adult males who experience higher levels of GRC and endorse hegemonic ideals have more negative attitudes and behaviours toward psychological help-seeking (Berger, Levant, McMillan, Kelleher, & Sellers, 2005; O'Brein, Hunt, & Hart, 2005; Seidler, Dawes, Rice, Oliffe, & Dhillon, 2016; Yousaf, Popat, & Hunter, 2015).

Extending this further, the distinction between hegemonic masculinity and gender conformity needs to be acknowledged. In this context, hegemonic masculinity can be thought of as a spectrum or sliding scale whereby men are thought to conform to a greater or lesser degree on particular (masculine) personality types, traits or attributes (Robertson, Williams, & Oliffe, 2016; Robertson & Kilvington-Dowd, 2019). This is different from a single and rigid construct of gender conformity, as masculinities in this context should be seen as part of a dynamic construct that will operate differently across different social practices and settings (Robertson, Williams, & Oliffe, 2016; Connell, 1995). For instance, the anticipated roles, expectations and gendered norms are also influenced by other components of one’s identity, such as ethnicity, sexuality, and disability (Robertson & Kilvington-Dowd, 2019). This leads to a configuration of masculinities, whereby masculinity does not necessarily contribute to one’s sense of self or identity, but instead presents as a social construct that occurs within and across differing social relations (Robertson, Williams and Oliffe, 2016; Connell, 1995).

Despite these differing configurations, these configurations may still be seen as hierarchical. Here, certain configurations of practice such as acquiring status or obtaining power present as more dominant configurations than others. In turn, some configurations (which can be seen as hegemonic configurations) may be of greater status, more influential, or held in higher regard than other configurations. Inadvertently, this can lead to other configurations becoming subordinated, marginalised, or even complicit with hegemonic configurations (Robertson & Kilvington-Dowd, 2019). Nonetheless, this hierarchical perspective provides a better foundation to understand help-seeking across various contexts, differences or contradictions between groups of men. These configurations better explain how contradictory behaviours seen in men's help-seeking can arise, or even the changes or shifts in help-seeking attitudes or behaviours in men they experience mental health difficulties (Robertson, Williams, & Oliffe, 2016; Robertson & Kilvington-Dowd, 2019). Given this, masculinity is a dynamic construct that is likely to adapt and shift depending on a range of contexts, social structures and power relations (Robertson, Williams, & Oliffe, 2016). It is important to understand this distinction between these two approaches of understanding masculinity. By moving away from narratives that seek to reduce masculinity into a single and rigid construct and towards conceptualising masculinity through various configurations, it provides a better framework to make sense of the social determinants (e.g., class, socio-economic status, social structures, and culture) of health inequalities that are seen between men and women (Robertson, Williams, & Oliffe, 2016; Robertson & Kilvington-Dowd, 2019).

As such, it is important not to view conformity to masculine norms as an entirely negative process as some aspects of this gender role can be adaptive, especially when managing mental health. For instance, the Positive Psychology/Positive Masculinity (PPPM) framework is rooted in positive psychology and draws attention to the strengths and virtues of masculine ideals as opposed to the negatives (Kiselica & Englar-Carlson, 2010). Positives associated with the masculine gender role include, male relational styles that flourish through shared activities, expectations to care and protect their loved ones, to be good fathers and be self-sufficient, to be courageous, and to use humour to attain intimacy and manage stressful situations (Kiselica & Englar-Carlson, 2010). In short, positive masculinity refers to the traits of traditional masculine roles that are positive, strength-based and can be used to improve the lives of men (Englar-Carlson & Kiselica, 2013). The practical applications of the PPPM framework can be observed in men experiencing emotional distress. For instance,

when applied, men who have greater conformity to winning, masculine status, and in some instances risk-taking are more likely to seek help (Wong, Ho, Wang, & Miller, 2017; Iwamoto, Brady, Kaya, & Park, 2018; Sileo & Kershaw, 2020). Furthermore, masculine ideals such as self-control and strength encourage men to gather information about mental health, become independent from medication, engage in physical activities to help manage their well-being, and to actively engage in help-seeking if it is perceived as an active and independent action (Seager & Barry, 2019b; Krumm, Checchia, Koesters, Killian, & Becker, 2017). Therefore, proponents of PPPM recommend that positive masculine traits be included within mental health treatment and psychotherapy (Kiselica & Englar-Carlson, 2010).

Subsequently, it may be more appropriate to highlight that there are masculine traits which can be considered adaptive or maladaptive. Certainly, maladaptive masculine traits do have a negative impact on help-seeking for mental health difficulties, and conformity to masculine norms has been shown to increase mental health stigma (Whato & Swift, 2016; Vogel, et al., 2011). Mental health prevalence rates and the disparity in help-seeking between men and women is not exclusive to the UK, and is consistently reported around the world (World Health Organization, 2002). This may be a more complex process, whereby a combination of barriers may provide a more systemtic and informative explanation as to why men and male students engage with metnal health services less (Whato & Swift, 2016; Vogel, et al., 2011).

Mental Health Literacy

A key focal point for mental health interventions has been to target mental health literacy. Mental health literacy refers to the knowledge and beliefs about mental health disorders that benefit the health of an individual or others such as knowing how to recognise a disorder and having sufficient knowledge of effective self-help strategies to prevent a mental disorder, as well as first aid skills to help others (Jorm, 2012; Kutcher, Wei, & Coniglio, 2016). The rationale for linking mental health literacy and help-seeking is that someone experiencing psychological distress will delay help-seeking as they fail to recognise or associate their symptoms with a mental health disorder (Jorm, 2012). Individuals may also be unaware of the types of professional help and evidence-based treatments (Jorm, 2012). In turn, if one is aware of their difficulties, they still may be reluctant to seek help due to lack of awareness of treatments available or lack understanding of treatment effectiveness.

When examining mental health literacy across age groups, young adults aged 18-24 are more likely to misidentify mental health disorders such as schizophrenia and depression (Farrer, Leach, Griffiths, Christensen, & Jorm, 2008). Similarly, this pattern is also observed in students as they are less likely to seek help from a General Practitioner (GP) (Reavley, McCann, & Jorm, 2012). Considering undergraduate students have worse mental health literacy in comparison to postgraduate students (Gorczynski, Sims-schouten, Hill, & Wilson, 2017) and that young adults are poorer at identifying mental health disorders (Reavley, McCann, & Jorm, 2012) it highlights the elevated risk of problems university students face from impaired mental health literacy. Certainly, poor mental health literacy can have a negative impact of help-seeking and is one of the most important barriers for this population group (Gulliver, Griffiths, & Christensen, 2010).

Numerous studies have demonstrated the association between mental health literacy and help-seeking, whereby those with higher mental health literacy also score higher on help-seeking intentions for mental health difficulties (Smith & Shochet, 2011). Furthermore, in one longitudinal study, greater perceived need for treatment and mental health literacy at baseline was a significant predictor of taking psychiatric medication at 6-months follow up (Bonabi, et al., 2016). Further evidence for mental health literacy contributing to help-seeking behaviours can be observed from mental health literacy interventions. For instance, mental health literacy e-interventions have been shown to improve help-seeking behaviours amongst international students (Clough, Nazareth, & Casey, 2019). Systematic reviews of help-seeking interventions for common mental health disorders also highlight the effectiveness of mental health literacy content in improving help-seeking attitudes (Gulliver, Griffiths, Christensen, & Brewer, 2012a; Xu, et al., 2018).

As with the other barriers previously mentioned, mental health literacy can help explain as to why help-seeking is lower in men and male students. A UK study sampling 380 students found that male students had significantly lower scores of mental health literacy in comparison to female students (Gorczynski, et al., 2017). However, such findings must be interpreted cautiously as participants were all recruited from one university in the UK (Gorczynski, et al., 2017). Thus, these findings may not be representative of the UK as whole or internationally. Nonetheless, similar findings have been consistently reported from multiple countries such as the US, Australia, Norway, and other European countries, whereby men and male students have poorer mental health literacy and are worse at identifying and

labelling mental health symptoms/diagnoses (Lee, et al., 2020; Hadjimina & Furnham, 2017; Cotton, Wright, Harris, Jorm, & McGorry, 2006; Haavik, Joa, Hatloy, Stain, & Langeveld, 2017).

Despite the promise mental health literacy interventions pose, several issues still remain. Mental health literacy does not solely explain poorer help-seeking as it is often coupled with other barriers such as stigma and conformity to masculine norms as previously discussed. Although mental health literacy shares a positive relationship with help-seeking attitudes, this does not always translate into help-seeking behaviours. One study on older adolescents (16-18) found no relationship between mental health literacy and help-seeking behaviour (Ratnayake & Hyde, 2019). This has also been observed in students participating in a 2-week internet-based mental health literacy intervention that sought to promote mental health help-seeking (Gulliver, et al., 2012b). No improvements to help-seeking were observed for students participating in the online mental health literacy intervention when compared to a control group (i.e. no intervention) (Gulliver, et al., 2012b). The content of mental health literacy interventions is also inconsistent, without an agreed upon format or what mental health literacy specifically refers to. Certainly, mental health literacy is a broad term that is ill defined as it has been used to refer to definition of problems, self-help skills, first aid mental health skills and knowing available treatments. Without a standardised format, it is not clear what exact components need to be included within mental health literacy interventions for them to be effective (Kelly, Jorm, & Wright, 2007; Brijnath, Protheroe, Mahtani, & Antoniades, 2016; Kutcher, Wei, & Coniglio, 2016). This also results in poor methodological quality making them highly susceptible to risk of bias (Wei, Hayden, Kutcher, Zygmunt, & McGrath, 2013; Lo, Gupta, & Keating, 2018; Kutcher, Wei, & Coniglio, 2016).

Although mental health literacy is likely to be associated with help-seeking attitudes, particular attention needs to be given to the gender differences observed between males and females and it needs to be considered in the context of other barriers.

Age, Ethnicity, & Sexual Orientation

Other factors that are often thought to interplay with help-seeking include age, ethnicity, and sexual orientation. Typically, older adults hold more favourable attitudes to help-seeking and are more likely to seek help than younger adults (Mackenzie, Gekoski, & Knox, 2006). In one study, older adults aged 55-74 years of age were up to 3-times more likely to report positive help-seeking attitudes for mental health difficulties than younger adults (Mackenzie, Scott,

Mather, & Sareen, 2008). Once again, this could be attributed to mental health literacy as older adults may have greater awareness of mental health difficulties. For example, age and being in close proximity to others with a mental health diagnosis are predictive of total mental health literacy (Piper, Bailey, Lam, & Kneebone, 2018). Another study conducted in adults aged 65 years and over demonstrated that mental health literacy mediated the relationship between socio-demographic factors and mental health service utilisation (Kim, Rhee, Lee, Park, & Sharratt, 2017). Additionally, older adults face greater exposure to health services for other health reasons such as flu vaccinations and cancer screenings (Bremer, Lüdecke, & von dem Knesebeck, 2019). This can increase their confidence and familiarity associated with accessing professional help whilst also allowing for more opportunities for mental health difficulties to be detected by a medical professional. Stigma may also be lower in older adults due to this increase in mental health literacy and service familiarity. However, the systematic review by Clement et al., (2015) of 144 studies reports no differences for health-related stigma across age groups. Considering that students have reduced exposure to health care settings and that their mental health literacy is notably worse, especially in male students, this younger age group are subsequently less likely to seek help for mental health difficulties.

Ethnicity also interplays with one's willingness to seek help for mental health difficulties. Most notably, ethnic minority men/male students are less likely seek help for mental health difficulties and are more likely to experience barriers to help-seeking (Parent, Hammer, Bradstreet, Schwartz, & Jobe, 2018; Verissimo & Grella, 2018; Kam, Mendoza, & Masuda, 2019; Kim & Zane, 2016). This may be explained by the types of barriers ethnic minorities face when seeking help, such as the fear of being judged or discriminated against (de la Cruz, et al., 2016) as well as elevated levels of both public- and self-stigma (Kim & Zane, 2016; Clement, et al., 2015). Furthermore, ethnic minority male students generally have poorer mental health literacy compared to their white counterparts (Rafal, Gatto, & DeBate, 2018). Again, this interplays with identifying mental health symptoms and understanding appropriate treatment options which can have a negative impact on help-seeking. Another important help-seeking barrier to consider across the different ethnicities is conformity to masculine norms (Vogel et al., 2011). Across different cultures and ethnic groups, hegemonic masculine values may vary and the degree to which they are endorsed is likely to differ. In turn, hegemonic masculine values can mediate the relationship between ethnicity and help-seeking. Masculinity norms across minority ethnic groups, such as African American men,

Asian men, Latino men, and men from an indigenous background (e.g., Aboriginal) vary. For instance, African American men may place greater emphasis on autonomy, sense of control, freedom, and support emotional expression (Powell, Adams, Cole-Lewis, Agyemang, & Upton, 2016; Vogel et al., 2011). Asian values encourage greater conformity to emotional restriction and emotional avoidance, whilst discouraging the use of substances (Liu & Iwamoto, 2007; Vogel et al., 2011). Latino men may more readily internalise masculine norms, increasing the likelihood of them adopting maladaptive masculine traits (e.g., stoicism), which then act as larger cognitive barriers that are associated with need to ask for help (Vogel et al., 2011). Indeed, these differences in masculine norms are associated with differences in help-seeking attitudes and behaviours (Liu & Iwamoto, 2007; Vogel et al., 2011; Powell, et al., 2016; Sveticic, Milner, & De Leo, 2012).

Sexual orientation can also have an impact on mental health help-seeking although the effects are mixed. Although sexual minority groups experience significantly higher prevalence rates of mental health problems (Spittlehouse, Boden, & Horwood, 2019; la Roi, et al., 2020), they are also more likely to seek help from mental health services (Baams, De Luca, & Brownson, 2018; Parent et al., 2018). Higher prevalence rates and greater help-seeking may go hand in hand. Sexual minorities experience greater discrimination from others which can account for increased mental health incidence and mental health severity (Almedia, Johnson, Corliss, Molnar, & Azarel, 2009). Indeed, greater distress may assist with symptom recognition and service utilisation. Furthermore, sexual minority individuals may seek help more readily because they have greater access to supportive services through signposting and referrals from lesbian, gay, bisexual, transgender, queer or questioning (LGBTQ+) socials networks (Willging, Salvador, & Kano, 2006). Sexual minority men may also experience less interpersonal conflict when sharing emotions, expressing affection and have a closer relationship with femininity due to having a different conceptualisation of masculinity and their own male identity (Simonsen & Blazina, 2000; Wester, 2008; McMahon, Tiernan, & Moane, 2020). This may also incorporate more positive help-seeking attitudes and perceptions of seeking help.

Despite sexual minority men being more likely to seek mental health support, they may still feel restricted to having hegemonic masculine ideals and that portraying such an image is important to them (Sánchez, Greenberg, Liu, & Vilain, 2009). This can have an impact on things such as stigma and help-seeking as homosexual men equally endorse hegemonic

masculine values or feel greater pressure to portray masculine behaviours to avoid being serotyped and discriminated against (Salvati, Ioverno, Giacomantonio, & Baiocco, 2016). Indeed, homosexual men and men who exhibit gender-non-confirming behaviours are likely to suffer from greater discrimination from heterosexual and other homosexual men (Salvati et al., 2016). Certainly, this pathway is complex and can contribute to differences observed in help-seeking attitudes and behaviours.

Genderless Mental Health Services

Considering the key barriers discussed earlier in this chapter, engaging and retaining men that do seek help is very important. However, evidence suggests the gender disparity may not solely reside with the individual and instead be embedded within the type of treatment and care men receive when they do seek help. Mental health research often fails to focus on gender differences in the treatment of mental health disorders. In a study examining 768 randomised clinical trials, 89% included both male and female participants but less than 1% intended to analyse their findings by gender (Weinberger, McKee, & Mazure, 2002). Similarly, mental health research often struggles to recruit male participants, resulting in an unequal proportion of male and female participants, with some studies reporting a 90% sampling bias in favour of female participants (Ellis et al., 2014; Diviak, Wahl, O'Keefe, Mermelstein, & Flay 2006; Griffiths, & Christensen, 2006). This oversight helps to explain why mental health services often fail to deliver gender-sensitive mental health treatments (Howard, et al., 2017). Furthermore, this can lead to discouragement and disengagement from men as mental health services adopt gender-biases or fail to provide appropriate gender-sensitive approaches. Certainly, understanding how men differ from women in response and uptake to treatment is critical for enhancing treatment efficacy and acceptability for those experiencing mental health difficulties (Weinberger, McKee, & Mazure, 2002).

For instance, common mental health disorders such as depression and anxiety are often regarded as stereotypically 'feminine' and although this can increase the likelihood of women fulfilling the criteria for depression, it also undermines the likelihood of correctly identifying depression in men (Norman, 2004; Salk, Hyde, & Abramson, 2017). Men and male students are more likely to experience alcohol or other drug use, risk taking, poor impulse control, and aggression when feeling depressed but may report lower frequency and intensity of core depressive symptoms when compared to women (Cavanagh, Wilson, Kavanagh, &

Caputi, 2017; Martin, Neighbors, & Griffith, 2013). These differences can lead to the gender disparities seen in treatment uptake due to clinicians misidentifying mental health symptoms in men as they are likely to present in ways that do not conform to expected medical guidelines. Symptoms of stress, irritability, risky behaviours, hyperactivity, and substance abuse are often considered male-typical symptoms of depression but none of these are included within the DSM criteria (Call & Shafer, 2018; Martin, Neighbors, & Griffith, 2013). In fact, men who experience more of these male-typical symptoms are less likely to seek mental health help for depression. Instead, they are more likely to look for other forms of help more relevant to their other health concerns such as medical professionals focussing on physical health, alternate professional sources not specialised in mental health, or spiritualists or healers (Call & Shafer, 2018). Furthermore, this problem can be exacerbated by pre-existing screening tools for depression. The Beck Depression Inventory (BDI) produces higher scores for females than males, even for individuals who do not meet the diagnostic criteria for depression, and this is likely due to the items being more related to the social construct of female gender and the biological changes that accompany depression (Salokangas, Vaahtera, Pacriev, Sohlman, & Lehtinen, 2002). Similar findings may also be present in other validated measures such as the Patient Health Questionnaire-9 (PHQ-9) and Kessler's Psychological Distress Scale (K10) (Kendel, et al., 2010; Slade, Grove, & Burgess, 2011; Baillie, 2005). Conversely, clinicians are less likely to diagnose men with depression due to gender stereotypes and clinician biases - even when they score the same on standardised diagnostic instruments (Afifi, 2007). In short, pre-existing validated scales are likely to be less sensitive at detecting depression in males. This has often led to recommendations and the development of male-specific instruments to measure mental health symptoms in men. For example, Rice et al., (2015) developed The Male Depression Risk Scale (MDRS-22) capturing male-specific symptoms such as emotional suppression, drug use, alcohol use, anger and aggression, somatic symptoms, and risk-taking.

Although symptoms present differently in men, reducing chances of detecting a mental health disorder from pre-existing diagnostic screening tools, men may also be treated differently by clinical professionals irrespective of their symptom presentation. As mental health research fails to focus on gender differences and assumes a gender-neutral position (Howard et al., 2017), this can lead to gender-biases within clinical treatment and the support offered to men and male students. Most notably, gender blindness assumes that there is no

difference in the health and illness between men and women, when differences do exist (Marcum, 2017). On the other hand, gender stereotyping assumes differences in health and illness between men and women when these differences do not exist (Marcum, 2017). Both male and female clinicians often report experiencing greater discomfort when working with male clients and often men are stereotyped to be perpetrators, aggressive, and abusive (Mahalik, Good, Tager, Levant, & Mackowiak, 2012). Clinicians are also likely to underdiagnose gender-atypical and over diagnose gender-typical mental health symptoms. For instance, clinicians often fail to understand and make a correct assessment of men suffering from abuse, trauma, depression or eating disorders (Mahalik et al., 2012). Furthermore, medical professionals are likely to hold their own gender-expectations of how men and women should behave and engage with healthcare. Women are perceived to be more health conscious and responsible than men, whilst it is expected for men to be more passive, ignorant, stoical about health issues, and have poor communication skills when articulating their emotions (Seymour-Smith, Wetherell, & Phoenix, 2002). One qualitative study examining 59 client-counsellor cases observed that counsellors displayed some gender expectations and expected their male clients to exhibit greater emotional control and those in therapy were there because they have got 'stuck' or failed to learn how to handle the situation (Vogel, Epting, & Wester, 2003). Men who did engage with therapy were seen as lacking self-control, unable to learn new things, and deficient in their ability to handle their current situation, whereas women were perceived as vulnerable and needed to be taken care of (Vogel, Epting, & Wester, 2003). Subsequently, men who do not fit with these gendered stereotypes are often branded as feminine or deviant (Seymour-Smith, Wetherell, & Phoenix, 2002). Nonetheless, due to the qualitative nature of this investigation, these findings may present gender-biases within the coding/analysis of the data or overlook certain themes that were more relevant to women due to the inexperience of the authors (Vogel, Epting, & Wester, 2003). Furthermore, this may not be present in all client-counsellor dyads as research demonstrates the level of a clinician's gender competency and understanding of male needs can account for outcomes attained through psychotherapy (Vogel, Epting, & Wester, 2003; Owen, Wong, & Rodolfa, 2009). Therapists, irrespective of their own gender, who are aware of gender issues, have good gender self-awareness, and are sensitive to the way in which men express and manage distress are likely to be more effective at identifying and treating them, leading to better outcomes (Cochran & Rabinowitz, 2003; Mahalik et al., 2012).

Another feature embedded within mental health services which deters men from engaging is the types of treatment provided. When examining men in isolation, it is apparent that they generally prefer psychotherapy over medication to manage their mental health (Berger, Addis, Green, Mackowiak, & Goldberg, 2013; Sierra Hernandez, Oliffe, Joyce, Söchting, & Ogrodniczuk, 2014). However, when compared to women, men are more ambivalent and less clear with their choices as women are more likely to choose psychotherapy over medication when compared to men (Dwight-Johnson, Sherbourne, Liao, & Wells, 2000; Houle, et al., 2013). Considering these two points suggests that men may prefer psychotherapy to medication but not as much as women do and they may be selecting psychotherapy as the lesser of two evils as opposed to the preferred treatment option. A qualitative study found that young men (mean age of 18.80 years) report sharing emotions as an unfamiliar process which can make therapy an uncomfortable experience (Rice, Telford, Rickwood, & Parker, 2017b). This can lead to a lack of confidence or anxiety when identifying and discussing their emotions (Rice et al., 2017b). However, it needs to be noted that these participants were already engaged with, and recruited from an intervention, which may present issues within the analysis. For example, these views may be specific to the intervention in which they were recruited from and subsequently not apply to other mental health contexts. Moreover, the perceptions and attitudes of therapy may be different to non-help-seeking men (Rice et al., 2017b). In another study where men were offered the choice of counselling or acupuncture to treat emotional distress, no significant differences were observed with the type of treatment they chose (Cheshire, Peters, & Ridge, 2016). Similarly, men prefer support groups, such as occupational support or information sharing, more than women, possibly due to less focus on sharing emotions (Liddon, Kingerlee, & Barry, 2018). This indicates that men adopt varying treatment preferences to address their problems. Men are also more likely to report systemic barriers with treatment options if they are not accommodating of male needs and ignore the importance of male gender within the context of mental health (Liddon, Kingerlee, & Barry, 2018).

The Need for Male-Sensitive Approaches

Up to this point, this thesis has summarised in great detail the issues pertaining to men's mental health, particularly in the disparity seen in completed suicide, whereby men are 3 times more likely to take their own life (Baker, 2018a; Baker, 2020; McManus, et al., 2016;

Office for National Statistics, 2018). Additionally, the mental health risk factors and poor help-seeking observed in students has also been emphasised. Given this, this thesis situates itself in a niche between two topical research fields, that of men's mental health (irrespective of age) and that of student mental health (irrespective of gender). Certainly, men's mental health is an area requiring great attention. Suicide rates are one of the biggest driving factors for this. Additionally, however, men are also significantly under-represented in mental health services due to patterns in help-seeking and service engagement. Nonetheless, when we begin to explore the barriers to help-seeking seen in men, a unique story unfolds. Barriers such as stigma, mental health literacy, help-seeking attitudes, and mental health risk factors are significantly greater for males, but even more so in a student population. Thus, this highlights a unique clinical population that is in great need of attention, male students. Male students sit at the juncture of the men's mental health literature and the student mental health literature. Here, we see how the greater risk gender contributes to suicide (i.e., being male) and poorer mental health help-seeking amongst a student population when compared to adults. To emphasise this point further, suicide among male students represent the biggest cause for concern as suicide is the biggest cause of death for younger men, representing 30% of avoidable deaths (Baker 2018a; Baker, 2020). Due to this, the current PhD situates itself at this juncture, seeking to overcome and provide much-needed light to understanding the nuances of male student mental health. As we have seen, men's mental health and student mental health represent two distinct research areas in their own right. Thus, finding literature or evidence that specifically caters to the male student population is difficult to come by, which again emphasises the need for the current PhD thesis. To address this, the current thesis seeks to synthesise and integrate evidence from the men's mental health literature and the student mental health literature to provide a systemic and comprehensive understanding of male student mental health help-seeking, together with the associated barriers, and potential interventions.

Current Recommendations

Considering the types and number of barriers and obstacles men and male students face when seeking help for mental health difficulties, it should come as no surprise that numerous authors have proposed specific recommendations and guidelines for developing mental health interventions and treatment programmes that are more sensitive to the needs of men.

These recommendations build on the barriers mentioned previously and include specific techniques such as;

a) mental health training and education to tackle stigma whilst normalising mental health issues (Seaton, Bottorff, Oliffe, Medhurst, & DeLeenheer, 2019; Men's Health Forum, 2015),

b) to use lay language as this is more acceptable to men (Seaton et al., 2019; Robertson, Bagnall, & Walker, 2015; Patrick & Robertson, 2016; Pollard, 2016; River, 2018; Men's Health Forum, 2015),

c) provide safe settings to build trust and rapport with professionals (Robertson, et al., 2018; Kivari, Oliffe, Borgen, & Westwood, 2018; Men's Health Forum, 2015),

d) implement male-only or male-sensitive settings to improve engagement (Baker, 2016; Cochran & Rabinowitz, 2003; Monaem, Woods, Macdonald, Hughes, & Orchard, 2007; Robertson, Bagnall, & Walker, 2015; Patrick & Robertson, 2016),

e) to help men become emotionally expressive whilst building feelings of self-esteem, control and responsibility (Robertson, Bagnall, & Walker, 2015; Pollard, 2016; Seidler, Rice, Oliffe, Fogarty, & Dhillon, 2017), and

f) to incorporate different therapeutic modalities such as strength-based approaches as they are perceived more favourably by men (Seaton et al., 2019; McKelley & Rochlen, 2007; Robertson, Bagnall, & Walker, 2015; Oliffe & Han, 2014; Patrick & Robertson, 2016; Seidler et al., 2017; Men's Health Forum, 2015).

Another piece of evidence that highlights the growing momentum of developing male-sensitive interventions is that in 2018 the American Psychiatric Association (APA) published Guidelines for Psychological Practice with Boys and Men which provides recommendations to enhance gender- and culture-sensitive psychological practices with boys and men from diverse backgrounds (American Psychological Association, 2018). Much of these recommendations are similar for male-students, although greater emphasis is placed on

health classes/programmes, more accessible healthcare, and the incorporation of incentives in a university setting (Davies, et al., 2000). Others call for change in policy, highlighting that healthcare policy should enforce the delivery of appropriate and acceptable health services to men in need (Bilsker, Fogarty, & Wakefield, 2018).

Through discussing the barriers to help-seeking as well as the recommendations that have been provided, a clear distinction in health promotion and help-giving approaches becomes important. This distinction is often touched upon within the evidence. For example, the access to care model by Gask et al., (2012) identifies community engagement as a key component for help-seeking (help-promotion), whilst delivering psychosocial intervention within the community may improve clinical outcomes (help-giving). Similarly, Horrell et al., (2014) delivered a CBT intervention for depression that considered both approaches. The intervention was labelled as a 'self-confidence' workshop and provided self-referral access (help-promotion), whilst also being structured as a one-day intervention that was delivered on the weekends (help-giving). Brown et al., (in submission) proposes the NEPSAC 'bridge' model (Normalising, Effectiveness, Publicity, Self-referral, Acceptable, Convenient) which also advocates for both the importance of social marketing of interventions to combat barriers of stigma and self-reliance (help-promotion) and tailoring the types of treatment offered depending on the population of interest (help-giving).

Firstly, help promotion may be of enormous value and impact for this population group. In essence, if mental health interventions can be promoted in a way that is congruent and appealing to male students, better uptake to mental health initiatives may be achieved. Much of the focus here revolves around attitude or behaviour change, motivating male students to seek help and make contact with formal (or informal) support. On the other hand, the second approach of help-giving places emphasis on the therapeutic experience male students receive and the type of help being given to them, not only as a means to improve clinical outcomes but to also further help encourage help-seeking if necessary. Help-giving interventions by definition can vary in how extensive and evidence-based they are. The intervention developed by Horrell et al., (2014) was one-day long for instance. This nuanced difference draws attention to two very different processes of help-promotion and help-giving.

Although these two processes can lead to differences in recommendations and solutions it is impractical to view them as solely distinct entities. Put simply, an excellent help-promotion campaign or initiative will be redundant if the male students who do seek help are

not met with appropriate help-giving approaches. This is likely to lead to an ineffective help-giving experience and increase the risk of drop out. Similarly, perfecting the help-giving component will not be of much use if the majority of male students do not engage with it. This would compromise a great intervention with poor uptake. Thus, they both must be considered and tackled accordingly, and in some instances, in tandem.

The current PhD aligns more with the former (i.e., help-promotion) working on the core processes to help facilitate help-seeking via help-promotion. However, as positive therapeutic experiences can be achieved from a range of approaches, an overlap may occur whereby help-promotion initiatives, particularly those that are face-to-face can facilitate an opportunity to experience help-giving, that in the eyes of the patient, feels akin to support despite aligning more with help-promotion. Nonetheless, this is a secondary outcome with the primary focus of this PhD being centred around help-promotion and working with male students to improve help-seeking.

Current Approaches

With the increased recognition of the importance of male-sensitive initiatives, there has been some recent progress. Various male-specific programmes aimed at engaging more men with mental health services have been developed and implemented (Bilsker, Fogarty, & Wakefield, 2018). A brief summary of some male-sensitive mental health campaigns and interventions can be seen in table 1.1.

Table 1.1 Examples of various Male-Sensitive Mental Health Initiatives.

Initiative	Aim	*N*	Age	Sample	Effectiveness
It's a Goal!	Pre-clinical CBT, group-based programme targeting young men to promote positive mental health and prevent the development of serious mental health problems (Spandler, McKewon, Roy, & Hurley, 2013).	214	Range from 17-70. 53% between 18-35, 30% between 26-45 and 18% over 46.	Predominantly white British men, although 13 women also participated, residing in the North West of England referred to the programme through the UK's IAPT service.	Significant improvement in mental health as measured by the WEMWBS. Mean (SD) improvement of 10 (7.7), $p < 0.001$.
HeadsUpGuys	A website where men can access psychoeducation, coping strategies, preventative advice and how to access professional services for depression (HeadsUpGuys, n.d; Ogrondniczuk, Oliffe, & Beharry, 2018)	19,000 visits per month	n.a	Demographic information is not captured from the website but averages 19,000 visits per month from a range of countries including Canada, US, UK, Ireland, Australia, New Zealand, Philippines, India and Pakistan.	Efficacy of the intervention has not been evaluated, although over 65,000 self-check questionnaires for depression have been completed and the website has gained good visibility from social media outlets and self-help websites.
Men's Sheds	Community-based organisations that focus on providing a space for older men to participate in meaningful occupation such as construction, gardening, pottery, social outings and art (UK Men's Sheds Association, n.d; Milligan, et al., 2013)	n.a	Older men, usually retired	Generally tailored towards older men to help create and foster social interaction, connections, support loss of identity through retirement, and combat social isolation. A safe place to participate in purposeful activities leaving men with a sense of achievement, accomplishment, value, and altruism.	Positive impact on men's physical health, mental health, and social and emotional wellbeing.
Real Men. Real Depression.	A campaign and brochures to educate the public about depression in men from 2003 – 2005 (National Institute of Mental Health, n.d; Rochlen, Whilde, & Hoyer, 2005).	n.a	n.a	National public campaign in the US seeking to educate the public about depression in men between 2003-2005 through the use of radio, television, public service announcements, brochures, fact	Distributed 1 million copies and over 150,00 copies were downloaded from the website. 14million views on the website and 5,000 e-mails and calls to the information hotlines.

				sheets, a website, and telephone and email hotlines	
Man Therapy	A website targeting men at risk of suicide and who are reluctant to seek care on their own. Using concepts relating to maladaptive masculinity to reach new men and reshape the conversation around mental health (Spencer-Thomas, Hindman, & Conrad, 2014; Man Therapy, n.d).	356,090 visits as of Jan 2014	79% between 25-64.	79% of visitors are male and 10% are Military personnel.	Efficacy of the intervention has not been evaluated, although over 59,894 mental health screenings have been completed and 19,586 have accessed crisis information. 83% would recommend to a friend and 51% agreed or strongly agreed that they were more likely to seek help after.
Atlas	A pilot service that aimed to engage more men suffering with distress into primary-care-based services by offering counselling and/or acupuncture (Cheshire, Peters, & Ridge, 2016).	107	Median 41.0 (IQR 31 – 49)	Patients referred to Atlas by their GP's. 75% employed, 48% white British, 27% White European/other, 8% Black/Caribbean/African, 4% Asian, 4% Arab, 4% mixed, 4% other.	Both acupuncture and counselling were equally popular. Significant improvement in anxious mood, perceived stress, positive well-being, and physical health ($p < 0.001$). No change in depressed mood.
YBMen Facebook Project	The Young Black Men, Masculinities, and Mental Health (YBMEN) project is a 5-week mental health education and social support intervention for young black men (Watkins, Allen, Goodwill, & Noel, 2017).	30	Black men aged 18-26 (mean 19.9).	Participants were black men who were enrolled in the local university and who had never been diagnosed with a mental health condition. Men with a mental health condition were excluded as the intervention was designed for subclinical symptoms and to focus on prevention.	Reduced depressive symptoms and increased social support. Additional positive feedback from qualitative data.
Help Out a Mate	Help Out a Mate is a 45-minute sports-based mental health literacy programme designed to increase the competencies and intentions	102	Adolescent males aged 12-18 (mean 14.30).	Male sports participants from a community football club.	Participants responded positively to the intervention and saw improvements in mental health literacy

	to provide and seek help for mental health problems amongst an adolescent male sports population (Liddle, Deane, Batterham, & Vella, 2019).				(depression and anxiety), intentions to provide help, and help-seeking attitudes.
The Men's Stress Workshop	A treatment focused on the goals of better understanding oneself and making better choices. Two individual sessions and eight group sessions incorporating psychoeducation, CBT skills and discussion of various masculine norms. (Primack, Addis, Syzdek, & Miller, 2010)	6	Ages ranged from 38 – 65.	Participants recruited from an urban community in the US with 5 identifying as non-Latino white and 1 as African American. 4 participants met criteria for major depressive disorder.	Decrease in depression severity as postworkshop. Increase in number of social support connections and stigma. No changes in conformity to masculine norms. Positive feedback from qualitative evaluation.
Silence is Deadly	A face-to-face multicomponent intervention for males in secondary school experiencing injuries, relationship difficulties, circumstantial stressors whilst providing information on how to 'help out a mate'. (Calear, et al., 2017)	n.a	n.a	Eight Australian high schools will be recruited to the trial, with male students aged 16 to 18.	Protocol - results yet to be published.

Although these mainly show promising results, issues still remain. Due to the idiosyncratic nature of such approaches, it is not always possible to assess effectiveness. For instance, the online interventions and national public campaign fail to provide any insight as to whether such downloads or visits are actually contributing to positive changes in help-seeking or well-being. Indeed, the Man Therapy intervention highlights that 51% of participants were more likely to seek help after visiting the website, although due to it being an uncontrolled study it is not clear if this is significantly better than a control group (i.e. no intervention), other initiatives/treatment as usual, or even better than chance (Spencer-Thomas, Hindman, & Conrad, 2014; Man Therapy, n.d). For other strategies, it is not clear as to whether men actually consider the intervention acceptable for their needs. Acceptability and feasibility evaluation are essential to determine an interventions potential or actual effectiveness. Even when significant improvements are observed from quantitative measures these are often done with small sample sizes, limiting the extent to which conclusions can be made and whether it is feasible to scale the intervention up to reach a larger proportion of men and male students.

Furthermore, for all of these seemingly effective interventions, the development stages of such interventions are not outlined and the theoretical or rationale underpinning as to why certain strategies or techniques have been implemented are rarely, if ever, stated. Some of these male-sensitive interventions, such as the Real Men Real Depression campaign, may not be much more effective than gender-neutral approaches (Rochlen, McKelley, & Pituch, 2006). Further, the majority of men-specific interventions only reach a small proportion of the male population. Additionally, it is not entirely clear how these initiatives can be scaled up or tailored specifically for male students or men suffering from psychological distress (Bilsker, Fogarty, & Wakefield, 2018; Monaem et al., 2007). In the instance where men do seek help, and the experience is negative, these approaches have the potential to leave a negative help-seeking experience which is likely to lead them to believe mental health support is ineffective, contributing to greater reluctance to disclose distress or seek help in the future (Seidler, Rice, Kealy, Oliffe, & Ogrodniczuk, 2020).

Given this, it is essential that male-sensitive interventions are developed carefully and correctly (Duncan, et al., 2020). Without the theoretical and detailed explanation underpinning such interventions, it is difficult to replicate them to other groups of men to further test the proposed interventions effectiveness. The current evidence base indicates

that much of the pilot interventions that were implemented are rarely replicated, followed-up, or built upon, as the development process and description of such pilot interventions are not outlined in sufficient detail (Hoffman, et al., 2014). Secondly, these interventions often fail to provide sufficient information regarding their effectiveness in the context of help-seeking or mental health outcomes through the use of objective measures. This again makes replication difficult. If the specific strategies and techniques that are implemented within effective interventions are outlined, the specific components contributing to change can be adapted, evaluated, and embedded within future developments. Indeed, if specific components were outlined it would allow for scalable and cost-effective interventions as it would be clear what is and is not necessary for an intervention to be effective. This is of particular concern for intervention providers who may be less familiar with the scientific literature and do not have the time to pilot their ideas.

Indeed, a considerable need for evidence-based evaluation and conceptual models as to how best to develop and promote mental health initiatives to men and male students is needed (Rochlen & Hoyer, 2005). By adopting a systematic, more comprehensive and transparent approach to reporting intervention development such as the Medical Research Council's (MRC) guidance for developing and evaluating complex interventions (Craig et al., 2008; O'Cathain, et al., 2019), it is likely to enhance our understanding about the intervention development process whilst facilitating retrospective assessment of how different approaches can lead to effective or ineffective interventions (Duncan, et al., 2020; Hoffman, et al., 2014).

With the lack of evidence-based interventions and poor evaluation methods, certain approaches may also be inadvertently harmful to men. Strategies that seek to leverage gender norms by adopting masculine ideas to elicit behaviour change need careful consideration (Fleming, Lee, & Dworkin, 2014). Similarly, the use of social marketing may use hegemonic masculinity as a promotional tactic to engage men. For example, making use of terms such as courage, being strong, or to 'man up' can in-avertedly reinforce notions of hegemonic masculinity contributing to worse health outcomes in the long-term (Baugher & Gazmararian, 2015). In turn, this can reinforce maladaptive and homogenised images of masculinity and 'competes' with other effective public health recommendations and services (Robinson & Robertson, 2010; Men's Health Forum, 2015).

Aims and Hypothesis

Considering the lack of evidence-based testing and interventions that are based on theory, the overarching purpose of this PhD is to provide a better understanding of mental health help-seeking in men and male students to inform the development of an empirically driven, theoretically informed intervention that targets and encourages help-seeking in male students. To address this, the current PhD will draw up existing evidence and theories from a range of published evidence to understand why men do not seek help. Furthermore, this evidence will be synthesised and integrated together by using the MRC Framework for developing a complex intervention (Craig, et al., 2008; O'Cathain, et al., 2019). The MRC framework was originally published to assist researchers adopt appropriate methods regarding the development and reporting of interventions (Craig, et al., 2008). This framework has undergone two revisions and the newest guidance provides detailed guidance on how to report and design complex interventions (O'Cathain, et al., 2019). Here, a complex intervention refers to an intervention that has several interacting components, requires novel behaviours by those delivering the intervention, or includes a variety of outcomes (O'Cathain, et al., 2019). Such a framework provides a structure as to how to carefully develop new interventions so that they have a better chance of being effective when evaluated, in turn increasing the chances of them being widely adopted in the real-world (O'Cathain, et al., 2019). In brief, the MRC framework has four key stages (feasibility and piloting, evaluation, implementation, and development), however more explicit actions such as planning, involvement of stakeholders, and drawing on existing theory are provided (Craig, et al., 2008; O'Cathain, et al., 2019). This PhD will address the first two key stages of the MRC framework, specifically development and feasibility and piloting. For the development stage, a systematic review will be conducted to identify the current evidence base, the integration of past theory as to why men do not seek help and what strategies can be used to address this issue, and thirdly, the modelling of process and outcomes of what an intervention may look like through the use of a qualitative focus group investigation. For the feasibility and piloting stage, three gender-sensitive pilot interventions addressing mental health help-seeking will be developed and piloted within a sample of male students. More specific detail pertaining to these stages will be discussed in Chapter 4.

The MRC framework for developing a complex intervention has been chosen over other frameworks as it provides a structured, yet flexible approach to designing a complex

intervention. As help-seeking in men is a complex pathway, containing a multitude of influential factors and barriers, the MRC framework provides guidance as to how to design an intervention that can accommodate these components, such as help-seeking attitudes, stigma, conformity to masculine norms, mental health literacy, demographic factors, types of services offered as well as any other important considerations that may arise. Indeed, other frameworks do not provide sufficient guidance on how to incorporate multiple interacting parts within an intervention or are too specific to a particular problem. For instance, frameworks outlining how to develop effective specific interventions for building healthy marriages, managing food portion sizes, developing digital health interventions, and working with complex trauma in children cannot be easily applied to men's mental health help-seeking (Dion, et al., 2003; Steenhuis & Bermeer, 2009; Yardley, Morrison, Bradbury, & Muller, 2015; Kinniburgh, Blaustein, Spinazzola, & Van der Kolk, 2017). Subsequently, the MRC framework is the preferred framework of choice due to being one of the most influential and widely cited frameworks for developing complex interventions, its flexibility and adaptability to a range of different contexts, and due to the current absence of a framework specific to men's mental health help-seeking.

Research Question: Is it possible to develop an intervention to systematically enhance mental health help seeking in male students?

To answer this research question, this PhD proposed four specific aims. These were:

1. To identify and evaluate the evidence for interventions that have been designed to improve/encourage mental health help-seeking in men. To achieve this, a systematic review will aim to synthesis and collate specific techniques that are consistently used within help-seeking interventions for men.

2. To discover the views of male students regarding what they think is important and acceptable when designing mental health interventions for male students. A qualitative, focus group investigation will be conducted with male students to identify specific recommendations and techniques to consider when designing an intervention.

3. To develop a framework and interventions for male students that targets help-seeking. Findings from the systematic review, focus groups investigation, and published literature will be synthesised into a comprehensive framework that reports the key features required to facilitate help-seeking. Detail of these key features will allow for future replication and development by other researchers and education/healthcare providers.

4. To test the acceptability and effectiveness of the developed interventions tailored towards improving mental health help-seeking in male students.

The structure of this PhD will align with these aims. Chapter 2 outlines a systematic review of male-sensitive interventions addressing mental health help-seeking and synthesised using specific behaviour change techniques (BCTs) (Michie, et al., 2013) that are utilised within them. This review is now published (Sagar-Ouriaghli, Godfrey, Bridge, Meade, & Brown, 2019). Chapter 3 reports a qualitative focus group investigation with male students exploring their thoughts about how to develop and design male-sensitive mental health interventions. Data was analysed using thematic analysis (Braun & Clarke, 2006; Vaismoradi, Turunen, & Bondas, 2013). This study is now published (Sagar-Ouriaghli, Brown, Vinay, & Godfrey, 2020a). Chapter 4 examines in some detail, the process of intervention development in accordance to the MRC framework and the Capability, Opportunity, and Motivation model of Behaviour change (COM-B) (Craig, et al., 2008; O'Cathain, et al., 2019; Michie, Van Stralen, & West, 2011). This paper is now published (Sagar-Ouriaghli, Godfrey, Graham, & Brown, 2020b). Chapter 5 reports on the implementation and evaluation of three gender-sensitive pilot interventions for male students. Lastly, Chapter 6 provides an overall conclusion from this work and general discussion of implications and future directions.

For logistical reasons, the post-print copies of the published papers have not been included within the thesis itself but are included in the appendices (2.1, 3.1, and 4.1). Within the thesis, the final accepted peer-reviewed Microsoft Word versions of the papers are included. This arrangement has made it easier to have a single formatting system for pages and references. Chapter 6 will discuss each chapter in more detail and provide a broader overview of how these chapters (and publications) align with one another.

Chapter 2:

Improving Mental Health Service Utilisation Amongst Men: A Systematic Review and Synthesis of Behaviour Change Techniques (BCTs) Within Interventions Targeting Help-Seeking

Chapter Preface **49**

Publication details **50**

Abstract **51**

Introduction **52**

Method **56**

Search Strategy 56

Population 56

Interventions 57

Eligible Articles 57

Quality Assessment 59

Data Extraction 61

Behavioural Change Techniques (BCTs) 64

Results **68**

Strength of Evidence 68

Categorisation of Interventions 68

BCTs within the Engagement Strategies 72

BCTs Within RCTs and Retrospective Review 72

Discussion **76**

Interpretation of BCTs with regard to the literature 76

Implications for Future Research 78

Implications for Clinical Practice 79

Strengths and Limitations 80

Conclusion **82**

Chapter Preface

Following on from the evidence discussed in the introduction, it is clear that the evidence base pertaining to men and male student's mental health help-seeking interventions is disconnected. Due to this, the current PhD seeks to provide a better understanding of mental health help-seeking in male students in order to inform an empirically driven, theoretically informed intervention that targets and encourages help-seeking in male students (i.e., help-promotion). Here, male students are the key focus as greater negative outcomes and much higher risk factors have been found compared to non-student males. For male students, onset for mental health disorders reaches its peak between 19-21 years of age (de Lijster, et al., 2017; Cía, et al., 2018; Kessler, et al., 2007), they have lower rates of having their mental health needs met (Han, Compton, Gfroerer, & McKeon, 2014; Macaskill, 2013), suicide is the leading cause of death (Baker, 2018a; Baker, 2020), greater exposure to mental health risk factors are present including: student loans (Walesmann, Gee & Genitile, 2014), loneliness (Diehl, Jansen, Ischanova, & Hilger-Kolb, 2018; Richardson, Elliot, & Roberts, 2017), academic stress (McIntyre et al., 2018), worse mental health help-seeking (Pedrelli, et al., 2016; Eisenberg, Golberstein, & Gollust, 2007), more negative attitudes to mental health support (Wendt & Shafer, 2016; Brenner, et al., 2018; Clough, Nazareth, Day, & Casey, 2019), and are more likely to misidentify mental health symptoms (Farrer, Leach, Griffiths, Christensen, & Jorm, 2008).

To develop an empirically driven, theoretically informed intervention, it is imperative to understand and synthesise what has currently been proposed and tested to provide a foundation and starting point regarding intervention development. A significant body of literature centred around the two topical research fields of men's mental health (irrespective of age) and student mental health (irrespective of gender) exists. Nonetheless, a paucity of proactive, progressive, or solution-focused interventions or contributions to the literature remains. Especially where these two research fields intersect, i.e., male student mental health help-seeking. To address this gap, the first research question within this PhD seeks to identify, synthesise, and evaluate previous interventions that seek to improve/encourage mental health help-seeking (i.e., help-promotion) in men and male students. Here, a systematic review was chosen as advised by the MRC framework for developing a complex intervention (Craig, et al., 2008). Given that male student mental health help-seeking sits at the juncture between two topical research fields of men's mental health and student mental health as

discussed, the systematic review sought to focus solely on men's mental health as this would ensure we captured all male student focused interventions whilst also providing additional contextual information around men of all age groups. As any literature solely focusing on male student mental health was so scarce, a broader systematic review covering males of all age groups was conducted in the effort to be more informative – allowing for an enriched foundation in which this PhD could be built upon.

Publication details

The following chapter was submitted for peer-review on the 17th of January 2019 and was accepted for publication by the American Journal of Men's Health on the 8th of May 2019 (Appendix 2.1). This chapter is a copy of the final accepted peer-reviewed pre-print version. Changes have only been made to the reference style, labelling of tables, figures, and supplementary material added to the appendices to ensure consistent formatting throughout this thesis. Additional discussion that is more detailed will be provided at the end of this thesis, within the discussion chapter. The full reference for the following chapter is as follows:

Sagar-Ouriaghli, I., Godfrey, E., Bridge, L., Meade, L., and Brown, J.S.L. (2019). Improving Mental Health Service Utilization Among Men: A Systematic Review and Synthesis of Behavior Change Techniques Within Interventions Targeting Help-Seeking. *American Journal of Men's Health, 1-18*. https://doi.org/10.1177/1557988319857009

Abstract

Compared to women, men are less likely to seek help for mental health difficulties. Despite considerable interest, a paucity in evidence-based solutions remains to solve this problem. The current review sought to synthesise the specific techniques within male-specific interventions that may contribute to an improvement in psychological help-seeking (attitudes, intentions or behaviours). A systematic review identified 6,598 potential articles from three databases (MEDLINE, EMBASE and PsychInfo). Nine studies were eligible. A meta-analysis was problematic due to disparate interventions, outcomes and populations. The decision to use an innovative approach that adopted the Behavioural Change Techniques (BCTs) taxonomy to synthesise each intervention's key features likely to be responsible for improving help-seeking was made. Of the nine studies, four were engagement strategies (i.e. brochures/documentaries), two RCTs, two pilot RCTs and one retrospective review. Regarding quality assessment, three were scored as 'strong', five as 'moderate' and one as 'weak'. Key processes that improved help-seeking attitudes, intentions or behaviours for men included: using role-models to convey information, psycho-educational material to improve mental health knowledge, assistance with recognising and managing symptoms, active problem-solving tasks, motivating behaviour change, sign posting services and finally, content that built on positive male traits (e.g. responsibility and strength). This is the first review to use this novel approach of using BCTs to summarise and identify specific techniques that may contribute to an improvement in male help-seeking interventions, whether engagement with treatment or the intervention itself. Overall, this review summarises previous male help-seeking interventions, informing future research/clinical developments.

Introduction

Globally, males are 1.8 times more likely to take their own lives compared to women (World Health Organization, 2018; Chang, Yip, & Chen, 2019). This disproportionality higher suicide risk is often associated with men being less likely to seek help for mental health difficulties. Men tend to hold more negative attitudes towards the use of mental health services compared to women (Mackenzie, Gekoski, & Knox, 2006; Möller-Leimkühler, 2002; Addis & Mahalik, 2003; Yousaf, Popat, & Hunter, 2015). Being male is negatively associated with one's willingness to seek mental health support (Gonzalez, et al., 2011) and is a significant predictor of help-seeking attitudes (Nam, et al., 2010). These attitudes are reflected in low service use which is consistently observed across western countries. When controlling for prevalence rates, women in the United States (US) are 1.6 times more likely to receive any form of mental health treatment compared to men across a 12-month period (Wang, et al., 2005). Similarly, Australian women are 14% more likely to access mental health services compared to men (Australian Bureau of Statistics, 2007; Harris, et al., 2015). Lastly, the United Kingdom's (UK) Improving Access to Psychological Therapies (IAPT) service that provides evidence based psychological treatments for depression and anxiety receives 36% male referrals (NHS Digitial, 2016). Women in the UK are also 1.58 times more likely to receive any form of treatment (either medication or psychological therapy) even when controlling for prevalence rates (McManus, et al., 2016).

Although men complete more suicides globally, in western countries the male to female ratio is notably higher, whereby men are 3.5 times more likely to commit suicide compared to their female counterparts (World Health Organization, 2002; Chang, Yip, & Chen, 2019). It is important to note that not all men who commit suicide have a mental health issue due to a variety of psychological, social and physical risk factors (Turecki & Brent, 2016). However, men who do experience suicidal ideation are less likely to use mental health services (Hom, Stanley, & Jonier Jr, 2015), reducing opportunities for prevention and intervention.

Numerous reviews have attempted to identify the pertinent factors explaining why men are more reluctant to seek help for psychological distress (Möller-Leimkühler, 2002; Seidler, et al., 2016; Gulliver, Griffiths, & Christensen, 2010). Men are thought to be deterred from engaging in mental health services due socialisation into traditional masculine gender roles. Traits associated with traditional masculinity include stereotypes of stoicism,

invulnerability and self-reliance which are frequently discussed as they do not fit comfortably with psychological help-seeking (Vogel et al, 2011; Tang, Oliffe, Galdas, Phinney, & Han, 2014). For instance, negative emotions are perceived as a sign of weakness, discouraging men from reaching out to friends (Pirkis, Spittal, Keogh, Mousaferiadis, & Currier, 2017). This negatively impacts men's overall help-seeking behaviours and their choice of treatment type (Seidler, et al., 2016). Failure to adhere to these masculine stereotypes can result in the internalisation of discriminative views held by the wider public (Corrigan, Rafacz, & Rüsch, 2011; Rüsch, Angermeyer, & Corrigan, 2005). These self-stigmatising beliefs further discourage men from seeking help (Addis & Mahalik, 2003; Pederson & Vogel, 2007; Levant, Kamaradova, & Prasko, 2014).

Another explanation for poor service use relates to differences in coping strategies. Men cope with mental health difficulties differently compared to women, demonstrating an increased tendency to self-medicate with alcohol and drugs to alleviate emotional distress (Kilpatrick, et al., 2000; Rutz & Rihmer, 2009; Möller-Leimkühler, 2002; Oliver, Pearson, Coe, & Gunnell, 2005). This is supported by higher prevalence rates of substance use disorders in men (Wilhelm, 2014; Nolen-Hoeksema, 2004). Similarly, mental health literacy (i.e. one's knowledge of prevention, symptom recognition and available treatments including self-help strategies) influences help-seeking (Jorm, 2012). Poor mental health literacy is reported to be associated with lower use of mental health services (Bonabi, et al., 2016; Thompson, Hunt, & Issakidis, 2004). Men are regarded as having poorer mental health literacy compared to women as they are worse at identifying mental health disorders (Swami, 2014; Cotton, et al., 2006).

Another obstacle men experience is the lack of appropriate diagnostic instruments and clinician biases. Men express symptoms of depression that do not always conform to the Diagnostic and Statistical Manual of Mental Disorders (DSM) (American Psychiatric Association, 2013; Addis, 2008). For example, they may express more externalising behaviours such as alcohol consumption, irritability and aggressive behaviours whilst under reporting other symptoms (Angst, et al., 2002; Rice, et al., 2015). These factors may mask men's difficulties, leading to inaccurate diagnoses and inappropriate treatment (Cochran & Rabinowitz, 2003; Kerr & Kerr Jr, 2001). In response to these symptomatic gender differences, it has been suggested that men would benefit from lower clinical thresholds (Angst, et al., 2002) or the use of other measures that may be more sensitive to the symptoms that they

express (Strömberg, Backlund, & Löfvander, 2010; Cochran & Rabinowitz, 2003). Furthermore, clinicians may suffer from their own biases with the expectation that men should fulfil particular masculine stereotypes (Mahalik, et al., 2012). For example, when men do not conform to these traditional masculine stereotypes by: expressing themselves emotionally or by taking responsibility for their health, they may be regarded as deviant and/or feminine (Seymour-Smith, Wetherell, & Phoenix, 2002; Vogel, Epting, & Wester, 2003). These biases influence the quality and type of care provided and leave men less likely to receive a diagnosis despite presenting with similar or identical symptoms to women (Doherty & Kartalova-O'Doherty, 2010).

Focusing on masculinity has been argued to be overly focused on problems associated with masculinity, so that clinicians neglect adaptive traits. A more recent framework, 'positive masculinity' (Englar-Carlson & Kiselica, 2013; Kiselica & Englar-Carlson, 2010), has suggested that masculine qualities can be valued. For example, self-reliance and responsibility can be helpful when experiencing emotional difficulties (Fogarty, et al., 2015; Englar-Carlson & Kiselica, 2013). Indeed, positive masculinity and practitioner training around male gender socialisation may assist with reducing practitioner biases when working with men (Mahalik, et al., 2012).

It is important to note that the degree to which these characteristics occur vary between men as they are not a homogenous group. Not all men will conform to traditional masculine norms and there are varying degrees of mental health literacy and symptom expression. In addition, other factors such as a person's culture (Lane & Addis, 2005; Guo, Nguyen, Weiss, Ngo, & Lau, 2015), sexual orientation (Vogel, et al., 2011), severity and type of presenting symptoms (Edwards, Tinning, Brown, Boardman, & Weinman, 2007) also influence one's willingness to seek mental health help.

The philosophies underlying interventions to improve men's help-seeking have varied. Indeed, targeting one's conformity to traditional masculine stereotypes may elicit behaviour change that extends to psychological help-seeking in men (Blazina & Marks, 2001; Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010). This approach may be perceived as aligning with feminist initiates, thus representing an antagonistic position against masculinity and male values (Hearn, 2015). Similarly, men's health campaigns addressing topics such as male victims of domestic violence and male suicide statistics reinforce the notion that men are a victimised group. This makes them susceptible to being used to justify certain men's rights

movements seeking to re-gain hegemonic masculine ideals that have been previously threatened (Salter, 2016). Although many acknowledge that men and women's health initiatives are not a binary choice (Baker, 2018b), these strategies may face some resistance from the wider public. This can therefore be a complex process made inherently more difficult by the current social and political climate.

Approaches that leverage traditional masculine norms have the potential to improve service uptake, however they also pose the risk of re-enforcing masculine stereotypes (Fleming, Lee, & Dworkin, 2014; Robinson & Robertson, 2010). Campaigns such as 'Man Up Monday' seeks to encourage tests for sexually transmitted infections (Anderson, Eastman-Mueller, Henderson, & Even, 2015), but also reinforces the notion that to be a 'real man' one must sleep with multiple partners and engage in violent or risky sexual behaviours (Fleming, Lee, & Dworkin, 2014). Such campaigns have been criticised for re-enforcing negative masculine stereotypes whilst undercutting alternative, positive campaigns that seek to encourage respectful and communicative sexual relationships (Fleming, Lee, & Dworkin, 2014). These approaches could be argued to contribute to an increase in violence and poorer well-being amongst men (Courtenay, 2000; Baugher & Gazmararian, 2015).

Given the disparity in mental health service use between men and women, it is important that strategies designed to improve help-seeking among men are developed further. Limited work has been carried out to address these problems, with only a handful of public awareness campaigns and interventions designed to improve men's psychological help-seeking. These include the 'Real Men. Real Depression' campaign focusing on educating the public about depression in men (National Institute of Mental Health, n.d), a male-sensitive brochure to address help-seeking in depressed men (Hammer & Vogel, 2010), an intervention aiming to reduce self-stigma associated with mental health problems (MacInnes & Lewis, 2008), the 'HeadsUpGuys' website that provides information and management tips for depression to encourage men to seek help (Ogrondniczuk, Oliffe, & Beharry, 2018), and 'Man Therapy' – a programme designed to teach men about mental health and self-evaluation tools which encourage them to engage in treatment (Spencer-Thomas, Hindman, & Conrad, 2014). Such initiatives, particularly campaigns, are often not rigorously tested to see if they do significantly improve psychological help-seeking (attitudes, intentions or behaviours) compared to controls or pre-existing strategies that are not gender specific. Moreover, they appear to be constructed in isolation with limited collaboration between researchers who

share the same goal. When developing a complex intervention, it is recommended that a theoretical understanding of the likely processes eliciting behaviour change are explored (Craig, et al., 2008). However, many initiatives do not explore these processes in detail, making it difficult to develop more effective interventions that improve help-seeking.

This review aims to collate and synthesise previous interventions that have been designed to improve psychological help-seeking in men. Additionally, this review seeks to identify key components across these interventions that are likely to contribute to improvements in help-seeking attitudes, intentions and/or behaviours. These key components can then be used as a theoretical framework within which to develop future mental health help-seeking approaches for men. This review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff, Altman, & Prisma Group, 2009) and was pre-registered on PROSPERO (https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=82270).

Method

Search Strategy

Published interventions measuring help-seeking behaviours were identified from the electronic databases of MEDLINE, EMBASE, and PsychINFO. A comprehensive review was conducted on the 1st of March 2019 without any restrictions for publication year, language or method. The search strategy was first formulated for Ovid (MEDLINE) before being adapted for other databases. Subject headings of 'help-seeking' OR 'barrier' related terms AND 'mental health' related terms AND 'intervention' related terms AND 'male sex' related terms were used (Appendix 2.2). Furthermore, publications identified from manual reference checks were also included to ensure a comprehensive search strategy.

Population

As highlighted previously, men's help-seeking behaviours differ significantly from women, thus requiring different techniques and strategies to engage them. To ensure that the current review's findings would be applicable to men specifically, only interventions containing a 100% male sample or studies with a male sub-analysis were included. Both community and clinical populations were eligible. Community populations referred to interventions that did not record or screen out by mental health status of their recruited sample. For interventions including a clinical population, mental health diagnosis was confirmed by the International

Classification of Diseases (ICD) (World Health Organization, 1992), DSM (American Psychiatric Association, 2013) or which met clinical cut offs on validated scales used to measure mental health severity and/or symptoms. Criminal and prison populations were excluded as barriers and routes to mental health care will be notably different from non-prison populations, such as; court ordered treatments and treatment eligibility (Begun, Early, & Hodge, 2016). Similarly, participants under the age of 18 were excluded from the present review as younger populations have additional facilitators to mental health care such as parental and school support (Dunne, Bishop, Avery, & Darcy, 2017). Younger boys also have access to child and adolescent mental health services which often have different assessment criteria and available treatments (Singh & Toumainen, 2015), potentially influencing help-seeking.

Interventions

All interventions measuring changes to help-seeking as a primary, secondary or additional outcome measure were included. Help-seeking behaviours were defined as changes to help-seeking attitudes (i.e. the beliefs held towards seeking professional help when faced with a serious emotional/mental health problem); intentions (i.e. one's willingness/readiness to seek support); or practical help-seeking (i.e. inquiring or presenting to professional psychological services or reaching out for social support from friends or family). For the remainder of this review changes to help-seeking refer to changes in attitudes, intentions or behaviours.

Eligible Articles

In accordance with the PRISMA guidelines, the study selection was undertaken in two phases (Moher, et al., 2009). After identification and removal of duplicates, all articles were screened via the title and abstract by the first author (ISO). Two authors (ISO and LB) retrieved and screened the full text of those articles selected after phase one. From the 6,598 articles identified, nine reports met the inclusion criteria (Figure 2.1). A Cohen's kappa (κ) statistic was calculated to assess the inter-rater reliability, whereby ≤ 0 indicates no agreement, 0.01-0.20 as slight, 0.21 – 0.40 as fair, 0.41 – 0.60 as moderate, 0.61 – 0.80 as substantial and 0.81 – 1.00 as almost perfect levels of agreement (Cohen, 1960; McHugh, 2012). A substantial level of agreement was achieved between the two authors (ISO and LB), $\kappa = 0.73$. Subsequently,

both authors (ISO and LB) resolved discrepancies by referring to the inclusion/exclusion criteria. Where disagreements remained, a third author was consulted for a deciding opinion (JB). Thus, 100% consensus was obtained.

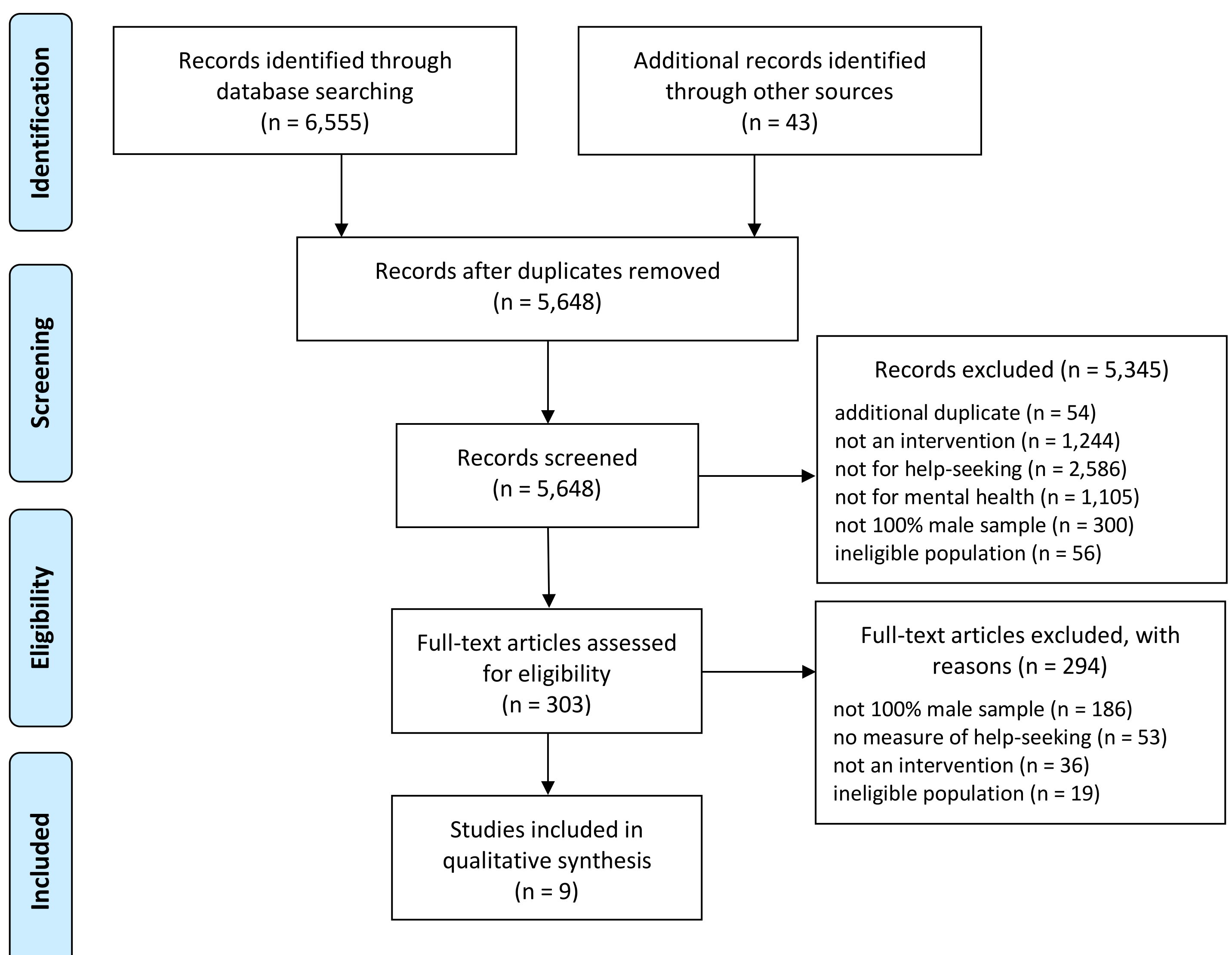
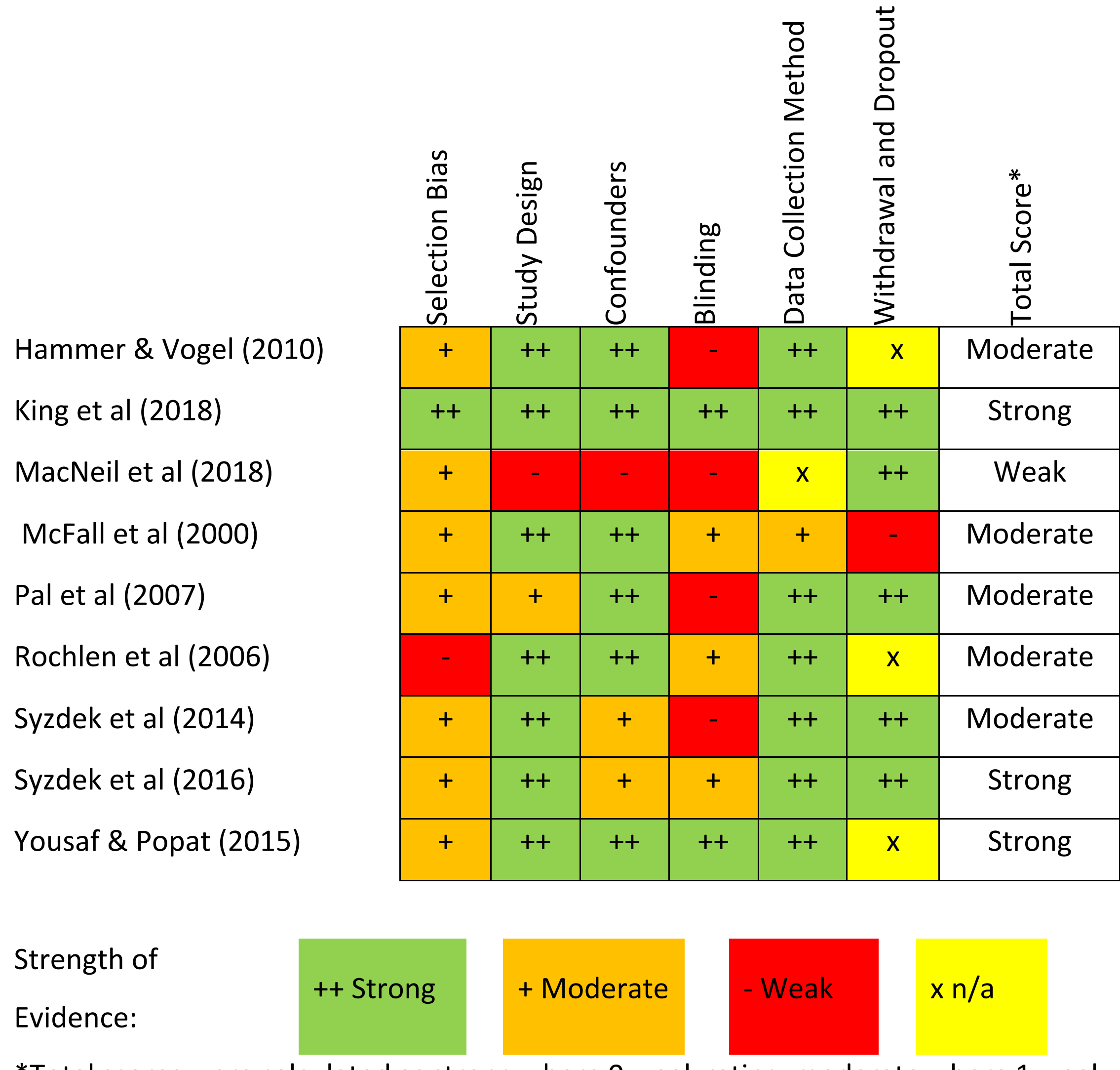


Figure 2.1. PRISMA flow chart.

Quality Assessment

The Effective Public Health Practice Project (EPHPP) checklist was used to assess the quality of each study (Thomas, 2003). Initially, pre-registration stated that the Critical Appraisal Skills Programme (Critical Appraisal Skills Programme, n.d.) checklist would be used; however, no qualitative studies were eligible. The EPHPP has been recommended when assessing the quality of public health interventions, particularly for those with varying experimental designs (Deeks, et al., 2003; Jackson & Waters, 2005). The EPHPP has also been reported to have better inter-rater reliability than the Cochrane Collaboration Risk of Bias Tool (Armijo-Olivo, Stiles, Hagen, Biondo, & Cummings, 2012). Six components of the study's methodology

(selection bias, study design, confounders, blinding, data collection methods and withdrawal and drop-outs) were scored as either weak, moderate or strong to reach an overall quality rating, also coded as weak, moderate or strong (Figure 2.2). An overall score of strong was assigned when there were no weak ratings, moderate for one weak rating, and weak if there were two or more weak ratings. The quality assessment was conducted by two authors (ISO and LB), scoring a substantial level of agreement, κ = 0.80. Similarly, all disagreements were discussed to reach 100% consensus.



	Selection Bias	Study Design	Confounders	Blinding	Data Collection Method	Withdrawal and Dropout	Total Score*
Hammer & Vogel (2010)	+	++	++	-	++	x	Moderate
King et al (2018)	++	++	++	++	++	++	Strong
MacNeil et al (2018)	+	-	-	-	x	++	Weak
McFall et al (2000)	+	++	++	+	+	-	Moderate
Pal et al (2007)	+	+	++	-	++	++	Moderate
Rochlen et al (2006)	-	++	++	+	++	x	Moderate
Syzdek et al (2014)	+	++	+	-	++	++	Moderate
Syzdek et al (2016)	+	++	+	+	++	++	Strong
Yousaf & Popat (2015)	+	++	++	++	++	x	Strong

*Total scores were calculated as strong where 0 weak rating, moderate where 1 weak rating, and weak where ≥ 2 weak ratings were scored.

Figure 2.2. EPHPP Checklist criteria for each study.

Data Extraction

Data extraction consisted of country of study, number of participants, age of participants, type of population, diagnosis of population, study design, the intervention's characteristics and outcome measures (Table 2.1). Additional information regarding uptake and dropout for the interventions was also included (Appendix 2.3).

Table 2.1. Table summarising characteristics of included studies.

Author (Year)	Country	N	Mean age in years (SD)	Population	Diagnosis (Measure)	Design	Intervention Aim	Intervention type & length	Intervention Delivered by:	Help-seeking Outcome Measures	Other Outcome Measures
Hammer & Vogel (2010)	U.S	1,397	29.44 (10.19)	Depressed community sample	Depression (CES-D)	RCT	Compare a newly developed male-sensitive brochure to a gender-neutral brochure	Male sensitive (MS) brochure vs RMRD brochure vs gender neutral brochure	Brochure	ATSPPHS (short version)	Self-stigma of Seeking Help
King et al (2018)	Australia	354	38.80 (19.9)	Community	N/A	Double-blind RCT	If the 'Man Up' documentary could increase help-seeking intentions	3-part documentary (1hr per part) examining the link between masculinity and mental health vs control	Video documentary	The General Help Seeking Questionnaire	CMNI, GRCS, Social Support, Well-being, Resilience and ASIQ.
MacNeil et al (2018)	Canada	14	28.21 (8.04)	Clinical	Eating Disorder (DSM-V)	Retrospective review	To examine male referral rates across TAU and Male assessment and treatment track (MATT)	Male sensitive assessment and treatment track vs ATAU	Outpatient eating disorder clinical team	Referral rates to MATT	SWLS, BDI, BAI, EDI-3
McFall et al (2000)	U.S	594	51.05 (3.75)	Clinical	PTSD (Compensation receipt for veterans)	RCT	Assess whether an outreach intervention providing information about services would improve service enrolment	Outreach PTSD information brochure + 1month follow-up call vs control	Leaflets and the study co-ordinator	Treatment inquiries. Agreement and/or attendance to a mental health provider.	N/A
Pal et al (2007)	India	90	29.70 (9.89)	Clinical	Treatment non-attendance and problematic drinking (AUDIT)	RCT	Examine change in alcohol use following a brief intervention compared to simple advice	Two 45m sessions of Brief Motivational Interviewing vs control	Medical social service officer	Readiness to change questionnaire	WHO Quality of Life and Addiction Severity Index

Rochlen et al (2006)	U.S	209	21.01 (1.56)	Community	N/A	RCT	Compare men's response to the RMRD brochure compared to a gender-neutral brochure	RMRD brochure vs Adapted RPRD gender neutral brochure vs Gender neutral mental health brochure – 'Beyond Sadness'	Brochures	ATSPPHS	GRCS, MHAES and qualitative assessment s
Syzdek et al (2014)	U.S	23	37.65 (11.44)	Depressed or anxious community sample	Anxiety & Depression (DUKE-AD)	Pilot RCT	What are the effects of GBMI on mental health functioning, stigma towards internalising disorders and help-seeking	One 2hr GBMI vs control	N/A	ATSPPHS and Help-Seeking Behaviour Scale	AUDIT, BAI, BDI, PPL, and symptom distress
Syzdek et al (2016)	U.S	35	19.71 (1.42)	Depressed or anxious community sample	Anxiety & Depression (DUKE-AD)	Pilot RCT	Assess GBMI effect on psychosocial barriers to help-seeking	One 2hr GBMI vs control	Trained male graduates	Help-Seeking Behaviour Scale	BAI, and the Treatment evaluation inventory
Yousaf & Popat (2015)	U.K	69	35.30 (12.08)	Community	N/A	Double-blind RCT	Test whether conceptual priming could increase men's attitudes towards seeking psychological support	25m test - unscramble 18 sentences with priming words towards help-seeking	Scrambled sentence test	Inventory of Attitudes Toward Seeking-Mental Health Services	N/A

Key: ASIQ, Adult Suicide Ideation Questionnaire; ATAU, Assessment and Treatment as Usual; ATSPPHS, Attitudes Towards Seeking Professional Psychological Help Scale; AUDIT, Alcohol Use Disorders Identification Test; BAI, Beck Anxiety Inventory; BDI, Beck Depression Inventory; CES-D, Centre for Epidemiological Depression Scale; CMNI, Conformity to Masculine Norms Inventory; DSM-V; Diagnostic and Statistical Manual of Mental Disorders 5th Edition; DUKE-AD, DUKE Anxiety and Depression subscale; EDI-3, Eating Disorders Inventory 3rd edition; GBMI, Gender Based Motivational Interviewing; GRCS, Gender Role Conflict Scale; hr, hour; m, minutes; MATT, Male Assessment and Treatment Track; MHAES, Mental Health Advert Effectiveness Scale; N/A, Data Not Available; PPL, Perceptions of Problems in Living questionnaire; PTSD, Post-Traumatic Stress Disorder; RCT, Randomised Controlled Trial; RMRD, Real Men Real Depression brochure; RPRD, Real People Real Depression brochure; SWSL, Satisfaction With Life Scale; TAU; Treatment As Usual; U.K, United Kingdom; U.S, United States; WHO, World Health Organisation.

Across the nine studies identified, populations were heterogenous with differing presenting problems (e.g. depression, problematic drinking, post-traumatic stress disorder (PTSD), eating disorders and a community sample). The interventions varied considerably. For instance, four promoted service engagement through the use of a brochure (Hammer & Vogel, 2010; McFall, Malte, Fontana, & Rosenheck, 2000; Rochlen, McKelley, & Pituch, 2006) or a documentary (King, Schlichthorst, Spittal, Phelps, & Pirkis, 2018), one evaluated multiple outcomes including readiness to change (Pal, Yadav, Mehta, & Mohan, 2007), one assessed the effects of priming men's attitudes towards help-seeking (Yousaf & Popat, 2015), and three evaluated the acceptability and efficacy for improving help-seeking attitudes, intentions and practical help-seeking (Syzdek, Addis, Green, Whorley, & Berger, 2014; Syzdek, Green, Lindgren, & Addis, 2016; MacNeil, Hudson, & Leung, 2018). As a result, a meta-analysis was deemed inappropriate as results would not be meaningful, particularly as they could not be interpreted in any specific context (Higgins & Green, 2005). An alternate, novel method that identified the Behavioural Change Techniques (BCTs) within interventions was used. This helped identify each intervention's key elements that may have contributed to changes in help-seeking attitudes, intentions and/or behaviours.

Behavioural Change Techniques (BCTs)

BCTs refer to the observable and replicable components within an intervention designed to change behaviour (Michie, et al., 2013), in this case, help-seeking. BCTs represent the smallest identifiable components that in themselves have the potential to change behaviour (Michie, Johnston, & Carey, 2016; Michie, West, Sheals, & Godinho, 2018). These components are referred to as the 'active ingredients', helping to make greater sense of the often very complex behaviour change interventions (Michie, et al., 2013). Standardisation of BCTs allows for greater replicability, synthesis and interpretation of an intervention's specific elements that may elicit behaviour change (Michie, et al., 2013; Cane, Richardson, Johnston, Ladha, & Michie, 2015).

Michie et al., (2013) devised a taxonomy (BCTTv1) containing 93 BCTs to address the lack of consistency and consensus when reporting an intervention (Craig, et al., 2008). Examples of BCTs include: 'framing/reframing' whereby a new perspective on a behaviour is suggested to change emotions or cognitions, 're-attribution' defined as suggesting alternative explanations to the perceived cause of the behaviour, and 'credible source' which involves

the presentation of verbal or visual information by a credible source, such as celebrity figures, mental health professionals and/or other men with lived experiences of mental health, either in favour of or against the behaviour.

For the current review, each intervention's BCTs were independently coded by two authors (ISO and LM) trained in recognising and coding BCTs (*http://www.bct-taxonomy.com/*). These were then discussed to reach consensus and are presented in Table 2.2.

Table 2.2. Table summarising the identified behaviour change techniques (BCTs) and outcomes of eligible interventions.

Author	Identified BCTs	Help-seeking Attitudes, Intentions and Behaviours (*p, d*)	Symptoms (*p, d*)
	Engagement Strategies (brochures/documentary)		
Hammer & Vogel (2010)	5.3. Information about social and environmental consequences 5.6. Information about emotional consequences 6.2. Social comparison 9.1. Credible source	Improved attitudes to help-seeking ($p < .05$*, d = n/a)	Not measured
King et al (2018)	5.6. Information about emotional consequences 6.1. Demonstration of the behaviour 6.2. Social comparison 9.1. Credible source 16.3. Vicarious consequences	Improved help-seeking intentions and intentions to seek help from male and female friends ($p < .05$*, $d < .05$)	No changes to suicidal ideation ($p > .05$)
McFall et al (2000)	3.1. Social support (unspecified) 4.1. Instruction on how to perform behaviour 9.1. Credible source	Improved service enquiry, attendance and follow-up appointments ($p < .05$*, $d > .05$)	Not measured
Rochlen et al (2006)†	4.1. Instruction on how to perform behaviour 5.6. Information about emotional consequences 6.2. Social comparison 9.1. Credible source	Male-sensitive and gender-neutral brochures both improved help-seeking attitudes ($p < .05$*, d = n/a)	Not measured
	Randomised Controlled Trials (RCTs)		
Pal et al (2007)	1.2. Problem solving 3.3. Social support (emotional) 5.3. Information about social and environmental consequences 8.2. Behaviour substitution 11.2. Reduce negative emotions 15.1. Verbal persuasion about capability	Improved readiness to change (*i.e.* intentions) from baseline to 1 month follow up ($p < .05$*, d = n/a)	Reduced alcohol addiction severity, alcohol use in last 30 days and improved psychological and physical well-being ($p < .05$* for all)
Yousaf & Popat (2015)	None identified.	Higher attitudes towards seeking mental health services for the primed group vs control ($p < .05$*, $d > .5$)	Not measured

Syzdek et al (2014)	2.2. Feedback on behaviour 2.7. Feedback on outcome(s) of behaviour 3.3. Social support (emotional) 4.1. Instruction on how to perform the behaviour	No changes for help-seeking attitudes, or help-seeking intentions ($p > .05$, $d < .5$).	Reduction in anxiety ($p > .05$, $d < .5$), depression ($p > .05$, $d < .5$) and problematic drinking ($p > .05$, $d > .5$).
Syzdek et al (2016)	1.4. Action planning 2.2. Feedback on behaviour 2.7. Feedback on outcome(s) of behaviour 3.3. Social support (emotional) 4.3. Re-attribution 5.6. Information about emotional consequences 9.1. Credible source 13.2. Framing/reframing	Increased behavioural help-seeking from parents, ($p < .05$*, $d > .5$), professionals, ($p > .05$, $d > .5$), partners, ($p > .05$, $d > .5$), friends, ($p > .05$, $d > .5$), and counselling services ($p > .05$, $d > .5$)	No change to depression ($p > .05$, $d < .5$), or anxiety ($p > .05$, $d < .5$)
	Retrospective Review		
MacNeil et al (2018)	3.3. Social support (emotional) 5.3. Information about emotional consequences 5.6. Information about social and environmental consequences 6.2. Social comparison	Received more male referrals after the instalment of intervention (MATT) ($p < .05$*, $d < .05$)	Not measured

† = One study reported their effect size in partial eta squared and was not appropriate to convert to Cohen’s D.

* = $p < .05$

d = Cohen’s D

Results

Strength of Evidence

There was a substantial level of agreement for the two authors (ISO and LB) completing the EPHPP quality assessment (Thomas, 2003) (κ = 0.80). Of the nine studies included, three were scored as having 'strong' quality (Syzdek, et al., 2016; Yousaf & Popat, 2015; King, et al., 2018), whilst five were deemed 'moderate' in quality (Hammer & Vogel, 2010; McFall, et al., 2000; Pal, et al., 2007; Rochlen, et al., 2006; Syzdek, et al., 2014). One study was scored as having 'weak' quality (MacNeil, et al., 2018) (Figure 2.2).

Categorisation of Interventions

As there were different types of interventions with some aiming to engage men (e.g. brochures/video documentary) and other interventions aiming to change behaviour or attitudes, the interventions were divided into three main categories of 'engagement strategies', 'RCTs/Pilot RCTs' and 'retrospective reviews'.

Engagement strategies comprised of three interventions delivering a brochure (Hammer & Vogel, 2010; McFall, et al., 2000; Rochlen, et al., 2006) and one study delivering a three-part video documentary (King et al., 2018) to improve help-seeking. RCTs/Pilot RCTs included two RCTs (Pal, et al., 2007; Yousaf & Popat, 2015) and two pilot RCTs (Syzdek, et al., 2014; Syzdek et al., 2016). The last intervention was a retrospective review comparing referral rates before and after the instalment of a male-sensitive assessment and treatment programme (MacNeil, et al., 2018).

A summary of the specific elements or BCTs used across all the interventions that may have contributed to improvements in male help-seeking are given in Table 2.3. The engagement strategies (i.e. brochures/documentaries, n=4) and retrospective review (n=1) contained eight and four BCTs respectively. 14 BCTs were identified within the RCTs/Pilot RCTs (n=4). As six BCTs (3.3, 4.1, 5.3, 5.6, 6.2 and 9.1) were coded across the different intervention categories (i.e. engagement strategies, RCTs/Pilot RCTs and retrospective review) they were only counted once, resulting in a total of 18 different BCTs across all the interventions identified.

The BCTs identified from the engagement strategies, RCTs/pilot RCTs and retrospective review were analysed separately due to different behaviour change approaches

(Table 2.3). Various BCTs were grouped into 'processes' to help synthesise the 18 distinct techniques implemented across these dissimilar interventions. These processes can be seen as overarching terms that summarise similar BCTs into broader psychological processes. Thus, helping to bridge the gap between these research findings and wider clinical practice (Figure 2.3).

Table 2.3. Examples and frequency of behavioural change techniques (BCTs) used within the engagement strategies, RCTs/Pilot RCTs and retrospective review.

BCT	BCT Example(s)	BCT Frequency
	Engagement Strategies (brochures/documentary)	
3.1 Social support (unspecified)	Telephone survey that provided an opportunity to ask questions about services, schedule an appointment and address perceived barriers. (McFall, et al., 2000).	1
4.1 Instruction on how to perform behaviour	Option to receive information about services and how to schedule an intake appointment/description of treatment options (McFall, et al., 2000; Rochlen, et al., 2006).	2
5.3 Information about social and environmental consequences	Description of mental health symptoms through the use of male-sensitive language (Hammer & Vogel, 2010).	1
5.6 Information about emotional consequences	Brochure containing facts specific to men and depression (Hammer & Vogel, 2010; Rochlen, et al., 2006) and a documentary delivering psychoeducational material about mental disorders (King, et al., 2018).	3
6.1 Demonstration of the behaviour	Video featuring men modelling positive health behaviours such as emotional expression and seeking help (King, et al., 2018).	1
6.2 Social comparison	Testimonials and photographs of men who have experienced depression (Hammer & Vogel, 2010; Rochlen, et al., 2006) and a showhost talking to other men who have reached out for help (King, et al., 2018).	3
9.1 Credible source	Letter from the programme director inviting men to seek care (McFall, et al., 2000), testimonials of men who have experienced depression (Hammer & Vogel, 2010; Rochlen, et al., 2006) and information being delivered by a familiar radio and television host (King, et al., 2018).	4
16.3 Vicarious consequences	Other men talking about how reaching out for help changed their mental health trajectory for the better (King, et al., 2018).	1
RCTs and Pilot RCTs		
1.2 Problem solving	Prompting discussion of drinking alternatives, high-risk situations and coping without alcohol (Pal, et al., 2007).	1
1.4 Action planning	Developing an action plan on how to improve mental health, which may include seeking help (Syzdek, et al., 2016).	1
2.2 Feedback on behaviour	A feedback report outlining personal scores on symptom measures (Syzdek et al., 2014; Syzdek, et al., 2016).	2
2.7 Feedback on outcome(s) of behaviour	Feedback on symptom levels and untreated mental health (Syzdek et al., 2014; Syzdek, et al., 2016).	2
3.3 Social support (emotional)	Adopting a motivational interviewing framework or a gender-based motivational interviewing framework (Pal, et al., 2007; Syzdek, et al., 2014; Syzdek, et al., 2016).	3

4.1 Instruction on how to perform behaviour	Discussing different actions that could be taken to address mental health problems such as; formal help, informal help and coping skills. (Syzdek, et al., 2014)	1
4.3 Re-attribution	Elicited how participants untreated mental health may be affecting their value-driven behaviours (Syzdek, et al., 2016).	1
5.3 Information about social and environmental consequences	Information regarding the harmful consequences of drinking. Linking alcohol consumption to potential consequences (Pal, et al., 2007).	1
5.6 Information about emotional consequences	Providing psychoeducational material about mental disorders (Syzdek, et al., 2016).	1
8.2 Behaviour substitution	Exploration of alternatives to drinking alcohol (Pal, et al., 2007).	1
9.1 Credible source	Listing famous men with internalising disorders (Syzdek, et al., 2016).	1
11.2 Reduce negative emotions	Reducing stress related to personal responsibility (Pal, et al., 2007).	1
13.2 Framing/Reframing	Re-framing help-seeking to be consistent with participants values and masculine norms (Syzdek, et al., 2016).	1
15.1 Verbal persuasion about capability	Emphasis on participants responsibility to change, facilitating self-efficacy and optimism (Pal, et al., 2007).	1
Retrospective Review		
3.3 Social support (emotional)	Delivering cognitive behavioural therapy (MacNeil, et al., 2018).	1
5.3 Information about social and environmental consequences	Providing psychoeducation and the biological model of mental health illnesses (MacNeil, et al., 2018).	1
5.6 Information about emotional consequences	Discussing the negative impact mental health has on daily living, relationships and sport (MacNeil, et al., 2018).	1
6.2 Social comparison	Highlighting that the men are not alone with their mental health struggles, and that there are others experiencing the same (MacNeil, et al., 2018).	1

BCTs within the Engagement Strategies

The most commonly used BCTs within the engagement strategies (i.e. brochures/video documentary) used a '*credible source*' and provided *'information about the consequences'* (either emotional, social or environmental) of poor mental health. Testimonials and photographs of men with depression (i.e. credible source) were used to explain a medical-model of depression and the associated symptoms (i.e. information). Similarly, a familiar radio/television host was used to deliver mental health information (King, et al., 2018). Video footage of men talking about their personal problems, help-seeking, and emotional expression was also used to model positive health behaviours and demonstrate how to seek help (King, et al., 2018). These highlighted the *'social comparison'* BCT as it provided someone who one could relate to (Hammer & Vogel, 2010; Rochlen, et al., 2006; King, et al., 2018). Similarly, Rochlen and colleagues (2006) used testimonials and photographs of men in their male-sensitive brochure who had experienced depression. This may have contributed to an improvement in help-seeking attitudes among men, despite not showing larger improvements compared to a gender-neutral brochure (Rochlen, et al., 2006). Lastly, McFall et al., (2000) intervention implemented a '*credible source*' (i.e. a letter from the PTSD programme director encouraging veterans to seek care), contributing to an improvement in practical help-seeking. In sum, all four engagement strategies utilised a role-model (i.e. credible source BCT), which may have contributed to an improvement in help-seeking.

In addition to the processes of providing information and using role-models, the BCTs of *'instruction on how to perform a behaviour'* and *'unspecified social support'* were used. Here, men received a telephone call to discuss the brochure before explaining how to schedule an appointment with a mental health service (McFall, et al., 2000).

Brochures appeared to be an effective strategy to improve men's help-seeking behaviours. The processes of using role-models and delivering information about the long-term outcomes of mental health disorders, symptoms and potential services appeared to help elicit this behaviour change.

BCTs Within RCTs and Retrospective Review

The RCTs and pilot RCTs also made use of role-models (i.e. credible source BCT). Famous men with depression or anxiety were listed to challenge misconceptions of mental health (Syzdek,

et al., 2016). Again, these methods provided real-life examples of other men experiencing the same or similar difficulties eliciting a sense of social comparison (MacNeil, et al., 2018). The interventions that provided information about the emotional, social and environmental consequences of mental illness appeared to improve help-seeking, whether behaviourally or attitudinally. The interventions included psycho-educational materials about mental disorders (Syzdek, et al., 2016), addressed the consequences of alcohol consumption (Pal, et al., 2007) and/or explored how eating disorders impact daily living, relationships and sport (MacNeil, et al., 2018).

Alongside providing information and using role-models, several other processes were identified. A process helping men to recognise and manage their symptoms was also identified. This contained the BCTs of: *'feedback on behaviour', 'feedback on outcomes of behaviour(s)', 're-attribution'* and *'reduce negative emotions'*. Syzdek and colleagues gave feedback on participants' current difficulties identified from a computerised assessment, before exploring whether their untreated mental health was affecting their value-driven behaviours (Syzdek, et al., 2014; Syzdek, et al., 2016). This enabled men to re-attribute their current symptoms to their behaviours. Moreover, the intervention by Pal et al., (2007) helped reduce stress associated with problematic drinking in an Indian context.

Secondly, a process incorporating active-problem-solving exercises was identified. This contained the BCTs of: '*problem solving*', *'behaviour substitution'* and '*action planning*'. These involved: planning how to improve one's mental health through seeking professional or non-professional help (Syzdek, et al., 2016), discussing situational drinking cues and exploring alternative drinking activities for hazardous drinkers (Pal, et al., 2007), respectively. *'Emotional social support'*, *'instruction on how to perform a behaviour'* and *'vicarious consequences'* were other BCTs that were identified. These contributed to two processes of motivating behaviour change and sign positing services.

The motivating behaviour change process comprised of the *'vicarious consequences'* and *'emotional social support'* BCTs as the BCTTv1 dictates that cognitive behavioural therapy (CBT) and motivational interviewing (MI) frameworks should be coded as emotional social support (Michie, et al., 2013). This BCT was observed in two studies using CBT and MI (Pal, et al., 2007; MacNeil, et al., 2018) and two pilot RCTs adapting MI to be gender sensitive (Syzdek, et al., 2014; Syzdek, et al., 2016). Also, the BCT of *'vicarious consequences'* was used within one engagement strategy, whereby men with lived experience discussed how seeking mental

health improved their overall trajectory (King, et al., 2018). As a result, it appears that the BCTs of *'emotional social support'* and *'vicarious consequences'* motivated men to change their behaviours related to their mental health.

For the sign posting services process, men were provided with a brochure listing their university's counselling services and referral information for community mental health providers (i.e. *'instruction on how to perform a behaviour'* BCT) (Syzdek, et al., 2016). Syzdek and colleagues also discussed potential actions that could be taken to address men's current mental health problems including formal help, informal help and coping skills (Syzdek, et al., 2014).

Lastly, the process of positive masculinity included the BCTs of: *'framing/re-framing'* and *'verbal persuasion about capability'*, noted across two interventions. Here, help-seeking was re-framed to be consistent with current masculine norms (i.e. a sign of strength) (Syzdek, et al., 2016) and emphasis was placed on one's personal responsibility to change (Pal, et al., 2007).

In summary, various BCTs were used within the interventions. This enabled the identification and synthesis of different processes that contribute to positive help-seeking behaviours. The use of role-models and information were important for the engagement strategies (i.e. brochures/documentary). This was further supplemented by instructions on how to seek help and social support. These processes were also apparent in the RCTs and the retrospective review. Additional processes included: active-problem-solving, recognising and managing symptoms, sign posting services, motivating behaviour change and building on positive masculine traits (e.g. responsibility and strength) (Figure 2.3). It is suspected that these processes contributed to the improvements in help-seeking.

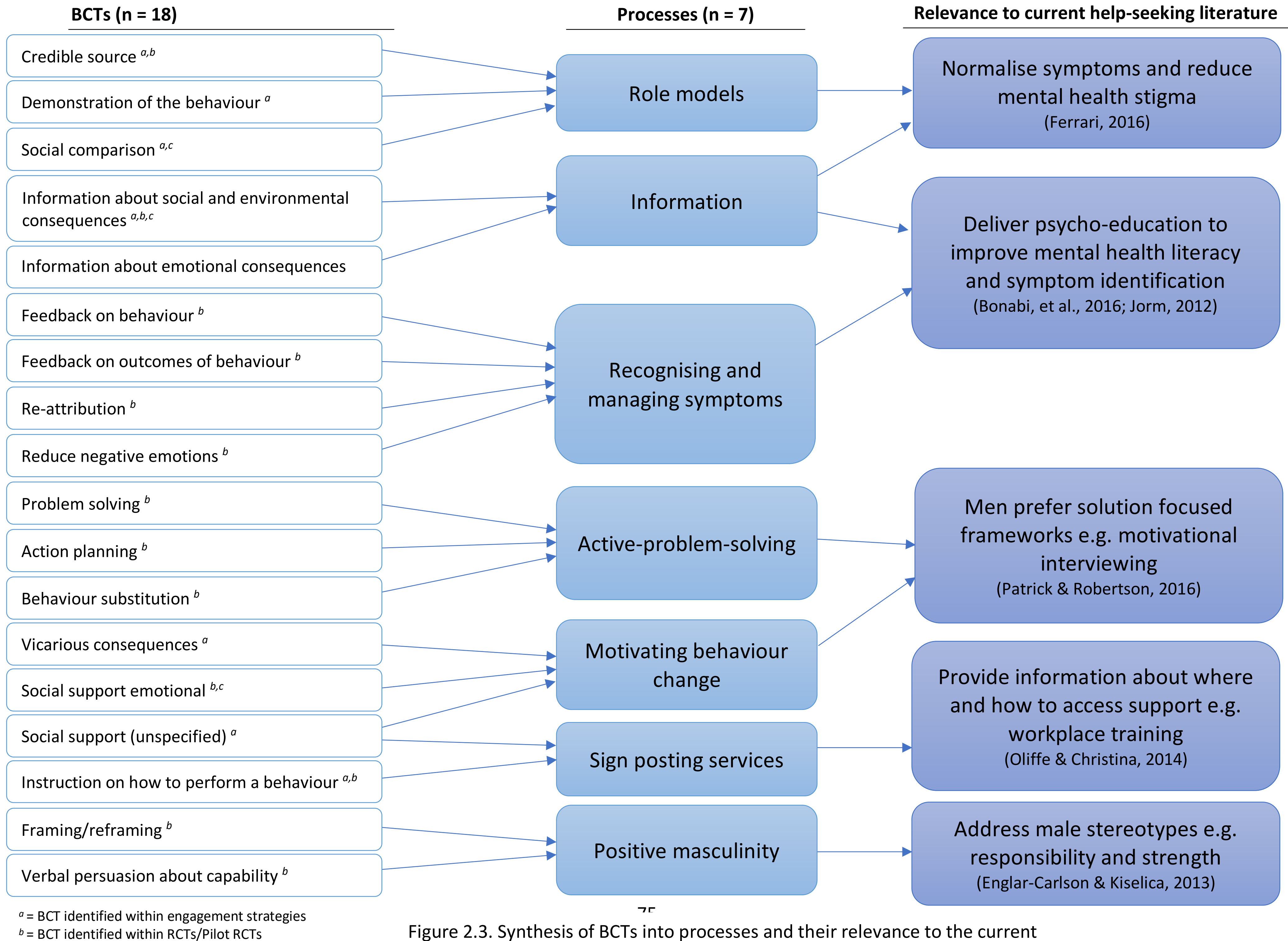


Figure 2.3. Synthesis of BCTs into processes and their relevance to the current

Discussion

As mentioned previously, distinct BCTs were grouped into 'processes' to enable these research findings to be more relevant in a clinical context. Seven key processes were synthesised from the 18 identified BCTs. These included: using role-models to convey information, psycho-educational material to improve mental health knowledge, assistance with recognising and managing symptoms, active problem-solving tasks, motivating behaviour change, sign posting services and incorporating content that builds on positive male traits (e.g. responsibility and strength).

To understand these processes in greater detail, the current male help-seeking literature was used to help explain why these processes may have contributed to an improvement in psychological help-seeking by men from the studies identified within this review.

Interpretation of BCTs with regard to the literature

Despite the heterogeneity across interventions, the 18 identified BCTs had a fairly consistent overlap with key constructs that have already been identified within the help-seeking literature. The process of delivering information about the emotional, social and environmental consequences of help-seeking and/or mental health diagnoses can be seen as facets of mental health literacy. Indeed, poor mental health literacy is a barrier to help-seeking (Bonabi, et al., 2016), and having knowledge of mental health disorders assists in their recognition, management and prevention (Jorm, 2012).

Using role-models and supporting men to recognise and manage their symptoms were also of importance. This was helpful as role models often normalised the problems, offering reassurance that the difficulties were the result of everyday stressors. This made the problems more acceptable, enabling men to acknowledge their symptoms and may have reduced mental health stigma (Ferrari, 2016). This can also help model the behaviour of seeking help when experiencing psychological distress. There is a danger that if not carefully used, this could also increase self-stigmatising beliefs about mental health. Once men identify with having a mental health problem, they may criticise themselves for not being able to cope or fear that they will be judged for having a mental health condition (Primack, et al., 2010). These stigmatising beliefs may deter men from seeking help. Nevertheless, improving mental

health literacy and using role models supported men to identify their own symptoms before discussing them in a safe setting. This helped to preserve their autonomy and clarify whether their symptoms required professional support. Considering this, some men may prefer a person-centred approach as they may feel discouraged from engaging in treatment that seeks to label a mental health diagnosis in a clinical framework (River, 2018). Although this may not improve treatment outcomes, it may improve service uptake. However, this has not been formally assessed.

Processes using active-problem-solving exercises and motivating behaviour change also seemed important across the interventions in this review. Men were provided with specific information about how to improve their mental health and use a variety of management strategies. Interventions that implement an action-orientated or solution focused framework may be promising as men are less inclined to engage in traditional talking therapies (Patrick & Robertson, 2016). This was also demonstrated from three interventions adopting a MI framework (Syzdek, et al., 2014; Syzdek, et al., 2016; Pal, et al., 2007). Similarly, drawing men's attention to the potential benefits of treatment and how seeking help can improve long-term outcomes may also improve their motivation to seek help (King, et al., 2018). The process of sign posting must not be overlooked. This process informed men about where and how to access professional support, indicating that men may need more guidance on this. Workplace training and the development of bridging services could help connect and motivate men to engage with existing mental health services (Oliffe & Han, 2014).

An equally important process that built on positive masculine traits emerged from two interventions (Pal, et al., 2007; Syzdek, et al., 2016). Targeting adaptive masculine stereotypes such as responsibility, and re-framing help-seeking to align with male values (e.g. a sign of strength) may have contributed to an improvement in help-seeking behaviours. This process fits in with Englar-Carlson & Kiselica work on 'positive masculinity' (2013), which acknowledges the virtues of masculinity, as opposed to remedying weaknesses (Kiselica & Englar-Carlson, 2010). This motivated men to take responsibility in looking after themselves and emphasised that seeking help for mental health difficulties does not indicate weakness, nor is it detrimental to one's masculinity.

Implications for Future Research

To the authors knowledge, this is the first review to identify key features within an intervention that may contribute to an improvement in help-seeking for men. A post-hoc decision to use the BCTTv1 to analyse and synthesise these interventions using BCTs was made because of the idiosyncratic nature of this research field but has proved very successful. Other public health interventions or fields that lack consensus or have limited data may find this approach useful when synthesising diverse interventions. Moreover, identifying promising BCTs is a good way forward when trying to understand or design interventions targeting a behaviour. Although the full BCTTv1 contains 93 BCTs (Michie, et al., 2013), the current review only identified 18 different BCTs. Thus, future research is needed to understand these promising 18 BCTs in more detail and to prevent overlooking other, potentially effective techniques.

To promote more coherent evidence, it is advised that a standardised reporting method is adopted when reporting newly developed help-seeking interventions for men. For example, the TIDieR checklist (Hoffman, et al., 2014), TREND statement (Des Jarlais, Lyles, Crepaz, & Trend Group, 2004) and the use of BCTTv1 will improve the clarity and consistency in this field. Alternatively, the development of a new male-specific framework for reporting help-seeking interventions would be helpful. Such a framework should place emphasise on the initial uptake to an intervention, the intervention's main components (i.e. BCTs), and the strategies used to recruit men (such as marketing techniques, language and phrases chosen) as these have been highlighted as key factors when designing male interventions (Pollard, 2016).

Ideally, future work would seek to evaluate the role specific BCTs have in changing help-seeking behaviours. Eventually, the evidence base would point towards specific techniques that are more effective than others. This enables better tailoring of interventions that address men's needs. This could also transpire into further precision-tailoring for various sub-groups of men, as help-seeking differs across: ethnicities (Parent, et al., 2018), education levels (Hammer, Vogel, & Heimerdinger-Edwards, 2013), and conformity to masculine norms (Wong, Ho, Wang, & Miller, 2017). Similarly, if it is possible to identify redundant or ineffective techniques within interventions, more cost-effective solutions can be developed.

As more male focused interventions addressing psychological help-seeking are designed, work can be done to dismantle and identify the effective techniques within them.

Implications for Clinical Practice

All four engagement strategies utilising brochures and documentaries demonstrated significant improvements in help-seeking. Brochures and documentaries may therefore be a feasible and acceptable strategy to enable behaviour change in men. This suggests men may not need direct face-to-face contact and are receptive to less invasive and personal strategies. This was further demonstrated through a conceptual priming task that improved help-seeking attitudes (Yousaf & Popat, 2015).

Mental health literacy can be a strong facilitator for seeking mental health help (Bonabi, et al., 2016). When given a vignette, men are less likely to identify other men as having a mental health difficulty (Swami, 2014). Moreover, poor identification of depressive symptoms and inadequate suggestions to treatment (e.g. do nothing and leave them alone) are associated with being male (Kaneko & Motohashi, 2007). This demonstrates that, generally, men have inaccurate perceptions of their health and are poorer at recognising symptoms.

Psycho-educational materials may help men to understand their current difficulties and the possible long-term outcomes of mental health conditions. This may enable men to distinguish their symptoms from everyday stressors, eliciting a greater perceived need for help. Although psycho-educational materials may contribute to favourable help-seeking attitudes, it needs to be carefully delivered (Gonzalez, Tinsley, & Kreuder, 2002). Men who do identify as having a mental health difficulty are at risk of stigmatising themselves for not being ‘strong enough’ to cope (Primack, et al., 2010), reducing their likeliness of seeking support. To overcome this, such information should be delivered in a supportive manner to help men accept their difficulties without feeling a sense of shame or loss of autonomy (Johnson, Oliffe, Kelly, Galdas, & Ogrodniczuk, 2012). This should be combined with offering reassurance about where they can access professional support, treatment information and to signpost appropriate services. Once in treatment, interventions that steer away from a diagnostic framework may be more palatable to men (River, 2018). They should aim to provide men with skills and greater self-control as opposed to treating what is wrong with them. This has been

demonstrated through interventions marketed as 'improve your sleep' or a 'stress workshop', gaining high levels of male-engagement (Primack, et al., 2010; Archer, et al., 2009). Also, using male role models such as celebrities and others with mental health difficulties may particularly appeal to men, helping to reduce mental health stigma and improve service uptake.

Lastly, active-problem solving or tangible solution focused approaches have been reported to be effective for changing other behaviours such as increasing physical activity and dieting (Hunt, et al., 2014). Indeed, such approaches might be more appealing to men.
These are not the entirety of processes that will improve male help-seeking. Similarly, working outside a diagnostic framework, providing men with skills that offer greater self-control and adopting solution focused approaches are not definitive solutions, as what may be helpful for some men may not be for others. None the less, these techniques demonstrate some potential for improving help-seeking in men and may continue to be effective.

Strengths and Limitations

This review has established how to synthesise complex behavioural interventions across different types of interventions. The steps taken to identify the active ingredients responsible for behaviour change have been demonstrated. A strength of this review included the use of a validated taxonomy used in other areas with reasonable inter-rater reliability (Michie, et al., 2013). All interventions were coded through consensus by two authors (ISO and LM). The current review has pointed out the specific techniques that should be considered when developing male help-seeking interventions in the future. This review has also implemented a systematic approach that utilised two reviewers throughout, resolved discrepancies to reach consensus and adopted a comprehensive search strategy.

There are however some limitations. Although the BCTTv1 is a widely used approach identifying techniques that elicit behaviour change, it is not possible to guarantee 100% accuracy of the coded BCTs, as it does not have perfect inter-rater reliability. This is further confounded as it is likely that an intervention's true content is under reported (Michie, Fixsen, Grimshaw, & Eccles, 2009). The recorded BCTs were only identified from the description provided in the published articles. It would therefore be helpful if future interventions reported their content more fully, ideally using BCTs or a similar system.

The BCT Taxonomy also presents other limitations. For instance, the BCTTv1 states that *'emotional social support'* extends to MI and CBT (Michie, et al., 2013). This is a limitation for the interpretation of the current finding's as MI was implemented within three studies in this review (Pal, et al., 2007; Syzdek, et al., 2014; Syzdek, et al., 2016). Indeed, MI includes aspects of emotional support, but in addition, behaviour change elicited from MI is thought to arise through combating ambivalence (Miller & Rollnick, 2013). Ambivalence refers to the experience of motivations for and against a behaviour. Thus, a MI framework seeks to elicit the positive reasons for changing a behaviour (Miller & Rose, 2015). In this context, emotional support may not necessarily have contributed to improvements in help-seeking per se, but men may need to work through their motivations both for and against seeking psychological support in order to improve their help-seeking attitudes, intentions and/or behaviours. The BCT taxonomy does not allow us to determine whether emotional support or working through ambivalence contributes to changes in help-seeking. A suggestion to overcome this limitation would be to use another taxonomy that seeks to identify specific MI techniques that contribute to behaviour change (Hardcastle, Fortier, Blake, & Hagger, 2017). Indeed, this may enable the distinction between social support and combating ambivalence.

Although help-seeking is consistently reported to be worse in males (Mackenzie, et al., 2006), the identified techniques in this review should be interpreted cautiously. Men are not a homogenous group. Alongside sex, other factors such as symptom severity, diagnosis (Edwards, et al., 2007), culture (Lane & Addis, 2005; Guo, et al., 2015) and sexual orientation (Vogel, et al., 2011) all intersect with help-seeking behaviours. Consequently, certain BCTs may be more or less effective for different sub-groups of men.

Lastly, from over 6,000 articles identified from the initial search strategy only 9 studies fulfilled the inclusion criteria. This highlights the dearth in literature surrounding studies that seek to evaluate changes in mental health help-seeking in males. Furthermore, only three studies utilised a measure of practical help-seeking (McFall, et al., 2000; MacNeil, et al, 2018; Syzdek, et al., 2016) which also highlights the lack of research using practical help-seeking as an outcome measure.

Conclusion

Historically, men are more hesitant about seeking help for mental health difficulties compared to their female counterparts. Often, this is associated with the disproportionately higher suicide rates in men compared to women (World Health Organization, 2018; Chang, Yip, & Chen, 2019). Nevertheless, a paucity of male-specific interventions designed to improve psychological help-seeking remains.

The current review includes all the available interventions. Furthermore, the specific features within these diverse interventions have been summarised, aiming to provide some clarity within this diverse field. This review has demonstrated the feasibility and usefulness of synthesising complex behaviour change interventions with this method.

Interventions designed to improve psychological help-seeking in men share similarities. Interventions that appear to improve male help-seeking incorporate: role models, psycho-educational materials, symptom recognition and management skills, active problem-solving tasks, motivating behaviour change, sign posting materials, and content that builds on positive masculine traits (e.g. responsibility and strength).

In sum, this review helps provide clarity when trying to understand help-seeking interventions for men. Furthermore, promising strategies to consider when developing future interventions have been discussed, informing both research and clinical practice.

Chapter 3:

Engaging Male Students with Mental Health Support: A Qualitative Focus Group Study

Chapter Preface **84**

Publication details **84**

Abstract **86**

Introduction **87**

Method **88**

Design 88

Patient & Public Involvement (PPI) 89

Procedure 89

Data Analysis 91

Results **92**

Participants 92

Theme 1: Protecting Male Vulnerability 94

Theme 2: Provide a Masculine Narrative of Help-Seeking 96

Theme 3: Differences Over Intervention Format 98

Theme 4: Difficulty Knowing When and How to Seek Help 100

Theme 5: Strategies to Sensitively Engage Male Students 102

Discussion **105**

Strengths & Limitations 110

Reflexivity 111

Conclusion **111**

Chapter Preface

The systematic review outlined in chapter 2 provides a comprehensive synthesis of the key strategies and techniques (i.e., the seven core processes) which have been deployed in previous mental health help-promotion (as opposed to help-giving) interventions to encourage help-seeking for men across all age groups. Within the systematic review, only two interventions promoting help-seeking are specifically for male students (Rochlen, McKelley, & Pituch, 2006; Syzdek, et al., 2016). Given that male students represent a unique and clinically vulnerable population, more so than non-student males and female students due to an intersection of gender and complex mental health risk factors for this population group (e.g., age of mental health onset, reduced chance of having their mental health needs met, increased risk of suicide, student loans, loneliness, academic stress, worse help-seeking behaviours, more negative attitudes towards mental health support, and reduced ability to correctly identify symptoms), further research is required to confirm whether the seven core processes from the systematic review are applicable to a male student population. There may also be additional nuances that have not been identified which need to be considered when developing a complex help-promoting (as opposed to help-giving) intervention for male students in contrast to men more generally.

To address this, the PhD next sought to conduct a qualitative focus group study with male students themselves to confirm if the seven core processes identified from the systematic review on men of all ages in chapter 2 would indeed be applicable to a male student population. Furthermore, the focus group study would also provide an opportunity to obtain qualitative information which could help identify any additional nuances/recommendations that needed to be considered when designing help-promoting interventions for male students which were not captured in the previous systematic review or in the current evidence base. This focus group study would aid in the discovery of male students' views as to what they think is important and acceptable when designing mental health help-promotion interventions for male students.

Publication details

The following chapter was submitted for peer-review on the 29th of November 2019 and was later accepted for publication by BMC Public Health on the 15th of July 2020 (Appendix 3.1). This chapter is a copy of the final accepted peer-reviewed pre-print version. Changes have

only been made to the reference style, labelling of tables, figures, and supplementary material added to the appendices to ensure consistent formatting throughout this thesis. Additional discussion that is more detailed will be provided at the end of this thesis, within the discussion chapter. Ethical approval and study documents are provided in appendix 3.2. A sample transcript can be found in appendix 3.4. The full reference for the following chapter is as follows:

Sagar-Ouriaghli, I., Brown, J.S.L., Tailor, V., and Godfrey E. (2020). Engaging Male Students with Mental Health Support: A Qualitative Focus Group Study. *BMC Public Health,* 20, 1159. https://doi.org/10.1186/s12889-020-09269-1

Abstract

Males are less likely to seek help for mental health difficulties compared to females. Despite considerable interest, a paucity of evidence-based solutions exists to address this. Concerns about students' mental health has led to the United Kingdom's Department of Education to make this a priority. Studies have shown that male students hold more negative attitudes towards the use of psychological services compared to female students and are less likely to seek help. A major concern is that male students make up 69% of university suicides, which is often associated with lower rates of help-seeking. This focus group study therefore sought to identify potential approaches that would be relevant to improving mental health help-seeking in male students. Three focus groups comprising of 24 male students at a London University were conducted. Participants were asked questions exploring: the barriers to seeking help, what would encourage help-seeking, how an appropriate intervention should be designed, and how to publicise this intervention to male students. Thematic analysis was conducted to evaluate participants responses. Five distinct themes were identified. These were: 1) protecting male vulnerability, 2) providing a masculine narrative of help-seeking, 3) differences over intervention format, 4) difficulty knowing when and how to seek help, and 5) strategies to sensitively engage male students. These themes represent important considerations that can be used, together with the existing literature about male help-seeking, to develop more male friendly interventions that are suitable for male students. This could help improve help-seeking attitudes and the uptake of mental health interventions for male students experiencing emotional distress.

Introduction

The UK is increasing its efforts to tackle issues surrounding student mental health. The majority of students fall into the age bracket of 18-25 years, coinciding with the peak onset period for various mental health disorders such as schizophrenia, and anxiety and depression (Kessler, et al., 2007; Jones, 2013). The Department of Education is developing guidelines to ensure universities improve the mental health support offered to students (Department of Education, 2018; Brown, 2016). Such initiatives can be attributed to the rise in students reporting mental health conditions. From 2007 to 2017 five times as many students disclosed a mental health condition, reflecting a 12% increase across a 10-year period (Thorley, 2017). Problems such as anxiety and depression are common in university students (Beiter, et al., 2015). Additional concerns of suicidal thoughts and behaviours, problematic drinking and substance misuse also occur frequently in this population (Mortier, et al., 2018; Dennahardt & Murphy, 2013; Wicki, Kuntsche, & Gmel, 2010). Alongside the increase in students reporting common mental health problems, it has been noted that symptoms have become more severe (Watkins, Hunt, & Eisenberg, 2011). This has increased the demand on student mental health services, which continues to rise annually (Watkins, Hunt, & Eisenberg, 2011; Broglia, Millings, & Barkham, 2017). These factors, coupled with the stressors of university, can have a detrimental impact on academic performance (Eisenberg, Golberstein, & Hunt, 2009) and place students at a greater risk of dropping out (Hjorth, et al., 2016).

An additional problem is that students are often still reluctant to seek help for mental health difficulties (Eisenberg, Golberstein, & Gollust, 2007). The stigma associated with seeking help has been shown to reduce student's willingness to talk about their mental health concerns (Eisenberg, et al., 2009). Confidentiality, trust, poor symptom awareness, self-reliance, inadequate service knowledge and difficulty expressing emotions have also been highlighted (Gulliver, Griffiths, & Christensen, 2010; Nam, Choi, Lee, Kim, & Lee, 2013). Further inspection of these barriers shows that they differ by gender. Indeed, female students hold more favourable attitudes towards help-seeking compared to males (Sheu & Sedkacek, 2004). Traditional masculine gender roles of stoicism, invulnerability and self-reliance can reduce men's willingness to seek support (Vogel, et al., 2011; Addis & Mahalik, 2003). In one study, male students preferred to deny weakness in order to uphold a stoic position and limit self-disclosure to remain autonomous; interestingly, they were more likely to engage in

mental health support when help-seeking was characterised as a sign of strength (Tang, et al., 2014).

Despite these findings, there remains a dearth of evidence-based solutions that aim to improve male student's help-seeking. Indeed, this is a key target area for universities and mental health services, particularly since 93 (69%) of the 134 students committing suicide in 2015, were male (Thorley, 2017). However, in the right circumstances, men are willing to talk about their emotional and physical experiences, including depression (Davies, et al., 2000; Emslie, Ridge, Ziebland, & Hunt, 2006; Chuick, et al., 2009) and qualitative work has helped provide a better understanding of poor utilisation of mental health services (Harper & Thompson, 2011).

The current study sought to conduct a series of focus groups with male university students. The aim of this research was to highlight key features that might be incorporated into mental health initiatives to help encourage male students to seek help for mental health difficulties.

Method

Design

Focus groups were chosen to explore the narratives of male university students as they are an effective strategy for collecting health data and a promising method to research mental health in men (Rochlen & Hoyer, 2005). This approach can enhance the discussion of personal issues by proving a supportive group environment, resulting in richer findings that might not be obtained from individual interviews (Gill, Stewart, Treasure, & Chadwick, 2008; McLafferty, 2004). Focus groups can help capture collective group attitudes, norms and overall narratives and foster positive group dynamics and interactions (Gill, et al., 2008). Discussion of mental health services with men should be encouraged (Pollard, 2016), particularly as group discussion may also provide interpersonal support and validation for men experiencing psychological distress (Cochran & Rabinowitz, 2003). Purposive sampling was adopted to recruit participants to the focus groups as there was deliberate choice of participants based on their gender (i.e. male) and level of education (i.e. students) (Etikan, Musa, & Alkassim, 2016; Palinkas, et al., 2015). Similarly, heterogenous purposive sampling was utilised in the current investigation to select a broad spectrum of participants regarding their ethnicity,

previously help-seeking behaviours, and degree faulty to resemble the student cohort as closely as possible (Etikan, Musa, & Alkassim, 2016). Thematic analysis was chosen to examine the narratives by breaking down speech into smaller units of content (Vaismoradi, Turunen, & Bondas, 2013), as it is a method that seeks to identify, analyse and report patterns (referred to as themes) within the data (Braun & Clarke, 2006).

Patient & Public Involvement (PPI)

To develop a relevant topic guide, this research was initially reviewed by an advisory team with experience of mental health problems who have been specially trained to advise on research proposals and documentation through the Young Person's Mental Health Advisory Group (YPMHAG) which is a free, confidential service in England provided by the National Institute for Health Research Maudsley Biomedical Research Centre via King's College London (KCL) (https://ypmhag.org/) (National Institute of Health Research, 2014). One author (ISO) presented the current investigation to the YPMHAG before seeking feedback. The YPMHAG consisted of 9 young adults (3 male) with a mean age of 22 years. Seven were either current or former university students.

The YPMHAG recommended that the investigation emphasise that the focus groups were not a form of group therapy, and that participants were not required to discuss personal experiences and any responses would remain anonymous. The finalised focus group questions explored the barriers to help-seeking, how to encourage mental health help-seeking, how mental health initiatives should be designed and how to publicise them to male students. A comprehensive topic guide is in Appendix 3.3.

Procedure

Ethical approval was granted by the universities local Research Ethics Office (Appendix 3.2). The focus groups were advertised via a routine fortnightly e-mail used to recruit students to research studies that was sent to all students at the university. Posters were distributed across the university campus and posted within social media pages and various societies. Both the e-mail and posters contained a brief summary of the project and provided additional contact details if students were interested in participating. No prior relationships were established with potential participants before the study commenced. After contacting the

research team, participants were sent an e-copy of the information sheet outlining the study in more detail including the aims of the research study and that it would be part of a PhD project. After reading this and agreeing to take part, participants were enrolled into the study (Figure 3.1). Upon arrival at the focus groups, situated in a university room located above the student's union, participants were given a hard copy of the information sheet, provided with an opportunity to ask any further questions and completed a consent form to take part. Focus groups were conducted until data saturation, the point at which no new themes or concepts relating to the research question are interpreted from the data, was achieved (Francis, et al., 2009; Hennink, Kaiser, & Weber, 2019; Hancock, Amankwaa, Revell, & Mueller, 2016; Guest, Namey, & McKenna, 2017; Braun & Clarke, 2019). Employing a thematic analysis approach, the research cannot determine exactly how many focus groups will be required in advance of analysis (Braun & Clarke, 2019). Transcripts of each focus group were reviewed after each session before conducting the next to determine if new concepts relating to the research question were identified within the data. Data saturation was reached after the third focus group whereby no new codes were developed. This is consistent with previous work as data saturation seeking to identify core themes within the data can be achieved with small sample sizes (Hennink, Kaiser, & Weber, 2019), with 84% of all possible codes being developed by the second focus group (Hennink, Kaiser, & Weber, 2019). Additionally, 96% of high-prevalence codes can be identified by the third focus group (Hennink, Kaiser, & Weber, 2019). Previous qualitative work investigating health-seeking behaviours of African American men found that two to three focus groups were effective for identifying 80% of all themes, and that three focus groups are enough to identify all of the most prevalent themes within the data set (Guest, Namey, & McKenna, 2017). Three focus groups were facilitated by the lead researcher (ISO, PhD student, male), with the assistance of a medical student currently enrolled at the university (VT, male). A topic guide (Appendix 3.3) was used to steer the conversation, but otherwise the facilitator allowed general discussion among the participants. During the focus groups, the second researcher took notes on the focus groups as well as the names of participants who had spoken and in which order to aid transcription. Other than the researchers and participants, no others were present.

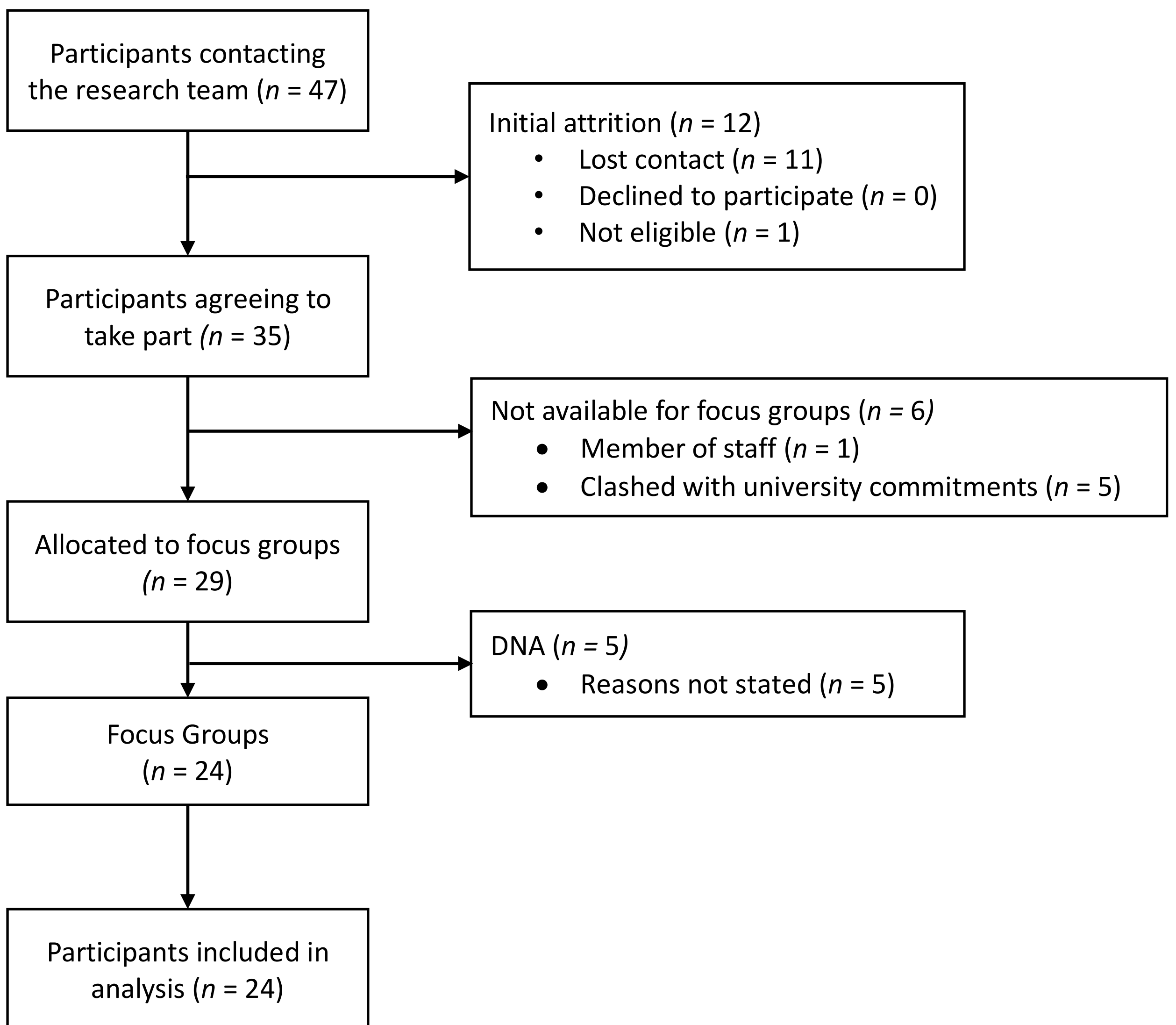


Figure 3.1. Recruitment flow chart.

Data Analysis

All focus groups audio discussions were recorded and encrypted on a Phillips Dictaphone Pocket Memo and transcribed verbatim by one author (ISO). The six-step guide for Thematic Analysis recommended by Braun & Clarke (2006) was used to analyse the data. The six steps are: 1) familiarisation with the data, 2) generate initial codes, 3) search for themes, 4) review themes, 5) define and name the themes, and lastly 6) produce the report. Coding was an iterative process conducted by two members of the research study team (ISO and VT) in an independent-parallel fashion before agreeing on finalised codes. Once all the data had been initially coded, it was categorised into broader groups encompassing relevant codes, which

were abstract ideas expressed within the transcript and were agreed upon before identifying themes. Themes encapsulated a common phenomenon that emerges from reoccurring codes within the data and represented the most prominent ideas and experiences of the participants (Vaismoradi, et al.,, 2016).

Results

Participants

Twenty-four male students attended the focus groups (Figure 3.1) and were compensated for their time with a £20 Amazon voucher. Participants' demographic information is outlined in table 3.1. The mean duration of the three focus groups was 72.47 minutes.

Table 3.1. Participants' demographic information.

Demographics	***N* (%)**
Total number of participants (% male)	24 (100%)
Age (Years)	
Mean (SD)	21.89 (3.39)
Range	18-31
Ethnicity	
Chinese	7 (29%)
Any other white background	5 (21%)
White British	4 (17%)
Pakistani	3 (13%)
Black African/Caribbean	2 (8%)
Any other Asian background	2 (8%)
Arab	1 (4%)
Degree Faculty	
Institute of Psychiatry, Psychology & Neuroscience	5 (21 %)
Natural & Mathematical Sciences	4 (17%)
Life Sciences & Medicine	4 (17%)
Business School	3 (13%)
Arts & Humanities	3 (13%)

Social Science & Public Policy	2 (8%)
Other/NA	2 (8%)
Dental Institute	1 (4%)
Level of Study	
Undergraduate	16 (67%)
Postgraduate (Master's or PhD)	7 (29%)
Other	1 (4%)
Has previously sought help for mental health	
Yes	12 (50%)
No	10 (42%)
Prefer not to say	2 (8%)

Five distinct themes were identified. These were: 1) protecting male vulnerability, 2) providing a masculine narrative of help-seeking, 3) differences over intervention format, 4) difficulty knowing when and how to seek help and 5) strategies to sensitively engage male students. These results and their underlying sub-themes are summarised in figure 3.2.

Protecting Male Vulnerability

- The importance of trust and confidentiality
- Facilitate social support
- Provide a male only space

Masculine Narrative of Help-Seeking

- Patriarchy invalidates men's concerns
- Seeking help is not masculine
- Frame help-seeking to be more masculine
- Normalise help-seeking
- Use male role models

Differences Over Intervention Format

- Preference for something informal and fun
- Preference for a formal intervention
- Brief interventions are easier to engage with
- Frequent sessions are needed for mental health

Difficulty Knowing When & How to Seek Help

- Improve mental health symptom knowledge
- Explain when symptoms warrant help (severity)
- Sign-post mental health services
- Clarify treatment structure
- Easier and quicker routes to care

Strategies to Sensitively Engage Male Students

- Do not label as a 'mental health' intervention
- Provide an incentive for attending
- Promote through student-led or university societies
- Deliver initiatives during orientation week and exams

Figure 3.2. Overview of themes and sub-themes to improve mental health help-seeking for male students.

Theme 1: Protecting Male Vulnerability

A prominent theme was that speaking about mental health was very difficult. The majority of participants were reluctant to confide in others and talk about their difficulties due to fears associated with opening up.

"why would you want to open a can of worms? there is no point to that… not immediately anyway" – Participant 5, Group 3

"most people just don't know, most people just, they're so afraid of what they don't know they just like don't want to know [talking about mental health]" – Participant 5, Group 1

To combat this, participants described environments that were safe and less threatening. They preferred settings that were more sensitive to male needs, enabling better management of the fear and vulnerability associated with opening up/seeking help. Many of the participants stressed the need for a safe space, trust and confidentiality.

"they have to trust you because men aren't like women, we don't open up very easily we don't" – Participant 5, Group 1

"people need more information about confidentiality because a lot of people are afraid that if they say anything about their mental health problems, other people will find out and they may have problems with that" – Participant 9, Group 2

Others emphasised that talking about mental health with professionals can be a deterrent. Many had a preference for speaking to someone they knew such as a close friend or someone they have been briefly introduced to. Indeed, according to participants, this may help facilitate a trusting environment.

"for me, it would be better if I will be surrounded by people who at least I know for like 10-15 minutes rather than a complete stranger – [if you say] 'let's talk about depression, or let's talk about anxiety'. [I'll say] not really, I don't want to talk about it, I don't know you guys why should I open up" – Participant 1, Group 1

Similarly, the importance of social support for psychological well-being and how this can encourage help-seeking was stressed.

"maybe like a time like hanging out with a friend, socialise, but at the same time like seeking help" – Participant 1, Group 1

"I think in my case a big help of this phase is actually people around me. So, like when I first experienced the issue, I didn't seek help personally, it was the people around me" – Participant 1, Group 3

Furthermore, participants stated that a male-only space would also assist with protecting the vulnerability they experience when trying to seek help for mental health. Moreover, this could assist with validating difficulties male students may experience.

"there's so much available for literally everything else. Men are like, they're pushed to one side, you don't need the help as much as women, young children, older people, disabled people, but men, we have nothing for ourselves" – Participant 5, Group 1

"I think emphasising men's mental health is insanely important" – Participant 1 Group 3

"I think if there were women here, I think it would detract from people like actually being open" – Participant 4, Group 3

These discourses emphasise the importance of providing a male only space or setting in which male students feel comfortable to disclose mental health concerns, whilst also providing an environment to facilitate further discussion around help-seeking. This may be enhanced by the assurance of trusting and confidential settings and facilitating social support with other male students.

Theme 2: Provide a Masculine Narrative of Help-Seeking

Traditional masculine stereotypes of being strong, responsible, invulnerable and self-sufficient were identified as key barriers to seeking help. Male students preferred to do things by themselves as seeking help contradicted masculine ideals.

"responsibility that surrounds the male character is playing a huge role in this as well because if you are male and you have a lot of responsibility and then you know that, 'okay I have a problem, now I have to seek help', then you have to rely on someone else, then my responsibility is sort of, it could be that, I can't do it anymore" – Participant 10, Group 1

"you might also feel anxious about talking to people and then showing vulnerability, which is also a big part why guys just don't talk about their emotions generally. They don't want to show vulnerability" – Participant 2, Group 3

These points emphasise that seeking help reduces one's ability to fulfil masculine ideals, particularly of responsibility and invulnerability. Furthermore, because men are often regarded as privileged in society they are not supposed to be disadvantaged. This in turn, makes it more difficult to open up about not feeling well or experiencing adversity.

"the term patriarchy because it just infers that, that it's impossible, or at least very difficult for men to have it bad, or to be disadvantaged in some way" – Participant 4, Group 3

Furthermore, the participants suggested that help-seeking appeared to be evaluated as an overall net loss. In this instance, seeking help would result in a loss to one's masculine identity without necessarily any immediate benefit.

"men especially, it's [i.e. mental health] is always going to rank in the lower things you know, you're never going to go, even like with regular health. I'm like 'oh I think it's broken but I'm not going to seek help immediately'" – Participant 5, Group 3

"you have to make like a big commitment [to therapy], and this commitment is like a short-term loss, it's a short-term loss" – Participant 1, Group 3

Concerns about responsibility, vulnerability and patriarchy infers that male students may benefit from a narrative that highlights how help-seeking can be masculine, will not be detrimental to their masculinity and engaging would be an overall net-gain. This was

evidenced by some participants stating that help-seeking does not have to be weak and can be a sign of strength whilst working towards better health and personal growth.

"if you tend to run away from your problems then you're weak in this sense, not in the eyes of others, but towards yourself" – Participant 5, Group 2

"people who attend then feel empowered because they're doing something strong not weak. I'm here looking after myself and that's empowering. It makes people who attend feel good and so I think that's a really really good idea" – Participant 7, Group 2

One way to encourage help-seeking was to normalise the behaviour by emphasising that it was common. In addition, utilising male role models to talk about their own mental health experiences and help-seeking stories would inspire hope and reduce the perceived negatives associated with help-seeking.

"I think just give them some materials or some something to the public that gives the feeling that seeking mental health [help] is not very special or a serious thing, just a normal thing, that it's fine. So, when you just get a mental health problem you will feel easy to seek help" – Participant 3, Group 3

"if they see another gentleman, high profession, high functioning individual, and they're talking about XYZ, they might think 'you know what, he's done it, why not myself?'. If you could do a personal narrative that'll be amazing" – Participant 5, Group 1

Overall, this theme highlights that help-seeking was perceived as a net loss to one's masculine identity and male-students could feel disqualified from seeking support due to male-privilege. Indeed, framing help-seeking to fit masculine norms, as a normal act of self-care was suggested to improve male-students engagement with mental health interventions.

Theme 3: Differences Over Intervention Format

Theme 3 highlighted a lack of consensus regarding the format of appropriate interventions for male students. These views were polarised, with participants disagreeing over the

formality and duration of the intervention. Much of the discourse emphasised the need for a fun and informal structure to help promote engagement.

"approach this from a different angle because we always do workshops, we always do lectures, we always do something which is like really formal rather than informal" – Participant 1, Group 1

"something that's fun, even if you are okay, something that you just come to anyway because it's enjoyable, I definitely think that will be better" – Participant 7, Group 2

Equally, many participants felt the opposite and stated that they would prefer a formal and serious structure. This disagreement was centred around these participants perceiving mental health as serious and they were concerned that an informal group would not be structured enough to facilitate openness.

"some people may be more open to sharing things if it's in a more private setting. It may not be best to do it with a group of friends or anything like that" – Participant 4, Group 1

"you don't want to alienate people by making it seem so light-hearted, because it's not. Because other issues are absolutely serious" – Participant 5, Group 1

The second disagreement was in response to the duration of the intervention. There was a preference, among half the participants, for something brief that lasted 1-2 hours and was spread across one or two sessions.

"an hour is fine, no-one has more than that to give away really" – Participant 6, Group 1

"I can maybe come once but not more often, so there should be a tactic to reach people in one workshop" – Participant 2, Group 3

Conversely, others felt that multiple sessions that were repeated more frequently were a better format. This was due to a perception of mental health as a more enduring problem, thus requiring repetition of information and longer-term support to encourage help-seeking.

"I know, even getting information, even getting information one session is not enough, you need repetition to get mental health across" – Participant 1, Group 3

"I think one off things don't actually work that much" - Participant 5, Group 2

Theme three captures the lack of consensus over the formality and duration of an intervention. This presents some difficulties when designing future mental health initiatives, but none-the-less demonstrates that these are salient factors, which may contribute to engaging male students with mental health support and other well-being practices.

Theme 4: Difficulty Knowing When and How to Seek Help

Theme 4 provides an overview of how male students conceptualised mental health and determined appropriate action. Many students acknowledged their limited understanding of common mental health conditions, such as anxiety and depression, and how they present in men. Participants felt common mental health conditions and how they present should be addressed more openly to facilitate greater help-seeking. This should be explained in lay terms, as opposed to using medical terms, such as those from DSM (American Psychiatric Association, 2013) and the ICD (World Health Organization, 1992).

"ask someone what depression means to you, and he'll be like 'err just someone who's really sad'. Which is not necessarily clear, what we mean by it is that there's biological changes, so they don't understand it's a lack of understanding and awareness"- Participant 5, Group 1

"I think not necessarily describing it as a kind of symptomatic profile, it's often the DSM approach. So, maybe having something a bit more holistic and a bit more solvent" – Participant 3, Group 2

Alongside difficulties with understanding mental health symptoms, two other notable areas were mentioned. Firstly, teaching students how to identify symptoms that are severe enough to warrant professional psychological support was highlighted. Many of the participants articulated difficulty in assessing their perceived need for mental health support.

"the difficult part was thinking, convincing myself I need help. And that was it, it's just getting over that first barrier and thankfully I did get over it. But the issue is that for me personally, that's the biggest barrier for myself - realising I need help" – Participant 5, Group 1

"we're all at university, there's a lot of other pressures going on, there's a certain amount, everyone just expects you to be stressed, and there's just certain expectations that you should be feeling that way. So, it's difficult to then think to yourself 'okay, there's a certain amount of this I should be feeling, but I'm now feeling too much' – Participant 6, Group 1

Other suggestions included: mental health interventions should explain when symptom awareness translates into seeking help, provide a checklist so students can cross-reference their symptoms, or include group discussions around mental health to facilitate self-reflection and greater awareness of symptoms.

"I'd have very generic statements, 'I am not enjoying what I used to enjoy', 'I feel like I'm tired all the time', blaa blaa blaa. If you're to say these out loud to certain individuals and 'how many of these can you relate to?', at this point it might trigger something to check themselves by" – Participant 5, Group 1

"anyone who talks about their [mental health] issues and so forth publicly, the people in the audience will start to relate and then that will start triggering stuff and people will start talking about it, guaranteed every time" – Participant 5, Group 1

Secondly, participants suggested information about psychological treatment, namely the process, duration and general service structure would be helpful. Many participants

acknowledged that they were unsure about which services were available, how to engage with them, and what kind of support they would receive if they did.

"I think it's a big thing about knowledge you need to know where to actually go, for instance I would normally, if I were to have mental health problems, I would normally think about the Student Union, just go maybe look at the Student Union but at the moment I have no idea where to look" – Participant 2, Group 3

"we don't actually talk about the process itself [i.e. therapy], how long does it take, what it looks like, when we should expect the first effect, why it's not straight away, people don't know this" – Participant 1, Group 1

The final point emerging from this theme highlighted logistical and structural barriers to seeking help. This included long waiting lists, lack of available support and slow administration surrounding university and professional mental health services.

"when they've [i.e. a friend] looked for help the NHS has something like a 6-month waiting list, 6 months to see help. It's a joke, it's a joke" – Participant 5, Group 1

"because of this high turnaround time I reckon that a lot of people might have the same feelings during exam time, during essay time, so a lot of people might want to talk to people and then it's just going to get so convoluted everybody wants to talk and then I reckon services in this case might not be able to help people out" – Participant 2, Group 3

This theme summarises the help-seeking barriers identified by participants: difficulty identifying/understanding mental health symptoms, problems identifying whether support is actually needed, lack of clarity surrounding available services, how to engage with services, what support they would receive, long waiting lists and other structural barriers to treatment.

Theme 5: Strategies to Sensitively Engage Male Students

The most widely recommended method suggested during the focus groups to promote mental health in male students was paradoxically not to place emphasis on mental health or

well-being. Indeed, this may overlap with a more informal approach advocated by some participants. Here, 'mental health support' was not perceived as beneficial and would result in a greater loss of time and resources if one were to attend. Having a title that does not reference mental health avoids this problem and was seen as less alienating, allowing for wider outreach to those who may not identify as having a mental health difficulty or who have symptoms that are not typically associated with mental health - such as problematic drinking, aggression and somatic symptoms.

"well-being sort of seems to 'ah it feels like I'm going to another session and I'm going to get lectured' and it's just a word I've heard a lot, it's an empty wishy-washy word [i.e. well-being]" – Participant 7, Group 2

"you know if you're struggling with depression and what not as a man, let's be real are you going to go to this workshop talking about men's mental health? Probably not" – Participant 1, Group 2

Similarly, providing an incentive or clear short-term benefit would help tip this cost-benefit analysis more favourably.

"So, I feel like if you have a side benefit to going to a workshop like that, that might be really cool" – Participant 5, Group 3

"Something similar to this with some snacks, like with some food or something kind of… an incentive to come" – Participant 6, Group 1

Other recommendations included promoting interventions through student networks or clubs, pre-existing bodies within the university and face-to-face advertising, as opposed to university wide e-mails and posters, as it was considered more engaging resulting in potentially higher levels of attendance.

"Getting societies involved, now I'm thinking about it, is a really really good idea ' cause you catch so many people like that, you catch the people at events, you catch a lot of different groups of people by getting societies involved" – Participant 5, Group 3

"Yeah well, human contact, like 'hey dude it's actually quite cool come along' and then you are much more inclined to go instead of seeing a poster" – Participant 5, Group 3

Finally, participants felt delivering mental health initiatives at the beginning of an academic year during orientation or 'freshers' week could elicit higher engagement. During this period, students have more time available to engage with extra-curricular activities and are more motivated to participate.

"for freshers you just say 'okay, now I have time' you want to do stuff, you feel like you've got an obligation to actually do stuff, maybe like 3 weeks afterwards you're like I don't care anymore but at the start you want to do something, you want to be informed, and maybe that's the best place to get to people so when they're still motivated" – Participant 2, Group 3

In addition to this, delivering mental health initiatives during 'critical' or 'darker' months was also considered to be a good idea. Participants thought running interventions around exams and before the Christmas/winter break would be more appealing and relevant to male students.

"then there should be like in these 'dark months' before exams" – Participant 4, Group 3

"you introduce sessions maybe before Christmas and then before exams" – Participant 4, Group 3

This theme captures key strategies which might help attract male students to attend mental health initiatives, and more specifically seek help. Labelling the intervention as something other than mental health, providing a short-term incentive, advertising via pre-

existing bodies and delivering initiatives during orientation and before exams were the most widely discussed strategies.

Overall, these five themes provide insight into how male students might think and how to better engage male students with mental health initiatives, possibly resulting in more effective and positive changes to psychological help-seeking.

Discussion

These focus groups identify five themes relating to: protecting male vulnerability, providing a masculine narrative of help-seeking, differences over intervention format, difficulty knowing when and how to seek help and strategies to sensitively engage male students.

Engaging with mental health services was reported as threatening and intimidating for male students, which led to apprehension and reluctance to seek support. This supports previous findings, which suggest men and male students require more trusting relationships, assurance of confidentiality and good rapport when managing mental health difficulties (Seidler, Rice, Ogrodniczuk, Oliffe, & Dhillon, 2018; Gulliver, Griffiths, & Christensen, 2012; Rickwood, Deane, Wilson, & Ciarrochi, 2005). The need for trust, confidentiality and good rapport may be due to components of stigma, characterised as one's attitudes and misconceptions of mental health and those with a mental health condition (Corrigan & Watson, 2002; Corrigan, Rafacz, & Rüsch, 2011). Stigmatising beliefs negatively impact help-seeking behaviours and attitudes which can account for the reluctance and apprehension experienced by the participants in this study (Vogel, et al., 2013; Vogel, Wade, & Hackler, 2007; Nearchou, et al., 2018). Indeed, men often have greater stigmatising views of mental health compared to women (Pedersen & Paves, 2014; Topkaya, 2014; Vogel, et al., 2013). By protecting the vulnerability male students experience with seeking help, it is likely to reduce the anticipated or experienced stigma. For example, building trust and emphasising confidentially can help dispel fears of being judged or personal information being shared outside the therapeutic setting. Along the same lines, providing social support within interventions may also reduce the emotional intensity and subsequent 'threat-level' of engaging. Social support can help encourage one to seek help, as being supported and validated by others helps to reduce one's internalised stigma (Birtel, Wood, & Kempa, 2017; Lindsey, Joe, & Nebbitt, 2010). Men often prefer group work (Cochran & Rabinowitz, 2003) and have a greater propensity to seek help when there is positive social encouragement to

do so (Rickwood, et al.,, 2005). Furthermore, male-only spaces that are gender-sensitive may help to validate men's mental health concerns and guard against negative perceptions of help-seeking (Liddon, Kingerlee, Seager, & Barry, 2019).

Participants discussed the notion of patriarchy, whereby the current world is seen as privileging, empowering and advantageous for men. In efforts to address this, society minimises male success/inequalities and magnifies female success/inequalities (Seager & Barry, 2019a). Subsequently, male students may discredit, invalidate or delegitimise their own concerns surrounding mental health and seeking professional support due to feelings of lack of entitlement, anticipated criticism or disapproval. These feelings may be heightened in the presence of female students, indicating a need for a male only-space.

The second theme related to seeking help which was characterised as dramatic, weak, less responsible, feminine, incompetent and less independent. Such stigmatising perceptions may contribute to greater self-criticism or self-stigma as these contradict traditional masculine stereotypes of strength, responsibility, self-sufficiency and control (Seidler, et al., 2016). Indeed, evidence highlights that men are more likely to internalise stigmatising views held by the general public and that self-stigma mediates the relationship between masculine norms and help-seeking attitudes (Vogel, Wade, & Hackler, 2007; Eisenberg, et al., 2009; Vogel, et al., 2011). In the present study, a cost-benefit analysis emerged weighing up the advantages and disadvantages of seeking help in the context of a potential threat to one's masculinity. Conversely, some students articulated help-seeking to be consistent with traditional masculine stereotypes. Framing help-seeking as a sign of strength, a display of responsibility or an act of self-growth could lead to more positive discourses surrounding mental health help-seeking and reduce the stigma associated with engaging. Indeed, this supports previous findings demonstrating male students who re-define help-seeking as a sign of strength adopt more positive help-seeking behaviours (Tang, et al., 2014; Vogel, et al., 2011).

Men who do seek help may feel inadequate or deviant from prescribed male norms (Levant, Kamaradova, & Prasko, 2014). Findings from these focus groups indicated that by normalising help-seeking and re-framing it to fit better within positive masculine norms, there is potential to improve service engagement, possibly through the reduction in self-stigma (Clement, et al., 2015; Gulliver, Griffiths, & Christensen, 2010). Adjusting therapeutic environments to be male-specific, safe and male-friendly whilst adopting 'male-positive'

values can assist with normalising help-seeking and reduce the stigma associated with seeking help (Robertson, Bagnall, & Walker, 2015). Another way to achieve this is to incorporate male role-models into future work. This approach is often used within male help-seeking interventions (Sagar-Ouriaghli, et al., 2019), where evidence supports the use of celebrities to teach people about mental illness and is an effective strategy for reducing mental health stigma (Ferrari, 2016).

Although much of the current findings may align with previous literature regarding stigma and masculine norms, male students experience a broad range of barriers where factors such as stigma are not always the biggest obstacle (Clement, et al., 2015). The third theme reflected key differences amongst the participants. Consistently throughout, half the participants preferred an informal and fun setting for an intervention as this would be more interesting and enticing. Previously, the use of humour and funny mental health campaigns have been shown to increase awareness of mental health and promote greater interest in counselling services (Erentzen, Quinlan, & Mar, 2018). Furthermore, lay language and humour provides relational styles that are more familiar to men (American Psychological Association, 2018). Indeed, this may help to explain why previous, more formal, interventions have struggled to engage men. In contrast, other participants expressed a preference for a formal setting. This was to help validate the significance of men's mental health and allow for mental health concerns to be discussed in a safe and serious setting, similar to that of traditional therapies.

Another difference focused on the duration of the intervention. Some participants suggested shorter interventions may be preferable as they require less commitment. This is corroborated by other discourses identified from these focus groups, where many of the students appear to undergo a cost-benefit analysis when deciding whether to seek help. In this instance, a brief intervention reduces the associated costs of engaging with support. Conversely, those expressing the need for a serious and formal setting were of the view that a prolonged and frequent intervention was required, due to the pervasiveness of mental health difficulties. One way of reconciling these discrepancies would be to blend both approaches, as this may appeal to more male students (Kierans, Robertson, & Mair, 2007; Robertson, Bagnall, & Walker, 2015). Alternatively, a 'one-size-fits-all' approach is unlikely to solve the current issues and a variety of different intervention formats could be assessed to see which is more appropriate for male students. Certainly, the development of brief and

informal interventions requires testing, as this approach is not currently provided by traditional mental health services.

The fourth theme captured the difficulties male students have with identifying mental health symptoms and knowing whether and when it is appropriate to seek support. Male students appear to have greater difficulty in identifying mental health symptoms compared to female students (Reavley, McCann, & Jorm, 2012; Cotton, et al., 2006). Improving mental health literacy is not a novel finding and has been a key target area for previous student mental health interventions (Sharp, Hargrove, Johnson, & Deal, 2006; Kutcher, Wei, & Coniglio, 2016; Yamaguchi, Mino, & Uddin, 2011). The rationale underpinning mental health literacy programmes serves to target mental health knowledge by improving one's ability to recognise mental health symptoms, have sufficient knowledge of treatment, and appropriate self-help strategies to facilitate help-seeking (Jorm, 2012). Similarly, mental health literacy interventions and campaigns can assist with improving mental health awareness whilst reducing stigmatising perceptions of mental health (Evans-Lacko, London, Little, Henderson, & Thornicroft, 2010; Rüsch, Angermeyer, & Corrigan, 2005). Positive improvements in both these domains can elicit greater help-seeking. The current findings extend this rationale further by highlighting the difficulty male students in particular have with relating symptoms to seeking support. To overcome this, participants recommended providing more concrete means to self-evaluate their symptoms, such as checklists and group discussions. Improving symptom knowledge and providing more specific clinical thresholds can help facilitate earlier detection and intervention of mental health difficulties.

Likewise, many students were unsure about how to access mental health support. Indeed, positive changes to help-seeking have been seen when services are sign-posted (Sagar-Ouriaghli, et al., 2019). Furthermore, male students were uncertain about what actually happened during therapy. This confirms previous research, whereby men often fail to understand various treatment options (particularly psychological therapies) and are unaware of the positive elements of help-seeking and how it relates to recovery (House, Marasli, Lister, & Brown, 2018). It is clear from these findings that male students require information about how treatment works, it's content and duration and what progress may look like. Additional barriers students mentioned when seeking support included the logistical and structural barriers to services. Although dependent on funding, services should seek to

make self-referrals less cumbersome and increase the availability of support staff to reduce waiting times for all students.

Finally, the fifth theme highlighted another issue when promoting mental health initiatives, as participants reported labels of ‘mental health’ or ‘well-being’ should be avoided as they could discourage attendance. These labels can be alienating and are perceived as being less benign than terms not related to mental health and they are likely to elicit stigmatising beliefs and negative perceptions of mental health. Men often reject services that use ‘psychiatric’ or ‘diagnostic’ frameworks that seek to label emotional distress as a mental illness (River, 2018). Avoiding a name that emphasises mental health could also help to engage male students who do not identify as having a formal mental health diagnosis but may be experiencing distress. Providing a secondary incentive was also recommended to help shift perceptions of help-seeking towards being a more positive and worth-while activity.

These focus groups also advised promoting mental health initiatives through pre-existing social networks such as university societies. This is a preferred method of communication for young adult males (18-25 years), as they are more likely to seek in-person mental health services when encouraged by their family or partner, whilst peer support increases in-person mental health service use after adolescence (Rickwood, Mazzer, & Telford, 2015).

Lastly, delivering mental health initiatives during university orientation week(s) and preceding exam periods was recommended. Previous research supports this, as lack of time is a frequent barrier student's face when engaging with mental health support and thus it may be more acceptable to position mental health initiatives when students have more time resources available or within close proximity such as student unions and halls of residences (Ryan, Marley, Still, Lyons, & Hood, 2017; Eisenberg, Speer, & Hunt, 2012; Eisenberg, Golberstein, & Gollust, 2007). Alternatively, it was proposed that mental health initiatives should be delivered during exam periods, as they can cause or contribute to higher levels of emotional distress (Bedwey & Gabriel, 2015). Although engaging before exams would be more time-costly, mental health support was perceived as having a greater benefit at this time. Mental health initiatives for male students should be positioned when it is most likely to engage them, particularly at the beginning of university (i.e. orientation week/freshers) and during exam periods.

Overall, it is hoped that these findings can be used alongside other recommendations (Sagar-Ouriaghli, et al., 2019; Liddon, Kingerlee, Seager, & Barry, 2019; American Psychological Association, 2018) to design more effective mental health interventions for male students to improve both their uptake and engagement.

Strengths & Limitations

Valuable insights have been gained from male students regarding the design and development of mental health initiatives for this population. A strength of this investigation included the use of two independent reviewers throughout thematic coding to reach consensus. Additionally, this investigation consulted the YPMHAG resulting in a more tailored and appropriate topic guide for this study. This may help explain why retention was relatively high (75%), with only 16 students (25%) losing contact after approaching the research team.

Furthermore, the current investigation purposely included participants who have (50%) and have not (42%) previously sought help for mental health. In turn, this enabled a broader overview of experiences male students may face when seeking help.

This study is not without limitations. Although the identified themes were sent to participants for data validation, none of them responded, which makes it difficult to state with certainty that participants felt the finalised themes capture their responses. Additionally, the current investigation was conducted by a novice researcher with each focus group facilitated by male students. This may have methodological implications, particularly the possibility of influencing the focus group discussions with their own biases. However, the researcher took part in several training courses prior to the study, regarding how to facilitate focus groups and conduct thematic analysis. Additionally, the research was supervised by experienced qualitative researchers throughout all stages of the study, which should have mitigated this risk.

Lastly, thematic analysis was chosen to identify the key patterns and themes that emerge from the data (Braun & Clarke, 2006). As part of this process, ‘data reduction’ occurs to condense and synthesise the most prominent ideas within the data (Alhojailan, 2012). This could mean more nuanced ideas and recommendations are lost due to not aligning with a broader, reoccurring theme. This may be of importance for different sub-groups of male students, as they may be faced with subtle differences when seeking help for mental health difficulties.

Reflexivity

It is important to acknowledge two key aspects that may have influenced the results presented in this paper. In this study, only male students were recruited and the researchers facilitating the focus groups (ISO and VT) were both male. This may have allowed male students to feel more comfortable when talking about mental health help-seeking. This was particularly apparent when students discussed masculine stereotypes and the notion that having a male only space was of importance. Similarly, both the focus group facilitators were students currently studying at the same institution as the participants. The researchers kept a reflexive diary and felt they had greater contextual understanding of the discourses provided, allowing for greater rapport and freedom for participants to express their thoughts. It is possible that as a result, the current focus groups provide a more detailed and accurate account of male students' experience of help-seeking.

Conclusion

Student mental health and poor male help-seeking is a major concern and providing the right response is currently being debated. The current investigation provides a detailed account of suggestions from current students about how to improve mental health initiatives for male students. It is hoped that the themes of protecting male vulnerability, providing a masculine narrative of help-seeking, differences over intervention format, difficulty knowing when and how to seek help and strategies to sensitively engage male students can be considered and implemented when designing future mental health interventions that seek to improve male students' overall well-being or willingness to seek psychological support.

Chapter 4:

Improving Mental Health Help-Seeking Behaviours for Male Students: A Framework for Developing a Complex Intervention

Chapter Preface **113**

Publication details **114**

Abstract **115**

Introduction **116**

Medical Research Council (MRC) Framework **117**

MRC Development: Identifying the Evidence Base **119**

Identifying Evaluation Methods 120

MRC Development: Identifying or Developing Theory **121**

Access to Care Model 122

Candidacy 123

Navigation 124

Appearance 125

Categorisation/Adjudication and Offer 126

Receipt or Rejection 126

Other Considerations 127

MRC Development: Modelling Process and Outcomes **128**

Modelling Process and Outcomes: Focus Groups 128

Modelling Process and Outcomes: The COM-B Model of Behaviour 134

MRC Feasibility and Piloting **138**

Strengths and Limitations **142**

Conclusion **143**

Chapter Preface

After conducting the focus group study, core processes that were covered within the systematic review were validated and considered important for a male student population. Particularly, themes relating to protecting male vulnerability, providing a masculine narrative of help-seeking, difficulty knowing when and how to seek help, and strategies to sensitively engage male students coincided with the core process of role models, information, recognising and managing symptoms, sign posting services, and positive masculinity which were identified from the systematic review. At this stage, this PhD has not only synthesised previous interventions but also identified recommendations from male students themselves from a series of focus groups. The overarching aim of this PhD is to develop an empirically driven, theoretically informed intervention to better promote help-seeking and encourages male students to seek help. Indeed, male students are situated as an extremely vulnerable population group due to males being at greater risk of suicide, and student's presenting with greater mental health help-seeking barriers and/or risk factors.

In order to develop an empirically driven, theoretically informed intervention that promotes help-seeking effectively, published literature and past evidence must be consulted to ensure that future recommendations are grounded in evidence-based practice. The majority of the developed interventions thus far fail to do this, emphasising the novel contribution of the next chapter. Therefore, chapter 4 seeks to develop a comprehensive framework by synthesising the existing evidence base pertaining to help-promotion for mental health in the context of male students who present with mental health difficulties. Chapter 4 utilises the MRC's framework for developing a complex intervention and discusses, firstly, previous help-seeking interventions and their evaluation methods, secondly, a theoretical framework outlining the important factors male students face when accessing support, and thirdly, how these factors can be mapped onto a model of behaviour change to inform the development of an evidence-based intervention. It is apparent how chapter 4 builds upon the previous studies (i.e., the systematic review and focus group investigation) alongside previous evidence to produce a framework that is specific to the development of interventions that seek to promote help-seeking in male students. By synthesising the evidence and in turn providing a comprehensive framework on how to design gender-sensitive mental health help-seeking interventions, two outcomes can be achieved. Firstly, in

the context of this PhD, the framework will allow for a theoretically informed intervention for male students to be developed, whereby key concepts and recommendations can be operationalised into a real-world intervention. Secondly, the framework provides an in-depth overview for the development of help-seeking/help-promoting interventions specifically for male students that other researchers and education/healthcare providers can utilise. Indeed, this allows for greater replicability and consistency within the field of male student mental health help-seeking.

Publication details

The following chapter was submitted for peer-review on the 11th of June 2020 and was later accepted for publication by the International Journal of Environmental Research and Public Health on the 7th of July 2020 (Appendix 4.1). This chapter is a copy of the final accepted peer-reviewed pre-print version. Changes have only been made to the reference style, labelling of tables, figures, and supplementary material added to the appendices to ensure consistent formatting throughout this thesis. Additional discussion that is more detailed will be provided at the end of this thesis, within the discussion chapter. The full reference for the following chapter is as follows:

Sagar-Ouriaghli, I., Godfrey, E., Graham, S., and Brown, J.S.L. (2020). Improving Mental Health Help-Seeking Behaviours for Male Students: A Framework for Developing a Complex Intervention. *International Journal of Environmental Research and Public Health, 17*(14), 4965-4990. https://doi.org/10.3390/ijerph17144965

Abstract

Men are less likely to seek help for mental health difficulties and this process is often used to help explain the disproportionally higher suicide rates compared to women. Furthermore, university students are often regarded as a vulnerable population group with a lower propensity to seek help. Thus, male students are a very high-risk group that is even more reluctant to seek help for mental health difficulties, placing them at high risk of suicide. Often, student mental health problems are highlighted in the media, but very few evidence-based solutions specifically designed for male students exist. The current paper seeks to provide a comprehensive framework about how to better design mental health interventions that seek to improve male students' willingness to access psychological support. The Medical Research Council's (MRC's) framework for developing a complex intervention was used to develop an intervention relevant to male students. In this paper, previous help-seeking interventions and their evaluation methods are first described, secondly, a theoretical framework outlining the important factors male students face when accessing support, and thirdly, how these factors can be mapped onto a model of behaviour change to inform the development of an evidence-based intervention are discussed. Finally, an example intervention with specific functions and behaviour change techniques is provided to demonstrate how this framework can be implemented and evaluated. It is hoped that this framework can be used to help reduce the disparity between male and female students seeking mental health support.

Introduction

In 2018, 33% of 18-year-olds enrolled into university education in the UK (UCAS, 2018). This period coincides with the peak onset age for various mental health conditions, such as schizophrenia, anxiety and depression (Kessler, et al., 2007; Jones, 2013). Anxiety and depression occur frequently in university students and are often caused or exacerbated by concerns relating to academic performance, pressure to succeed and post-graduation plans (Beiter, et al., 2015). This places students at a greater risk of experiencing psychological difficulties with suicidal thoughts and behaviours reported in just under a quarter (22%) of this population group (Mortier, et al., 2018). Although female students are more likely to be diagnosed with depression and anxiety and frequently report suicidal thoughts/behaviours (Mortier, et al., 2018; Macaskill, 2013; Evans, et al., 2018), 69% of suicides in 2015 were completed by male students (Thorley, 2017). For younger men aged between 15–29 years old, suicide is the second leading cause of death (Chang, Yip, & Chen, 2019; World Health Organization, 2018).

Explanations for this phenomenon are often associated with willingness to seek help for mental health difficulties. Young people aged 16-24 overall represent the least likely age group to receive mental health treatment (Mental Health Foundation, 2016). Additionally, male students are less likely to seek help compared to female students (Sheu & Sedkacek, 2004). Female students are significantly more likely to use mental health services than male students (OR = 1.54) (Eisenberg, Golberstein, & Gollust, 2007). This trend continues into later adulthood, whereby only 9% of men receive treatment for a mental health condition compared to 15% of women (Mental Health Foundation, 2016), with women remaining 1.58 times (95% CI 1.32 to 1.89) more likely to receive mental health treatment compared to men even after controlling for prevalence rates (McManus, et al., 2016). This helps explain why globally adult men are 2.35 more likely to take their own life compared to women (Chang, Yip, & Chen, 2019), or even up to 3.5 times more likely in high-income countries such as the UK (Chang, Yip, & Chen, 2019; World Health Organization, 2018). Therefore, reducing help-seeking barriers for male students and engaging them with mental health initiatives can not only improve health outcomes whilst at university but can also have a preventative function and lead to more positive help-seeking behaviours in adulthood.

Although both male and female students face a range of barriers to seeking psychological support (Gulliver, Griffiths, & Christensen, 2010; Nam, Choi, Lee, Kim, & Lee, 2013), lower rates of help-seeking observed in men are often attributed to traditional stereotypes of masculinity including, stoicism, self-reliance, and restrictive emotionality (Addis & Mahalik, 2003; Davies, et al., 2000). For instance, male students may view seeking support and expressing one's emotions as a sign of weakness, whilst it is deemed acceptable for female students to express and articulate themselves emotionally (Seamark & Gabriel, 2018). Moreover, male students prefer to limit emotional disclosure and deny weakness as a way to preserve their autonomy and stoicism (Tang, et al., 2014). Due to poor help-seeking in male university students and their increased risk of suicide, universities are faced with increasing pressure to implement mental health initiatives, which may mean they are not necessarily evidence based or gender appropriate (Barkham, et al., 2019). Only a handful of evidence-based interventions targeting help-seeking for men have been evaluated (Sagar-Ouriaghli, et al., 2019), with even fewer targeted specifically towards male university students (Rochlen, McKelley, & Pituch, 2006; Syzdek, et al., 2016). When such strategies are published, the intervention development process is not reported. It is essential for the intervention development process to be reported as this can enhance our theoretical and practical understanding about developing mental health interventions for male students (Duncan, et al., 2020). In response to this, the current paper seeks to develop the first framework for developing and designing mental health interventions for male students that is grounded in evidence-based practice.

Medical Research Council (MRC) Framework

To develop an intervention targeting help-seeking behaviours in male students, the MRC's framework for developing a complex intervention was adhered to (Craig, et al., 2008; O'Cathain, et al., 2019). The MRC framework has four key stages, consisting of development, feasibility and piloting, evaluation, and implementation (Figure 4.1) (Craig, et al., 2008). As of 2019, this framework was updated, with additional action points being added for the development stage of the original framework (O'Cathain, et al., 2019). Although these action points need to be considered when developing an intervention, not all of the actions can be addressed nor are relevant to every problem or context (O'Cathain, et al., 2019).

Furthermore, the updated MRC guidelines for developing a complex intervention advises that an approach to intervention development is decided upon first. This paper will discuss the development of an intervention using a published approach grounded in theory and evidence base by combining published research evidence and existing theories (O'Cathain, et al., 2019). The MRC framework for developing and evaluating complex interventions will be used with the Behaviour Change Wheel to develop a framework for new interventions that addresses help-seeking in male students. It is anticipated that this framework will create a starting point for future interventions, which can be refined as the current evidence base is enriched. Furthermore, specific detail in accordance with the Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) checklist has been included (Appendix 4.2) to further enrich the quality of evidence that is reported within the current paper (Duncan, et al., 2020).

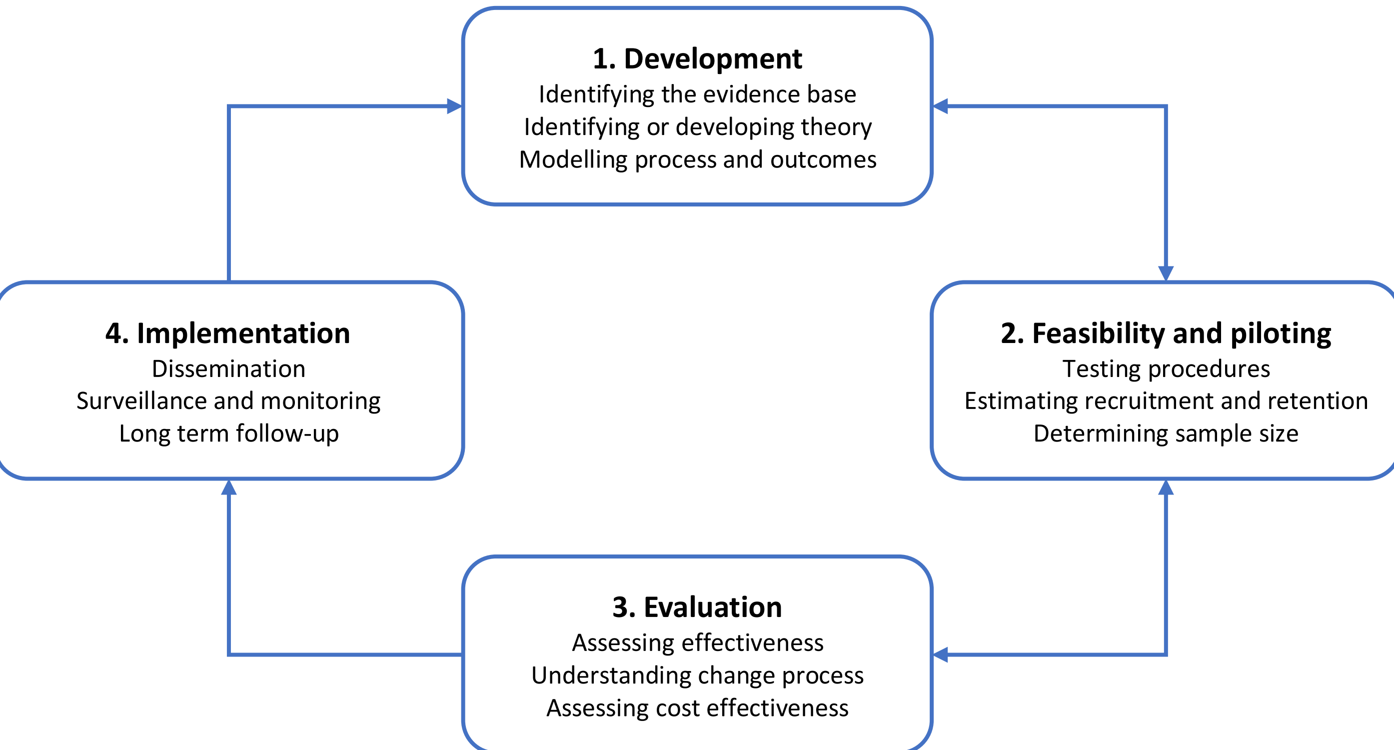


Figure 4.1. Medical Research Council's (MRC's) four key stages for developing and evaluating an intervention (Craig, et al., 2008).

MRC Development: Identifying the Evidence Base

The first stage to consider when developing a complex intervention is to summarise what is already known about similar interventions and the methods that have been used to evaluate them (Craig, et al., 2008; O'Cathain, et al., 2019). The MRC framework stresses that if a recent systematic review of similar interventions is not available then a high-quality systematic review should be conducted and updated (Craig, et al., 2008). At the time, there was only one systematic review that summarised six interventions targeting help-seeking for depression, anxiety, and general psychological distress for both males and females across multiple age groups (Gulliver, Griffiths, & Christensen, 2012). Of these, three were delivered to university students with a total sample size of 547 (32% male). These interventions included information targeting mental health literacy, content to reduce mental health stigma, service information, and a supportive interview centred around consulting a sports psychologist (Han, Chen, Hwang, & Wei, 2006; Sharp, et al., 2006; Donohue, et al., 2004). Despite these interventions targeting help-seeking in students, they were not investigating male students specifically. This information is essential for the development of an appropriate intervention for male students as they hold more negative attitudes than female students and are less likely to engage with mental health services (Nam, et al., 2013).

In response to this, a systematic review investigating help-seeking interventions specifically in males was conducted (Sagar-Ouriaghli et al., 2019). This systematic review identified nine interventions targeting mental health help-seeking in men of different age groups, two of which were delivered to male students (Rochlen, McKelley, & Pituch, 2006; Syzdek, et al., 2016). Despite these interventions leading to positive changes in help-seeking, theoretical frameworks leading to their development had not been outlined. This presents difficulties for replication, as well as challenges in identifying what techniques have been key to positive changes (Duncan, et al., 2020; Hoffman, et al., 2014).

As the systematic review conducted by Sagar-Ouriaghli et al. (2019) consisted of nine interventions with heterogenous clinical populations and dissimilar designs, a meta-analysis could not be conducted (Higgins & Green, 2005). To provide a coherent summary, a novel method that identified the Behavioural Change Techniques (BCTs) was used (Michie, et al., 2013). BCTs characterise the smallest identifiable "active ingredients" embedded within an intervention designed to change the desired behaviour (Michie, et al., 2013). Thus, the key

elements that are likely to contribute to improvements in help-seeking behaviours were extracted from these nine interventions (Sagar-Ouriaghli, et al., 2019). Sagar-Ouriaghli et al. (2019) identified 18 BCTs (e.g., credible source, feedback on behaviour and problem solving), which were synthesised into seven broader, more clinically relevant, psychological processes that are likely to contribute to changes in help-seeking for men of different age groups (Appendix 4.3). These seven key processes include: the use of role models (e.g., celebrities and other men) to convey information, psycho-educational materials to improve mental health knowledge, assisting men to recognise and manage their symptoms, adopting active problem solving and/or solution focused tasks, motivating behaviour change, sign-posting mental health services, and finally, including content to build on positive masculine traits (e.g., responsibility and strength).

The identification of these seven processes captured from the nine interventions included the two interventions that target help-seeking behaviours in male-students (Rochlen, McKelley, & Pituch, 2006; Syzdek, et al., 2016). Furthermore, the three interventions targeting help-seeking behaviours in both male and female students identified by Gulliver et al. (2012) confirm the seven key processes identified through the BCTs (Appendix 4.3). In sum, the previous systematic reviews by Sagar-Ouriaghli et al., (2019) and Gulliver et al. (2012) have captured key processes or elements within interventions that are likely to improve mental health help-seeking for male students.

Identifying Evaluation Methods

In addition to identifying previous interventions, The MRC framework emphasises the importance of identifying the methods that have been used to evaluate them (Craig, et al., 2008; O'Cathain, et al., 2019). Across the 12 interventions outlined above, ten help-seeking measures were utilised. Of these measures, the Attitudes Towards Seeking Professional Psychological Help scale-short form (ATSPPH-SF) (Fischer & Farina, 1995), was the most commonly used instrument to measure help-seeking, which was used to evaluate four interventions (Sharp, et al., 2006; Rochlen, Blazina, & Raghunathan, 2002; Hammer & Vogel, 2010; Syzdek, et al., 2014).

The initial ATSPPH-long form (ATSPPH-LF) has been validated in 960 students (49% male) demonstrating good internal consistency ($\alpha = 0.86$) and test–retest reliability (0.82)

(Fischer & Turner, 1970). The ATSPPH-SF contains ten items taken from the ATSPPH-LF and has demonstrated moderate internal consistency (α = 0.77–0.84), good test-retest reliability (0.80) for university students, and correlates well with the original scale (*r* = 0.87) (Fischer & Farina, 1995; Elahi, Schweinle, & Anderson, 2008). Higher ATSPPH-SF scores (i.e., more favourable attitudes to help-seeking) and recent mental healthcare use share a significant positive relationship, suggesting that the scale may predict whether someone will access future treatment (Elahi, Schweinle, & Anderson, 2008). Overall, the ATSPPH-SF is an appropriate scale to measure help-seeking attitudes in a male-student population.

In conjunction with help-seeking attitudes, it is also important to capture changes to behavioural or actual help-seeking, such as presenting to a service or reaching out to someone for support. From previous work identified, three studies measured behavioural help-seeking with a psychometric instrument using the Help-Seeking Behaviour Scale (HSBS) or the General Help-Seeking Questionnaire (GHSQ) (Syzdek, et al., 2016; Syzdek, et al., 2014). Of these, only the GHSQ has been validated, making it the preferred and more psychometrically robust instrument to use (Wilson, Deane, Ciarrochi, & Rickwood, 2005). The GHSQ is a 24-item scale that assesses future help-seeking intentions/attitudes as well as recent and past help-seeking experiences (Rickwood, et al., 2005). The GHSQ has been validated in 218 students aged 12–19 years old (51% male), whilst demonstrating good internal consistency (α = 0.70–0.85) and test–retest reliability over a three-week period (0.86–0.92) (Wilson, et al., 2005). The last ten items of the GHSQ assess recent help-seeking behaviours in the past 2 weeks and is referred to as the Actual Help-Seeking Questionnaire (AHSQ) (Rickwood & Thomas, 2012; Rickwood & Braithwaite, 1994). Overall, two evaluation methods demonstrating good psychometric properties have been identified. Future mental health help-seeking interventions for male students should seek to measure changes to help-seeking attitudes (ATSPPH-SF) and help-seeking behaviours (AHSQ).

MRC Development: Identifying or Developing Theory

Following the identification of previous interventions and evaluation methods, the MRC framework stresses the importance of identifying or drawing upon theory to help identify what is important, relevant, and feasible for an intervention (Craig, et al., 2008; O'Cathain, et

al., 2019). To achieve this, the "access to care model" (Gask, et al., 2012) shall be discussed in the context of barriers male students face when engaging with mental health services.

Access to Care Model

The access to care model of Gask et al., (2012) is a theoretical model outlining how people with common mental health problems (i.e., anxiety and depression) engage with services and is best described within the development stage of the MRC's framework for developing a complex intervention. The model draws heavily upon an interpretive synthesis of literature summarising healthcare access by vulnerable groups and identifies six key issues with "candidacy" at its core (Figure 4.2) (Dixon-Woods, et al., 2006).

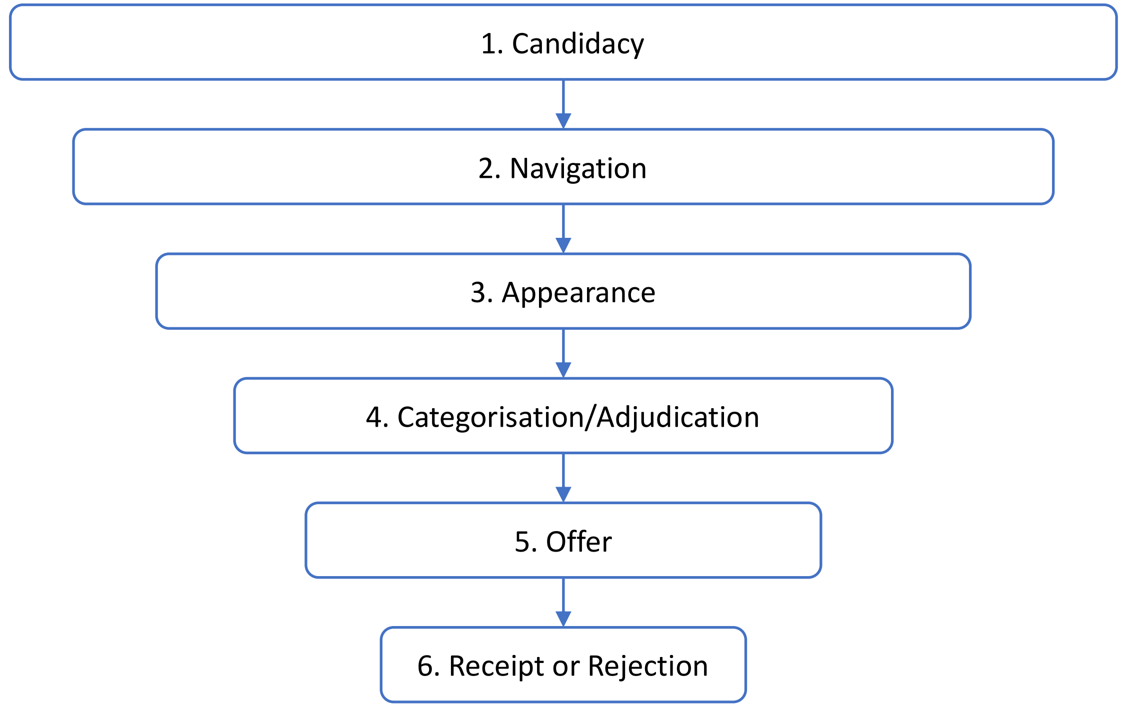


Figure 4.2. Access to care model.

Candidacy

Candidacy is a dynamic and constantly evolving construct to describe how people's eligibility for medical intervention is negotiated between themselves and health professionals (Dixon-Woods, et al., 2006). Candidacy is focused with one's role and personal identity, whereby service engagement will occur if it remains congruent with their identity, or that help-seeking will not threaten their competence to fulfil social roles (Gask, et al., 2012).

In the context of male help-seeking, engaging with mental health services can threaten one's masculinity, impacting both their personal identity and social role(s). Masculine stereotypes are centred around stoicism, emotional control, power, success, and independence (Addis & Mahalik, 2003). Help-seeking may not align with these stereotypes, as men must control their emotions, be self-sufficient, and endure pain (O'Brein, Hunt, & Hart, 2005). Seeking help is seen as a loss of control and independence, whilst demonstrating weakness and vulnerability for not being able to cope with emotional distress (O'Brein, Hunt, & Hart, 2005; Yousaf, Grunfeld, & Hunter, 2015). Indeed, male students who demonstrate

higher conformity to masculine norms have greater negative attitudes towards help-seeking (Seidler, et al., 2016; Ramaeker & Petrie, 2019; Vogel, et al., 2011; Wimer & Levant, 2011).

Deviation from these masculine stereotypes can be perceived as non-normative and thus elicit self-stigmatising beliefs or negative perceptions from the wider public (Primack, et al., 2010). Male students are more likely to report higher public and self-stigma of mental health compared to female students and are thus less likely to use mental health services (Wu, et al., 2017; Levant, Kamaradova, & Prasko, 2014). Although both public- and self-stigma may impact help-seeking, self-stigma is likely to be a stronger predictor than public stigma (Wu, et al., 2017; Topkaya, 2014; Clement, et al., 2015). Indeed, self-stigma has been shown to mediate the relationship between conformity to masculine norms and help-seeking amongst male students (Vogel, et al.,, 2011; Levant, et al., 2013; Shepherd & Rickard, 2012). This factor explains why male role models contribute to positive changes in help-seeking as they can assist at an early stage of the help-seeking process with re-aligning mental health help-seeking to be congruent with masculine stereotypes and reduce mental health stigma (Sagar-Ouriaghli, et al., 2019; Ferrari, 2016; Mann & Himelein, 2008).

Navigation

If help-seeking is not perceived to threaten one's identity and social role, the individual will then seek to gain entry to a mental health service, referred to as "navigation" (Gask, et al., 2012). At this stage, the individual needs to rely on their sense of self-efficacy and their mental health literacy to determine their current needs and approach an appropriate service.

Male students may struggle at this stage, particularly for mental health, as they are required to identify services organised around professional psychiatric and psychological models. This can be a particular issue as men have greater difficulty at identifying mental health symptoms compared to women (Swami, 2014; Cotton, et al., 2006; Reavley, McCann, & Jorm, 2012). Difficulties in identifying mental health symptoms can be explained by poorer mental health literacy, perceiving symptoms as minor or insignificant, or difficulty in associating atypical symptoms with more conventional definitions (Yousaf, Grunfeld, & Hunter, 2015). Men may be more irritable, violent, and more inclined to engage in substance abuse, which are often regarded as male depressive symptoms (Seidler, et al., 2016; Martin, Neighbors, & Griffith, 2013). Moreover, tolerating a high degree of distress is considered

manly and one must only seek help when the problem is serious (O'Brein, Hunt, & Hart, 2005). Indeed, by definition, conformity to masculine gender roles raises the threshold for when one can express distress, but can also result in denial, undervaluation and failure to identify symptoms that indicate the need for support (Möller-Leimkühler, 2002).

Men also experience higher levels of fear and embarrassment associated with the use of services (Yousaf, Grunfeld, & Hunter, 2015). This arises from the unfamiliarity of healthcare services, the perception of positioning themselves in a vulnerable situation, and being perceived as weak (Yousaf, Grunfeld, & Hunter, 2015). Sign-posting services sensitively is therefore an important technique to include in future interventions as male students need more information regarding mental health services and who they can contact (Sagar-Ouriaghli, et al., 2019; Yousaf, Grunfeld, & Hunter, 2015).

Appearance

The next step of "appearance" requires men being able to identify presenting symptoms through adequate mental health literacy and to identify an appropriate service. Presenting to a service is often left to be the responsibility of the patient, whereby they must initiate contact via their GP or self-referring to a relevant mental health service such as IAPT. Another method includes "invitations", where the patient responds to an invite from a particular service. Similarly, "grabs" remove the component of candidacy by taking away the patient's control. An example of this includes compulsory mental health screenings done in the workplace or during other physical health appointments.

Despite these avenues, male students may experience fewer opportunities at this stage. Compared to women, men consult medical professionals less often across all age groups (Wang, Hunt, Nazareth, Freemantle, & Petersen, 2013), with the largest discrepancy occurring in men aged between 21–39 (OR = 0.40). This is often attributed to higher reproductive health appointments seen in women (Wang, et al., 2013). However, this pattern is still found in men under 21 (i.e., students) (OR = 0.77) and for health check-ups not related to reproductive health (e.g., blood pressure) (Wang, et al., 2013; Deeks, Lombard, Michelmore, & Teede, 2009). Consequently, this reduces the opportunity to detect symptoms relating to mental health and facilitate the help-seeking process. To combat this, male friendly services, extended opening hours, and mental health workplace/university programmes may

assist with encouraging male students to present to services or provide an increased opportunity for “invitations” and “grabs” (Oliffe & Han, 2014; Monaem, et al., 2007).

Categorisation/Adjudication and Offer

Categorisation/adjudication is the next stage whereby a professional judgement is made that either confirms the patient’s illness or confirms their suitability to be offered an appropriate intervention.

Male students may present with atypical symptoms and have difficulties with understanding how these relate to psychological models of poor mental health. This may obscure detection from mental health professionals and diagnostic measures. Moreover, certain symptoms such as aggression and substance abuse may prevent confirmation of distress and brand male students as unsuitable for treatment (Cochran & Rabinowitz, 2003; Vogel, Epting, & Wester, 2003). Additionally, clinicians may hold their own gender biases further inhibiting male students from receiving an offer for mental health treatment (Mahalik, et al.,, 2012). Biases may include, perceiving men as feminine for expressing themselves (Seymour-Smith, Wetherell, & Phoenix, 2002), overlooking men’s emotions, and shaming them for expressing vulnerability by over-stressing independence (Mahalik, et al., 2012).

These factors all reduce the chances of male students receiving an offer of help and exacerbate the gender differences seen in mental health help-seeking. However, if they are deemed appropriate for treatment an offer will be made, moving them into the final stage of the access to care model.

Receipt or Rejection

Receiving an offer for treatment does not guarantee the student will engage as the offer may be rejected. This can be a significant obstacle for men. Only 36% of referrals made to IAPT in 2018 were male, with 36% of 18–35-year old’s declining the referral and disengaging from treatment (Baker, 2018a). For all ages below 65 years, men were less likely to enter, and complete treatment compared to women (Baker, 2018a).

Furthermore, there is evidence highlighting differences in treatment preferences for both men and women (Liddon, Kingerlee, & Barry, 2018). Women tend to prefer psychotherapy and counselling more than men, whereas men have a greater preference for

support groups and occupational support (Liddon, Kingerlee, & Barry, 2018; Liddon, et al., 2019). Similarly, men demonstrate higher levels of engagement towards gender-sensitive and proactive (i.e., solution focused) therapies (Liddon, et al., 2019; Patrick & Robertson, 2016).

As men have a tendency to delay help-seeking until the severity of symptoms become unmanageable (O'Brein, Hunt, & Hart, 2005; Rice, et al., 2017a), a stepped care approach that delivers the least intensive treatment first may be ineffective for men (Reinhardt, et al., 2008; Walker, et al., 2000). Thus, men with severe symptoms may be offered treatment that is not intensive enough for their current symptoms. These factors all have a part to play in the decision male students make when accepting or rejecting a mental health service/treatment offer.

Other Considerations

Alongside the access to care model, other factors may also be important. Aspects of the male archetype can be positive when facing emotional adversity (Seager & Barry, 2019b). Ideals of regaining control via information and relying on one's owns resources can be helpful strategies for men with mental health difficulties (Krumm, et al., 2017). Englar-Carlson and Kiselica's (2013) positive psychology/positive masculinity model (PPPM) highlights the strengths associated with masculine stereotypes and that men do and will engage with services if male specific issues and approaches are considered (Englar-Carlson & Kiselica, 2013; Kiselica & Englar-Carlson, 2010). Positive masculinity could therefore be used to develop more male student-friendly services (Liddon, et al., 2019).

Some strategies for improving engagement have been reviewed (Seidler, et al., 2018) and recommendations made by clinicians. These include, clarifying treatment structure, adopting goal-focused or action-oriented approaches, forming collaborative relationships and tailoring language accordingly (Seidler, et al., 2018). Outlining the treatment structure can help to overcome men's ambivalence, fear, or embarrassment towards help-seeking whilst mitigating client mistrust, suspicion, or fear of dependency within the therapeutic relationship (Seidler, et al., 2018). Clinicians who self-disclose, use person-centred approaches, and focus on strengths can also reduce the client–clinician gap. This assists with building strong therapeutic alliances that are more collaborative, allowing for greater trust and honesty later on. Furthermore, goal-focused or action-oriented approaches can help

maintain men's motivation and engagement with treatment (Seidler, et al., 2018). Similarly, using lay language such as swearing and the appropriate use of humour can assist with forming a collaborative and equal therapeutic relationship (Liddon, et al., 2019; Erentzen, Quinlan, & Mar, 2018).

Finally, when examining help-seeking facilitators within a student population, positive past experiences, social support or positive encouragement from others, confidentiality and trust in services, positive relationships with services, good mental health literacy, perceiving the problem as serious, and emotional competence have been identified as key factors that encourage students to seek psychological support (Gulliver, Griffiths, & Christensen, 2010; Rickwood, et al., 2005; Gulliver, Griffiths, & Christensen, 2012; Disabato, et al., 2018).

MRC Development: Modelling Process and Outcomes

The third step in the development stage of developing a complex intervention in accordance with the MRC's framework is modelling process and outcomes (Craig, et al., 2008). Modelling seeks to conduct preliminary testing of an intervention to understand the context in which the intervention will operate and be implemented (O'Cathain, et al., 2019; Rowlands, Sims, & Kerry, 2005). As a result, a more practical and appropriate intervention can be designed. To understand the context of a male student mental health help-seeking intervention, a series of focus groups were conducted (Sagar-Ouriaghli, et al., 2020a).

Modelling Process and Outcomes: Focus Groups

The focus groups sought to identify key features of the context that can be incorporated into mental health initiatives to help encourage male students to seek help for mental health difficulties (Sagar-Ouriaghli, et al., 2020a). Three focus groups with 24 male students (mean age of 21.89 years) from a UK London University were asked questions exploring the barriers to seeking help, what would encourage help-seeking, how an intervention should be designed, and how to publicise this intervention to male students. The results from the focus group revealed five themes that male students considered important when designing male-friendly interventions that addressed mental health help-seeking (Sagar-Ouriaghli, et al., 2020a). These themes were: (1) protecting male vulnerability, (2) provide a masculine narrative of help-seeking, (3) preferred intervention formats regarding formality and length

(where participants differed), (4) difficulty knowing when and how to seek help, and (5) strategies to sensitively engage male students (Figure 4.3).

These findings support much of the evidence relating to the influence of masculinity on help-seeking, low mental health literacy, and the need for information about services. Additionally, these focus groups captured more nuanced practical findings that have not been mentioned within the wider literature. This included discrepancies over the formality and duration of interventions and appropriate ways of promoting mental health initiatives to male students.

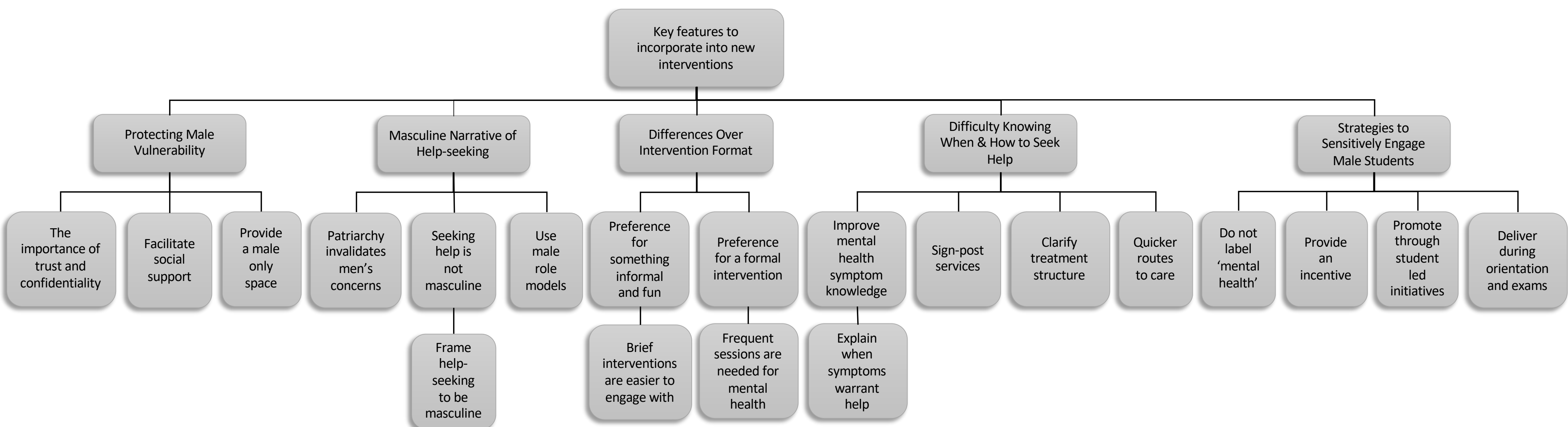


Figure 4.3. Overview of themes and sub-themes identified from focus groups (Sagar-Ouriaghli, et al., 2020a).

While both the formality and duration of an intervention are important factors to consider when designing interventions, it was clear that male students differed in their preference, with half stating that they would be more likely to engage in a formal intervention. This was due to the serious nature of mental health difficulties and would provide validation of men's mental health difficulties (Sagar-Ouriaghli, et al., 2020a). Equally, however, others stated that an informal intervention would be more acceptable. This may allow for greater use of lay language and humour when working with male students (Liddon, et al., 2019; Erentzen, Quinlan, & Mar, 2018). Similarly, an informal setting is more familiar to men when building relationships which can help create greater rapport and trust (American Psychological Association, 2018). Certainly, it would be worthwhile to compare the differences in uptake between formal and informal interventions.

There was also a lack of consensus regarding the duration of an intervention. Some students preferred a brief and short intervention (e.g., two sessions lasting up to 2 h each), whilst others requested something more frequent and long standing (Sagar-Ouriaghli, et al., 2020a). Traditionally, 6–12 weekly therapy sessions are considered the gold standard when treating depression and anxiety (The National Institute for Health and Care Excellence, 2019) but referral rates for men remain relatively low (NHS Digitial, 2016). Furthermore, not having enough time is often a key barrier for students wanting to access mental health care (Ryan, et al., 2017; Eisenberg, Speer, & Hunt, 2012). Considering these points, a brief intervention provides a more feasible and practical solution (i.e., less time needed) to facilitate help-seeking in male students that existing services fail to offer, possibly as a bridge into pre-existing services.

When engaging male students with mental health initiatives, focus group participants advised against using mental health labels and the term "well-being" (Sagar-Ouriaghli, et al., 2020a). This relates to the finding that men often reject the use of psychological support if it seeks to label emotional distress as a psychiatric illness within a diagnostic framework (River, 2018). Avoiding the use of mental health labels when promoting an intervention allows for a wider reach of male students who do not identify as having a mental health issue or who are experiencing difficulties that are not typically associated with psychological distress (Seidler, et al., 2016). This further reinforces the use of lay language when working with male students.

Advertising mental health initiatives through pre-existing student bodies was advised by the focus groups (Sagar-Ouriaghli, et al, 2020a). Indeed, male students are more likely to seek in-person mental health support when encouraged by a family member or partner, whilst peer encouragement has a greater influence after adolescence—coinciding with university enrolment (Rickwood, Mazzer, & Telford, 2015).

A third approach that may elicit higher levels of engagement would be to provide a more direct and immediate incentive. Here, male students perceive engaging with mental health support to be a "net-loss" regarding their masculine identity, time, and other priorities (e.g., university work) (Sagar-Ouriaghli, et al., 2020a). By providing an immediate incentive, such as monetary incentive, fun social bonding, or academic support may help tip this cost–benefit analysis more favourably (Sagar-Ouriaghli, et al., 2020a). This facilitates better opportunity for "appearance" and "invitations" to mental health initiatives as discussed earlier within the Access to Care Model (Gask, et al., 2012).

A final nuanced point that male students unanimously agreed upon was that mental health initiatives should be delivered during the start of an academic year (also known as freshers) and during exam periods (Sagar-Ouriaghli, et al, 2020a). At the start of university, students have more time available to engage with mental health initiatives. Similarly, during exam times, mental health support may be perceived as having a more direct benefit due to exam-related stress (Sagar-Ouriaghli, et al., 2020a).

This paper has summarised previous systematic reviews of help-seeking interventions, theory that influences help-seeking in male students, and qualitative work exploring intervention development. Data from the previous interventions, qualitative work and clinical recommendations results in 17 factors that are seen to be very important in changing behaviours relating to help-seeking in male students (Table 4.1). Additionally, five tools which may assist with changing or improving some of these factors have been discussed. These include the use of role models, sign-posting services, better availability of services, positive masculinity, and the use of humour and lay language.

Table 4.1. Summary of 17 factors influencing male students help-seeking for psychological support from various sources.

Factors Influencing Help-Seeking	Factors Targeted in Previous Interventions: Systematic Reviews (MRC 1.1)	Theory Relating to Men's Help-Seeking: Access to Care Model (MRC 1.2)	Modelling Process and Outcomes: Focus Groups (MRC 1.3)
Help-seeking is not masculine	X	X	X
Public-stigma of help-seeking	X	X	X
Self-stigma of help-seeking	X	X	X
Difficulty identifying mental health symptoms	X	X	X
Unsure of treatment structure	X	X	X
Unfamiliarity with mental health services	X	X	X
Social support, support groups and occupational support	X	X	X
Current relationship with service provider (e.g., trust)		X	X
Symptom severity (i.e., delay until symptoms are unmanageable)		X	X
Preference for proactive therapies	X	X	
Availability of services (e.g., extended opening hours, during exams and freshers)		X	X
Ability to expressing emotions/emotional competence		X	
Structure of the intervention (i.e., formality and duration)			X
Past experience of help-seeking and current help-seeking attitudes		X	
Fear and embarrassment of using mental health services (treatment stigma)		X	
Treatment is too time consuming			X
Clinician difficulty in detecting male symptoms		X	
Clinician biases towards men with mental health difficulties		X	

Modelling Process and Outcomes: The COM-B Model of Behaviour

Following the identification of these factors, it is important that they are implemented and operationalised appropriately. To do so, the Capability, Opportunity, and Motivation model of Behaviour (COM-B) was selected as it has predictive validity on the delivery of behaviour change interventions (Michie, Van Stralen, & West, 2011; Keyworth, Epton, Goldthorpe, Calam, & Armitage, 2020). The COM-B model is a behaviour system that draws on the interaction between capability, opportunity, and motivation to generate a behaviour, in this case help-seeking (Michie, Van Stralen, & West, 2011). Capability refers to the individual's psychological and physical capacity to engage in the behaviour and is dependent on their knowledge and skills. Motivation encapsulates all brain processes that energise and direct behaviour, further divided into reflective motivation (i.e., conscious evaluation and planning) and automatic motivation (i.e., emotions or impulses that arise from associative learning and/or innate dispositions). Lastly, opportunity includes factors that lie outside the individual that facilitate the behaviour or prompt it, containing both physical and social factors (Michie, Van Stralen, & West, 2011) (Figure 4.4). All of these six domains are strong predictors of the practical delivery of health care professional practice (Keyworth, et al., 2020).

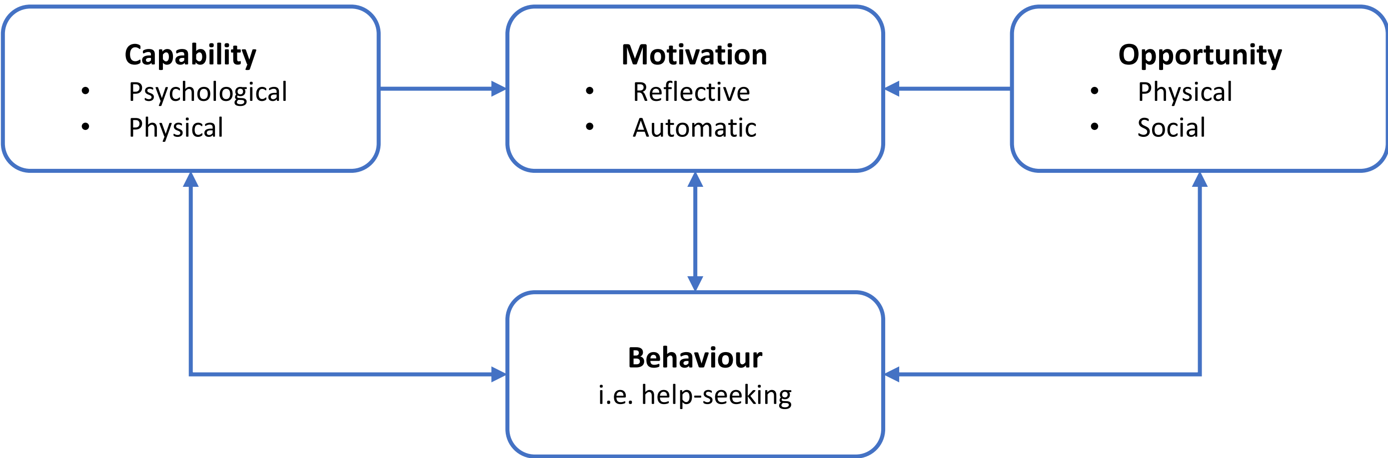


Figure 4.4. Capability, Opportunity, and Motivation model of Behaviour (COM-B) System.

This behavioural system can then be linked to wider intervention functions and policy categories to help assist with developing appropriate interventions (Michie, Van Stralen, & West, 2011; Barker, Atkins, & de Lusignan, 2016). This behaviour change system can be depicted by three layers within the 'Behaviour Change Wheel' (BCW) with sources

of behaviour (i.e., COM-B domains) at its core, surrounded by intervention functions and lastly policy categories. Similar to the COM-B model, the layers within this system are not linear and each layer component may interact with one another. By using the COM-B model and BCW, it was possible to map the 17 factors that influence help-seeking (Table 4.1) according to capability, motivation, and opportunity (Table 4.2). Mapping these factors to their respective domains was completed by two authors (ISO and SG) in an independent parallel fashion before discussing discrepancies to reach 100% consensus.

Table 4.2. Mapping of help-seeking factors to COM-B system of behaviour.

Capability: **The individual's capacity to engage in the behaviour**	**Opportunity:** **All factors lying outside the individual that make performance of the behaviour possible or prompt it**	**Motivation:** **All brain process that energise the direct behaviour**
Psychological	**Physical**	**Reflective**
Difficulty identifying mental health symptoms	Availability of services	Help-seeking is not masculine
Ability to express emotions/emotional competence	Structure of the intervention	Self-stigma of help-seeking
Unsure of treatment structure	Preference for proactive therapies (availability)	Past experience of help-seeking
Unfamiliarity with mental health services	Treatment is too time consuming	Current help-seeking attitudes
Symptom severity (increases awareness)		Treatment stigma
		Symptom severity (evaluation of symptoms)
		Treatment is too time consuming (perception)
		Preference for proactive therapies (evaluation)
Physical	**Social**	**Automatic**
	Public stigma of help-seeking	
	Social support	
	Relationship with service provider	
	Clinician difficulty in detecting symptoms	
	Clinician biases	

Mapping help-seeking factors to the COM-B model provides greater guidance and clarity as to how to improve help-seeking in male students via the intervention function as indicated by the BCW (Michie, Atkins, & West, 2014). Firstly, intervention functions that address psychological capability should be focused around education, training, or the enablement of male students to improve their knowledge and awareness of mental health symptoms and services (Michie, Atkins, & West, 2014). Secondly, physical opportunity highlights the disparity between male-student needs and the design of pre-existing mental health services. Therefore, intervention functions should include training, restriction, environmental restructuring, and better enablement of mental health services to make them more accommodating for male students (Michie, Atkins, & West, 2014). This may include adjusting the availability of services through workplace/academic programmes, extended opening hours (Oliffe & Han, 2014; Monaem, et al., 2007), or by re-structuring therapeutic environments that are shorter and more conducive to building trust and good patient–clinician relationships. Thirdly, reflective motivation appears rooted in male students' ambivalence toward seeking help. Intervention functions should include education, persuasion, incentivisation, or coercion to elicit more positive evaluations of using psychological support (Michie, Atkins, & West, 2014). Finally, social opportunity highlights a wider, more systemic issue regarding notions of masculinity, public stigma and the clinician's role within therapy. Intervention functions should be rooted in restriction, environmental restricting, modelling, and enablement (Michie, Atkins, & West, 2014). Similarly, the training of clinicians may help to reduce clinician bias (Mahalik, et al., 2012; Seymour-Smith, Wetherell, & Phoenix, 2002). Furthermore, some of these factors may overlap across multiple domains within the COM-B model. Greater severity of symptoms may increase one's awareness of their mental state (psychological capability) or may provide a better opportunity for evaluation and planning (reflective motivation). Both the factors of treatment being too time consuming and the preference for proactive therapies can be a perception/evaluation of existing treatments (reflective motivation) or a physical barrier that does not accommodate men's needs without offering an alternative choice (physical opportunity). Lastly, not all intervention functions should be implemented, and should be chosen based on their affordability, practicability, effectiveness/cost-effectiveness, acceptability, side-effects/safety, and equity—otherwise known as the APEASE criteria (Michie, Atkins, & West, 2014).

Once an intervention's functions have been decided upon, the next step requires the identification of the intervention's content regarding specific techniques that can be operationalised and incorporated into an intervention. This is an iterative process that involves identifying a range of specific techniques from the Behavioural Change Techniques Taxonomy (BCTTv1) (Michie, et al., 2013) that could be considered for any particular function (Michie, Atkins, & West, 2014). Once all potential BCT's have been identified, the APEASE criteria is used once more to determine which specific techniques or tools are most appropriate. Additionally, BCTs that have been frequently used before in similar interventions may also aid in this decision (Michie, Atkins, & West, 2014; Sagar-Ouriaghli, et al., 2019).

MRC Feasibility and Piloting

Once all intervention functions, policy categories, and BCTs have been selected, it is possible to then draft an intervention that targets the desired behaviour change, in this case help-seeking. In turn, this enables the newly developed intervention to be evaluated and piloted accordingly. For the purpose of this report, an example intervention is provided that draws upon nine factors that influence male-student help-seeking behaviours for mental health (Table 4.3). Indeed, this example only selects nine of the important factors in order to improve help-seeking attitudes as it is not yet clear which factors have a stronger influence on help-seeking than others. This example has been constructed through the use of the COM-B model, BCW, and specific BCTs to finalise a potential intervention.

Table 4.3. Example intervention for male students to improve mental health help-seeking, including Behavioural Change Techniques (BCTs).

Factor	COM-B Domain	Intervention Function	BCTs	Intervention Component
Difficulty identifying mental health symptoms	Psychological Capability	Education	2.2. Feedback on behaviour 5.1. Information about health consequences 5.3. Information about social and environmental consequences 5.6. Information about emotional consequences	Incorporate educational content that provides information about common mental health symptoms, their presentation, consequences of not seeking help, and use screening tools to assist students with self-identifying any current symptoms. This educational content can be delivered through a range of methods such as face-to-face classes, presentations, videos or educational leaflets.
Unsure of treatment structure	Psychological Capability	Education	5.1. Information about health consequences 5.6. Information about emotional consequences	Provide information about how service referrals and assessments operate. This may include information pertaining to waiting lists and where the referral takes place. Outline the treatment structure such as the number of sessions, how long appointments last for, and the types of confidentiality across services. Information can be delivered through a range of methods including face-to-face classes, presentations, videos or educational leaflets.
Unfamiliar with mental health services	Psychological Capability	Education	3.1. Social support (unspecified) 3.2. Social support (practical)	Explain and sign-post different mental health services and support options. This includes the names of different services, the types of support they would receive and the geographical location of such support. Information can be delivered through a range of methods including face-to-face classes, presentations, videos or educational leaflets.
Social support	Social Opportunity	Environmental Restructuring	3.1. Social support (unspecified)	Advise students to talk to friends and family about their mental health or provide environments that are conducive to forming social relationships. Advice can be delivered though presentations, posters, videos or educational leaflets.
Preference for proactive therapies	Psychological Capability or Reflective Motivation	Environmental Restructuring	1.2. Problem solving 1.4. Action planning 11.2. Reduce negative emotions	Incorporated self-management strategies such as relaxation, time management, problem solving, and action planning to resolve mental health difficulties. Such strategies can be delivered in face-to-face class sessions

				or group settings. Referral to (online) self-help materials or video resources may also be suitable.
Help-seeking is not masculine	Reflective motivation	Modelling	6.2. Social comparison 9.1. Credible source 13.2. Framing/Re-framing	Use group settings to discuss how mental health can still be masculine (e.g., a sign of strength). Draw attention to male celebrities and male role models who have sought help and are successful. Alternatively, use posters, videos or leaflets to promote help-seeking as a masculine trait.
Self-stigma of seeking help	Reflective Motivation	Modelling	6.2. Social comparison 13.2. Framing/Re-framing	Reframe help-seeking to be positive and provide examples of others with mental health difficulties and how seeking help improved their well-being. Reframing can be achieved through group discussions, presentations, leaflets, posters or videos.
Treatment-stigma	Reflective Motivation	Persuasion	5.1. Information about health consequences 5.6. Information about emotional consequences	Outline the benefits of treatment and what can be achieved if engaged with. Draw particular attention to one's well-being, reduction of symptoms, and increased functioning. Information can be delivered through a range of methods including face-to-face classes, presentations, videos or educational leaflets.
Structure of the intervention	Physical Opportunity	Environmental Restructuring	NA	Create a male-only space for students to drop-in to as opposed to a formal intervention. Here, this drop-in space could be more attractive to male students and make the intervention less time consuming. Physical spaces that have a central theme (e.g., sports or arts and crafts) are likely to appeal to male students. However, online male spaces (e.g., gaming) may provide a similar opportunity.

Once an intervention has been designed, the acceptability and feasibility of the intervention should be evaluated. In this context, the MRC's framework highlights the importance of evaluating the acceptability, compliance, delivery of the intervention, recruitment, and retention (Craig, et al., 2008). Here, we emphasise the importance of measuring the recruitment and retention to mental health initiatives whilst also evaluating the acceptability of help-seeking interventions for male students.

When investigating the evaluation methods from previous help-seeking interventions, there is not a consistent measure of acceptability. Across the 12 help-seeking interventions outlined in the development stage of this paper, only the Mental Health Ad Effectiveness Scale (MHAES) and the Treatment Evaluation Inventory Short Form (TEI-SF) have been used in one study each (Rochlen, McKelley, & Pituch, 2006; Syzdek, et al., 2016). Despite both demonstrating good psychometric properties (Rochlen, Blazina, & Raghunathan, 2002; Kelley, Heffer, Gresham, & Elliot, 1989), the MHAES was designed to measure the effectiveness of brochures advertising mental health services (Rochlen, McKelley, & Pituch, 2006), whilst the TEI-SF evaluates parents' acceptance of interventions for behaviour problem children (Kelley, Heffer, Gresham, & Elliot, 1989). Subsequently, these are not suitable when evaluating mental health help-seeking interventions for male students.

To evaluate acceptability, the Theoretical Framework of Acceptability Questionnaire (TFAQ) was identified (Sekhon, Cartwright, & Francis, 2018). The TFAQ is a theory-informed questionnaire containing eight items evaluating the acceptability of healthcare interventions (Sekhon, Cartwright, & Francis, 2018). The eight items of the TFAQ capture eight distinct domains that relate to acceptability. These domains include general acceptability, affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness, and self-efficacy (Sekhon, Cartwright, & Francis, 2017). Moreover, the TFAQ can be used within all four stages of the MRC's framework for developing complex interventions and provides a more comprehensive definition of the term "acceptability", synthesised from 43 review articles, allowing for better operationalisation (Sekhon, Cartwright, & Francis, 2017). As the TFAQ provides a general framework, it is possible to tailor this measure towards help-seeking in male students (Appendix 4.4).

Once an intervention has been developed in accordance with this framework, it is recommended that the outcome measures of help-seeking attitudes and help-seeking behaviours are measured by the ATSPPH-SF and AHSQ, respectively. The final measure used

to evaluate the feasibility and acceptability of a newly developed intervention is to use the TFAQ and make adaptive changes where necessary. Furthermore, newly developed interventions should be reported in accordance with the Template for Intervention Description and Replication (TIDieR) checklist to aid with replication and the clarity of the final intervention (Sagar-Ouriaghli, et al., 2019; Hoffman, et al., 2014).

Strengths and Limitations

Here, the current paper provides an overview of the factors to embed within an intervention to improve mental health help-seeking for male students. The strengths of this paper are that it rigorously follows the MRC's framework for developing a complex intervention. This allows for a detailed description of future interventions, enabling better replication, evidence synthesis, and wider implementation for researchers and health care professionals working with male students (Craig, et al., 2008). Another strength is that this framework makes use of other tools to improve the systematic nature of the recommendations provided. Here, the use of the COM-B model of behaviour change, BCW, BCTTv1 and APEASE criteria has been discussed when designing gender-sensitive interventions for male students with the ultimate goal to enhance their effectiveness and replicability once published (Michie, et al., 2013; Michie, Van Stralen, & West, 2011; Michie, Atkins, & West, 2014). Similarly, the use of the GUIDED checklist is provided to further enhance the description of this framework and allow readers to understand key aspects when developing mental health interventions for male students (Duncan, et al., 2020).

Despite these strengths, this paper is not without limitations. Although the current paper addresses mental health help-seeking for male-students specifically, some of the rationale underpinning key features are drawn from the adult male literature to provide a more comprehensive synthesis. Subsequently, the recommendations may not directly transfer to male-students. Indeed, younger adults are significantly less likely to seek help and hold more negative help-seeking attitudes (Mackenzie, et al., 2008; Mackenzie, Gekoski, & Knox, 2006), whilst students are also faced with barriers that may differ from non-students and older adult males. In an attempt to provide a comprehensive overview, the current paper is unable to provide more specific recommendations for sub-groups of male students. For instance, sexual minority male students or male students from ethnic minority backgrounds face different barriers and it is likely that they will need more tailored interventions to

accommodate their needs and encourage help-seeking (Parent, et al., 2018; Kam, Mendoza, & Masuda, 2019; de la Cruz, et al., 2016; Baams, De Luca, & Brownson, 2018; Kim & Zane, 2016; Verissimo & Grella, 2018). Lastly, this framework is yet to be implemented when designing future male-student help-seeking interventions. Although this paper synthesises evidence-based work specifically for men and male students, it is unclear as to how transferable and applicable this will be to real-world scenarios. Indeed, it would be valuable to see how effective/ineffective this framework is for others developing mental health interventions for male students.

Conclusion

Previous work has consistently identified that the onset of mental health difficulties, such as anxiety and depression often coincide with when students begin or start further education at university (Kessler, et al., 2007; Jones, 2013). These mental health difficulties can be made worse from the pressures and expectations at university, contributing to a greater risk of suicide and protracted educational outcomes (Beiter, et al., 2015; Mortier, et al., 2018). Typically, students and young people, irrespective of gender, are reluctant to seek help for mental health difficulties due to a range of barriers (Mental Health Foundation, 2016; Gulliver, Griffiths, & Christensen, 2010; Nam, et al., 2013). However, male students remain more reluctant to seek help for mental health due to additional barriers, such as traditional stereotypes of masculinity (Sheu & Sedkacek, 2004; Eisenberg, Golberstein, & Gollust, 2007; Addis & Mahalik, 2003; Davies, et al., 2000). Due to male students being less likely to use mental health services and being at a higher risk of suicide than female students, universities are faced with an increased pressure to develop and implement effective initiatives for male students (Barkham, et al., 2019). Nonetheless, such initiatives that have been developed often fail to be grounded in evidence-based practice or tailored to the needs of male students. Where such approaches have been implemented, the development process is not outlined. This creates significant difficulty for other healthcare or education providers to replicate, develop, or refine effective mental health initiatives that are tailored towards male students.

The current paper therefore provides an in-depth framework on how to develop and design mental health interventions for male students in accordance with the MRC's framework for developing a complex intervention (Craig, et al., 2008). Indeed, this paper presents a series of recommendations that are grounded in evidence-based practice. Previous

gender-sensitive help-seeking interventions for men and male students and their active ingredients (i.e., BCT's) that are likely to elicit positive help-seeking attitudes or behaviours are first examined. Next, the identification of theory that is specific to male student's help-seeking behaviour is outlined through the use of Gask's access to care model (Gask, et al., 2012). By using previous published interventions and pre-existing theory further supplemented by qualitative findings from focus groups, 17 key factors that influence male students help-seeking for psychological support have been identified. These 17 factors allow for the operationalisation of key techniques that can be used to target help-seeking in male students. Through the use of the COM-B model of behaviour change, BCW, and BCTTv1, we have developed a framework for developing gender-sensitive interventions for male students that are likely to be effective and grounded in evidence-based practice. This paper also presents an example of an intervention that can be developed through the use of this framework to help inform future healthcare and education providers seeking to produce mental health interventions for male-students. It is hoped that this framework can be used to help reduce the gender disparity in those seeking mental health help can be reduced amongst a student population.

Chapter 5:

A Series of Gender-Sensitive Mental Health Pilot Interventions for University Male Students: targeting uptake, acceptability, help-seeking, and mental outcomes

Chapter Preface **146**
Abstract **147**
Introduction **148**
Method **150**
Design 150
Measures 150
Interventions 152
Intervention 1: Men-Tality 156
Intervention 2: Psychological Strength for Men 156
Intervention 3: Man Cave 157
Results **158**
Participants 158
Aim 1: To assess the overall acceptability for all three interventions. 161
Aim 2: To assess differences in acceptability scores between the interventions. 162
Aim 3: To examine the types of male students who engage with the interventions 163
Baseline Help-Seeking Attitudes 163
Baseline Self-Stigma 164
Baseline Conformity to Masculine Norms 164
Baseline Mental Health Status 165
Ethnicity, Previous Help-Seeking, Age, Level of Study, and Degree Faculty at Baseline 165
Aim 4: To assess the interventions effectiveness 167
Post-Effectiveness for Help-Seeking Attitudes & Behaviours 167
Post-Effectiveness for Mental Health Status 169
Discussion **169**
Strengths & Limitations **173**
Conclusion **175**

Chapter Preface

Chapter 4 has provided a detailed framework on how to design effective mental health help-seeking interventions to assist with help-promotion for male students. At the end of the chapter, an example intervention with specific functions and behaviour change techniques is provided to demonstrate how this framework can be implemented and evaluated.

This example intervention forms the basis and foundation for chapter 5. Whereby the example intervention that has been developed in chapter 4, through the use of this framework which incorporates the systematic review and focus groups results, will be tested and evaluated by male students themselves in chapter 5. At this stage, chapter 5 seeks to test the acceptability and outcomes of three gender-sensitive, theoretically informed, evidence-based interventions tailored specifically towards male students. As discussed at the beginning of this thesis, help-promotion and help-giving represent two distinct approaches when trying to support male students with mental health difficulties. Given that this PhD aligns more with help-promotion, changes to help-seeking attitudes and behaviours as opposed to clinical outcomes is the main area of interest when piloting the gender-sensitive help-seeking interventions. Nonetheless, face-to-face help-promoting interventions may also be perceived by male students to facilitate a positive therapeutic experience. Therefore, changes in clinical outcomes may be observed and are still of interest and so will be evaluated as secondary outcomes within this chapter.

Abstract

Up to a third of students experience a common mental health condition which is associated with decreased academic functioning and an increased risk of dropping out. While the prevalence of common mental health difficulties is lower amongst male students, worryingly, they are twice as likely to die by suicide. The importance of developing interventions that are gender-sensitive for male students to improve their uptake to mental health initiatives has been recently emphasised. However, effective and acceptable methods for male students are unexplored. The current study conducted three gender-sensitive pilot interventions for male students to evaluate acceptability (including uptake), changes to help-seeking and mental health status. Three gender-sensitive interventions were delivered to 24 male students. The interventions consisted of: Intervention 1 – a formal mental health intervention targeting male students ("psycho-educational model"), Intervention 2 - a second formal intervention that adopted more gender-sensitive language and promoted positive masculine traits ("positive masculinity model"), and Intervention 3 - an informal drop-in offering a social space for male students to receive general health information and connect with other students ("informal drop-in model"). These were evaluated for acceptability (including uptake) and outcomes. In terms of acceptability, Intervention 3 - the informal drop-in intervention appeared better at engaging male students who have greater conformity to maladaptive masculine traits, more negative attitudes to help-seeking, higher levels of self-stigma, who were less likely to have used mental health support before and were of an ethnic minority. No significant changes to help-seeking attitudes, behaviours, or mental health status were observed across the interventions. All interventions were deemed equally acceptable with minimal opportunity costs and perceived burden. These findings indicate differences in acceptability, particularly uptake, for male students who may be seen as more difficult to engage. Using informal strategies may help reach male students who would otherwise not engage with mental health support, familiarise them with help-seeking, and connect them with pre-existing mental health interventions. No differences in outcomes measured were found. More work needs to be carried out using informal interventions to engage male students.

Introduction

Mental health disorders are commonly reported amongst university students with prevalence rates ranging from 20% to 30% (Auerbach, et al., 2016; McManus & Gunnell, 2020; Bruffaerts, et al., 2018). Common mental health disorders such as depression and anxiety often contribute to greater drop-out rates and reduced academic functioning (Auerbach, et al., 2016; Bruffaerts, et al., 2018; Eisenberg, Golberstein, & Gollust, 2007; Hjorth, et al., 2016). Although depression and anxiety are typically reported to occur more frequently amongst female students (Liu, Stevens, Wong, Yasui, & Chen, 2019; McManus & Gunnell, 2020), male students are more than twice as likely to die by suicide (Gunnell, et al., 2020). Indeed, higher suicide rates amongst male students has been observed since 2000 (Gunnell, et al., 2020), and is consistent with older adults, where men are 2.35 times more likely to take their own life compared to women worldwide (Chang, Yip, & Chen, 2019).

Higher suicide rates in male students can be partly explained by lower engagement with mental health services compared to female students (Cadigan, Lee, & Larimer, 2019; Eisenberg, Golberstein, & Gollust, 2007; Pedrelli, et al., 2016). This disparity in service use is a complex process with a multitude of barriers negatively influencing mental health service engagement for male students (Sagar-Ouriaghli, et al., 2020b). Common barriers include, male students holding more negative attitudes to help-seeking (Nam, et al., 2010; Clough, et al., 2019), having greater conformity to traditional masculine norms (Seidler, et al., 2016; Ramaeker & Petrie, 2019), both public- and self-stigma (Wu, et al., 2017; Levant, Kamaradova, & Prasko, 2014), and poorer mental health literacy relative to their female counterparts (Clough, et al., 2019; Haavik, et al., 2019).

As conformity to masculine norms negatively influences help-seeking attitudes and behaviours amongst male students, it might act as a potential target area to elicit behaviour change and improve help-seeking (Seidler, et al., 2016; Ramaeker & Petrie, 2019; Vogel, et al., 2011; Wimer & Levant, 2011). However, general conformity to masculine norms may not be entirely detrimental. Conformity to specific traits such as emotional control, self-reliance, dominance, masculine toughness, and anti-femininity may better explain help-seeking reluctance (Wimer & Levant, 2011; Sileo & Kershaw, 2020; Heath, Brenner, Vogel, Lannin, & Strass, 2017; Gorski, 2010). On the other hand, masculine traits such as winning, masculine status, and in some instances, risk-taking can be protective factors, helping to reduce the likelihood of mental health problems occurring as well as improving the chances of help-

seeking if problems do arise (Wong, et al., 2017; Iwamoto, et al., 2018; Sileo & Kershaw, 2020).

Recent developments emphasise the importance of gender-sensitive interventions for male students (Ratnayake & Hyde, 2019; Mackenzie, Visperas, Ogrondniczuk, Oliffe, & Nurmi, 2019; Schoen, Brock, & Hannon, 2019; Sileo & Kershaw, 2020; Sagar-Ouriaghli, et al., 2020a). Indeed, male students may benefit from different techniques and approaches found to be effective for men generally when trying to improve help-seeking for mental health difficulties such as the delivery of psychoeducation materials, reframing help-seeking to align with masculine norms, and the use of role models to convey information. (Sagar-Ouriaghli, et al., 2019). Other techniques found in male-specific interventions may include solution focused approaches, sensitively sign-posting services, and the use of lay language and humour (Patrick & Robertson, 2016; Liddon, et al., 2019; Seidler, et al., 2018; Erentzen, Quinlan, & Mar, 2018; American Psychological Association, 2018; Sagar-Ouriaghli, et al., 2019; Yousaf, Grunfeld, & Hunter, 2015; Brown, Sagar-Ouriaghli, & Sullivan, 2019; Sagar-Ouriaghli, et al., 2020a).

By developing interventions that are more gender-sensitive for the needs of male university students, we aim to achieve greater male engagement and uptake to mental health initiatives among men. In turn, this may help to improve mental health outcomes for male students and subsequently reduce their elevated risk for suicide. The current investigation sought to evaluate three gender-sensitive mental health pilot interventions for male students by evaluating their differences in acceptability and effectiveness. To be specific, the aims were:

1. To assess the overall acceptability of the three interventions.

2. To assess differences in acceptability scores between the three interventions.

3. To examine the types of male students who engage with the three interventions, regarding their help-seeking attitudes, self-stigma, conformity to masculine norms, mental health status, ethnicity, previous help-seeking, age, level of study, and degree faculty.

4. To assess the interventions effectiveness for improving help-seeking attitudes, behaviours, and mental health status at post, 2-week, and 4-week follow up for all three interventions.

Method

Design

Descriptive statistics pertaining to self-stigma, conformity to masculine norms, mental health status, ethnicity, level of study, degree faculty, age, and previous help-seeking were used to analyse the types of students who engaged with the interventions. The acceptability of the three interventions was analysed to explore whether a particular intervention was more or less acceptable to male students. Lastly, a pre-post design was implemented across the three interventions to analyse changes in help-seeking attitudes, behaviours, and mental health status.

Measures

The measures utilised within this investigation comprised of acceptability (including uptake), conformity to masculine norms, self-stigma, help-seeking attitudes and behaviour, and mental health status.

Theoretical Framework of Acceptability Questionnaire.

The Theoretical Framework of Acceptability Questionnaire (TFAQ) was used to evaluate the acceptability of the interventions (Sekhon, Cartwright, & Francis, 2018) (Appendix 4.4). The TFAQ contains 9 items evaluating eight distinct domains that relate to acceptability, including general acceptability, affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness and self-efficacy (Sekhon, Cartwright, & Francis, 2017). Each domain includes one item except for perceived effectiveness where two items are included to capture the perceived effectiveness for help-seeking and mental health outcomes. All of the items are rated on a Likert scale ranging from 1 to 5, where higher scores indicate better acceptability. One item also provides a textbox allowing for participants to provide qualitative feedback. Items 3 and 8 (burden and opportunity costs) are reversed coded, where lower scores represent greater acceptability.

As intervention 3 (Man Cave) was an informal drop-in, the uptake, total number of students attending, and the number of students consenting was recorded to further evaluate acceptability.

Conformity to Masculine Norms Inventory and Self-Stigma of Seeking-Help Scale.

The Conformity to Masculine Norms Inventory (CMNI-46) (Mahalik, Locke, Ludlow, & Diemer, 2003) (Appendix 5.1) and the Self-Stigma of Seeking-Help scale (SSOSH) (Appendix 5.2) (Vogel, Wade, & Haake, 2006) were completed at baseline as both conformity to masculine norms and self-stigma are barriers to help-seeking for male students (Seidler, et al., 2016; Ramaeker & Petrie, 2019; Vogel, et al., 2011; Wimer & Levant, 2011; O'Brein, Hunt, & Hart, 2005; Wu, et al., 2017; Levant, Kamaradova, & Prasko, 2014).

The CMNI-46 contains 46 items measuring the degree of conformity to nine traditional masculine norms including, winning, emotional control, primacy of work, risk-taking, violence, heterosexual self-presentation, playboy, self-reliance and power over women (Mahalik, et al., 2003; Parent & Moradi, 2011). Items are rated on a 4-point Likert scale from strongly disagree (0) to strongly agree (3) and a score for each domain can be calculated by taking the mean score of the respective items for each domain. Furthermore, a mean score across all items is used to generate a total conformity to masculine norms score, whereby higher scores represent greater conformity to masculine norms (Mahalik, et al., 2003; Parent & Moradi, 2011). The CMNI-46 has good internal consistency (α=0.78 – 0.89) (Parent & Moradi, 2011).

The SSOSH scale includes 10 items rated on a 6-point Likert scale ranging from strongly disagree (0) to strongly agree (5). A total self-stigma score is obtained where higher scores indicate greater concern that seeking mental health support would negatively affect one’s satisfaction with oneself, self-confidence, and overall self-worth. The SSOSH scale has strong internal consistency (α=0.86 – 0.90) and moderate test-retest reliability (0.72) (Vogel, Wade, & Haake, 2006).

Attitudes Towards Seeking Professional Psychological Help Scale and The Actual Help-Seeking Questionnaire.

To evaluate help-seeking attitudes and behaviours the Attitudes Towards Seeking Psychological Help-Scale – Short Form (ATSPPH-SF) (Appendix 5.3) (Fischer & Farina, 1995) and the Actual Help-Seeking Questionnaire (AHSQ) (Appendix 5.4) (Wilson, et al., 2005; Rickwood, et al., 2005) were used. The ATSPPH-SF contains 10 items rated on a 4-point Likert scale ranging from disagree (0) to agree (3). A total score for mental health help-seeking attitudes is obtained, whereby higher scores represent more favourable help-seeking

attitudes. The ATSPPH-SF has moderate internal consistency (α=0.77 – 0.84) and good test-retest reliability (0.80) (Fischer & Farina, 1995; Elahi, Schweinle, & Anderson, 2008). Alongside help-seeking attitudes, the AHSQ contains 10 items measuring behavioural help-seeking (e.g. presenting to a service or speaking to friends and family) in the past 2-weeks. Similarly, the AHSQ has moderate internal consistency (α=0.70 – 0.85) and good test-retest reliability (0.86 – 0.92) (Wilson, et al., 2005).

Warwick-Edinburgh Mental Well-Being Scale.

Mental health status was measured via the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) (Appendix 5.5), a 14-item questionnaire containing positively phrased items measuring positive affect, psychological functioning, and personal relationships. Items are rated on a 5-point Likert scale ranging from none of the time (0) to all of the time (5). Scores are summed with higher scores representing greater overall well-being (Tennant, et al., 2007). The WEMWBS has good internal consistency (α=0.89) and test-retest reliability (0.83) (Tennant, et al., 2007).

The ATSPPH-SF, AHSQ, and WEMWBS were completed at baseline for all interventions, post-intervention for interventions 1 and 2 and at both 2-week and 4-week follow up for all three interventions.

Interventions

Ethical approval was granted for each intervention by the universities local Research Ethics Office (Appendix 5.6). The content included within the three interventions was identified from a systematic review and focus groups conducted with male students (Sagar-Ouriaghli, et al., 2019; Sagar-Ouriaghli, et al., 2020a).The application of this content has been outlined in chapter 4 within a framework specifically tailored towards male students (Sagar-Ouriaghli et al., 2020b). Generally, the intervention's content was operationalised through the use of Behaviour Change Techniques (BCTs) (Michie, Johnston, & Carey, 2016; Michie, West, Sheals, & Godinho, 2018). These BCTs are listed within a taxonomy (BCTTv1) outlining a range of techniques that represent an intervention's active ingredients that lead to behaviour change, in this case help-seeking (Michie, et al., 2013). Table 5.1 summarises the intervention content, BCTs utilised, and what this looked like in practice. By describing the development and active

ingredients (i.e. BCTs) of each intervention in explicit detail it enables other researchers or healthcare/education providers to replicate or build on the current findings. To further aid replication, a framework for developing interventions specifically for male students (Sagar-Ouriaghli, et al., 2020b), the Template for Intervention Description and Replication (TIDieR) checklist (Appendix 5.7) and the Consolidated Standards of Reporting Trials (CONSORT) extension statement for reporting pilot or feasibility trials (Appendix 5.8) has been adhered to (Hoffman, et al., 2014; Eldridge, et al., 2016; Lancaster & Thabane, 2019).

Additionally, focus group recommendations on how best to promote the interventions included: not to label it as a 'mental health' intervention, to provide an incentive for attending, to promote through student-led societies, and to deliver such initiatives during orientation week and exams (Sagar-Ouriaghli, et al., 2020a). Recruitment for each intervention lasted a duration of 4 weeks. This time frame was held consistent to highlight if one intervention was more acceptable than another. Similarly, a recruitment period of 4 weeks was chosen for each intervention to coincide with timelines part of a PhD thesis. All three interventions were delivered face-to-face by a PhD student (ISO, male) with the support of a medical student (VT, male).

Table 5.1. Summary of the intervention content, BCTs utilised, and the delivery method across the three gender-sensitive interventions.

Intervention Content	BCT(s) embedded within the intervention	Delivery method
Delivery of mental health information regarding depression, anxiety and alcohol misuse.	5.1. Information about health consequences 5.3. Information about social & environmental consequences 5.6. Information about emotional consequences	Group presentation for intervention 1 and 2 outlining what mental health is, stressors at university, symptoms associated with excessive low mood, excessive worry, and excessive alcohol use. Highlighting how many symptoms and when their duration is cause for concern. Case study examples/vignette's where students have to identify the symptoms. Intervention 3 included a leaflet of mental health symptoms what they look like and when their duration is cause for concern.
Information on available mental health services, the treatment structure and its effectiveness.	3.2. Social support (practical) 5.1. Information about health consequences 5.3. Information about social & environmental consequences	Listing different types of support in both interventions 1 and 2 including, friends and family, online support, university services, and professional services in the NHS. Emphasising that they have the choice to engage with any service they feel is appropriate. Presentation of a 'road map' regarding how long referrals, assessments, treatment duration, and the effectiveness of medication and cognitive behavioural therapy (CBT). Same information provided within a leaflet in intervention 3.
Use of videos and photos of male celebrities who have experienced mental health help-seeking.	6.2. Social comparison 9.1. Credible source	Group discussion on photographs of male celebrities from a range of professions who have openly discussed issues relating to mental health (e.g. Prince William and UK rapper Stormzy) and a short video from YouTube where male celebrities talk about their mental health struggles (Interventions 1 and 2 only).
Emphasis placed on taking responsibility for your mental health.	3.2. Social support (practical) 13.2 Framing/Re-framing	Interventions 1 and 2 included a presentation highlighting that taking responsibility and finding appropriate support is a positive. Support can extend to friends, family, and professional support. Group discussion on why men find it difficult to ask for help. Intervention 2 and 3 labeled as 'improving psychological strength for men' and 'man-cave' to align with male stereotypes.
Delivering a male-only space whilst facilitating social support	3.1. Social support (unspecified)	Group based interventions specifically for male-students. Games console activity *after* interventions 1 and 2 as part of the honorarium given. Intervention 3 provided an informal drop in space to meet other male students by providing a series of social activities (games console, board games, arts and crafts, and table tennis).
Highlighting active problem solving/self-help techniques such as problem-solving, mindfulness, time management and action planning.	1.2. Problem solving 1.4. Action planning 11.2. Reduce negative emotions	Interventions 1 and 2 includes information and practice activities for relaxation techniques (5-minute YouTube activity on mindfulness), solving a novel problem (e.g. how to make £1million in 6 months), time management (a case study/vignette on how to improve a student's poor time management), and action planning where student's identify 3 key problems and 3 potential solutions that can be completed in the next month. Intervention 2 had additional information about behavioural activation, how to identify negative cycles patterns of behaviour and how to change them as well as setting and monitoring goals.

Mental health self-assessment as part of a ‘self-check’ to evaluate one’s current difficulties.	2.1 Monitoring of behaviour by others without feedback 2.2. Feedback on behaviour 2.3. Self-monitoring of behaviour	Completion of the Warwick-Edinburgh Menta Well-Being Scale (WEMWBS) as a ‘self-check’ exercise for interventions 1 and 2. Repeated again in session 2, with the addition of calculating total scores and what ‘healthy’ or average scores (i.e. 50) look like – if substantially lower participants were reminded of the content addressed such as finding support and self-help techniques. Intervention 3 included the WEMWBS as a ‘self-check’ within a leaflet.

Intervention 1: Men-Tality

Prior to recruitment, a survey was sent to 20 male students to identify a title for a mental health intervention. The preferred name for the intervention was 'Men-Tality: A Mental Health Workshop for Male Students' (Appendix 5.9). The intervention was promoted during orientation week at the university welcome fair where university societies can show-case extra-curricular activities (Sagar-Ouriaghli, et al., 2020a). Additionally, posters and the fortnightly university e-mail circular that is sent to all students was used to promote the intervention.

Intervention 1 was delivered in a room located in the student union and was divided into two 2-hour group sessions. In session 1, information on mental health symptoms (depression, anxiety, and alcohol misuse) and how to recognise them, available mental health services, treatment structure, treatment effectiveness, videos/photos of male celebrities who have experienced mental health difficulties to frame help-seeking within a masculine narrative, and greater emphasis placed on taking responsibility for your mental health were addressed (Table 5.1). In the following week, session 2, a video of male celebrities discussing mental health difficulties and help-seeking was shown before exploring a range of skills including problem-solving, mindfulness, time management, and action planning. Lastly, a mental health self-assessment (i.e. WEMWBS) was completed individually for students to do a 'self-check' within the session. Responses were used to privately evaluate one's current difficulties and were reminded of the available services and self-management techniques that were addressed in sessions 1 and 2 (Table 5.1).

Intervention 2: Psychological Strength for Men

Intervention 2 was titled 'Improving Psychological Strength for Men' to provide a more 'positive masculine' image, enabling male students to engage with a mental health intervention without contradicting their perceived sense of self/masculinity (i.e. 'being weak'). The objective and content embedded within intervention 2 was similar to intervention 1 except it focused more on problem-solving and solution focused techniques – discussing them in the first session, whilst also placing greater emphasis on positive masculine stereotypes (e.g. responsibility and psychological strength) (Table 5.1). As before, mental health labels were deliberately avoided to help engage more male students (Sagar-Ouriaghli,

et al., 2020a). The phrasing of 'psychological' was chosen to avoid mental health related terms, and information relating to depression, anxiety, and alcohol misuse were labelled as 'low mood', 'worries/stress' and 'excessive drinking', respectively. Posters and the fortnightly e-mail circular were used to promote the intervention to all students.

Intervention 2 was also divided into two 2-hour group sessions. Session 1 focused on skills such as behavioural-activation, action-planning, mindfulness, goal setting and monitoring, problem-solving, and time management techniques. The following week, session 2 emphasised one's responsibility to look after their mental health before providing information around available mental health services, identifying mental health symptoms, treatment structure, and treatment effectiveness. Lastly, mental health self-assessments (i.e. WEMBWS) were completed to obtain personal feedback about their current mental health status (Table 5.1).

Intervention 3: Man Cave

Intervention 3 was designed to be informal and offer a group drop-in for male students. It was based on previous focus group results, indicating that male students also have a preference for informal and fun settings (Sagar-Ouriaghli, et al., 2020a). Intervention 3 was titled 'Man Cave' to emphasise a male-only group and was hosted on the ground floor within the student union in close proximity to the student café. This ensured a more opportunistic setting, unlike interventions 1 and 2 where pre-registration/sign up was required. As before, intervention 3 was advertised via posters and across the fortnightly e-mail circular to all students. Students were invited to sign up once they entered.

Intervention content was delivered through leaflets that were placed on an information desk within the room. There were two researchers (ISO and VT) available to answer any questions they might have. Students were free to discretely collect leaflets that were relevant to them without prompt or discussion with anyone. Specially adapted leaflets containing information about available mental health services, mental health symptoms, and a self-assessment scale (i.e. WEMBWS) was provided. Additional leaflets addressing physical health, local doctor's surgeries, smoking cessation, and university gyms were provided (Table 5.1). Various social activities such as board games, video gaming, table tennis, and snacks were stationed around the room to shift the focus away from mental health with the intention to be more inviting to male-students (Table 5.1). Drop-in sessions ran weekly for 4 hours for

a series of 4 weeks. Students were free to attend for any time period and attend as many sessions as they liked. A copy of the participants information sheets, consent forms, demographic questionnaire, posters, and intervention PowerPoint slides for all interventions can be seen in Appendix 5.10 – 5.16.

Results

Participants

Across the three pilot interventions, 24 male students were recruited. For participants to be eligible to participate they had to identify as male as well as be a student (undergraduate or postgraduate). A specific sample size was not pre-determined as the current pilot investigation sought to explore how many students would engage as a means to test their acceptability and feasibility. 126 students expressed interest in intervention 1 (Men-Tality) and provided contact details to a member of the research team at the welcome fair. An additional 23 students responded to the poster/e-mail invitation. Of the 149 male students expressing interest in intervention 1, 9 students attended and completed the intervention. Due to logistical restrictions and to prevent students from engaging in both interventions simultaneously, interventions 2 (Psychological Strength) and 3 (Man Cave) were promoted later on within the academic year. Subsequently, they were not advertised during welcome fair. 22 students expressed interest in intervention 2, with 6 attending the intervention where all completed 4-week follow. For intervention 3, 15 students expressed interest, resulting in 9 consenting to take part and 3 completing 4-week follow up. Within intervention 3, only one student completed both 2-week and 4-week follow up. A summary of students agreeing to take part, uptake, and completion rates is depicted in figure 5.1. Demographic information of the 24 participants split by each intervention is outlined in table 5.2.

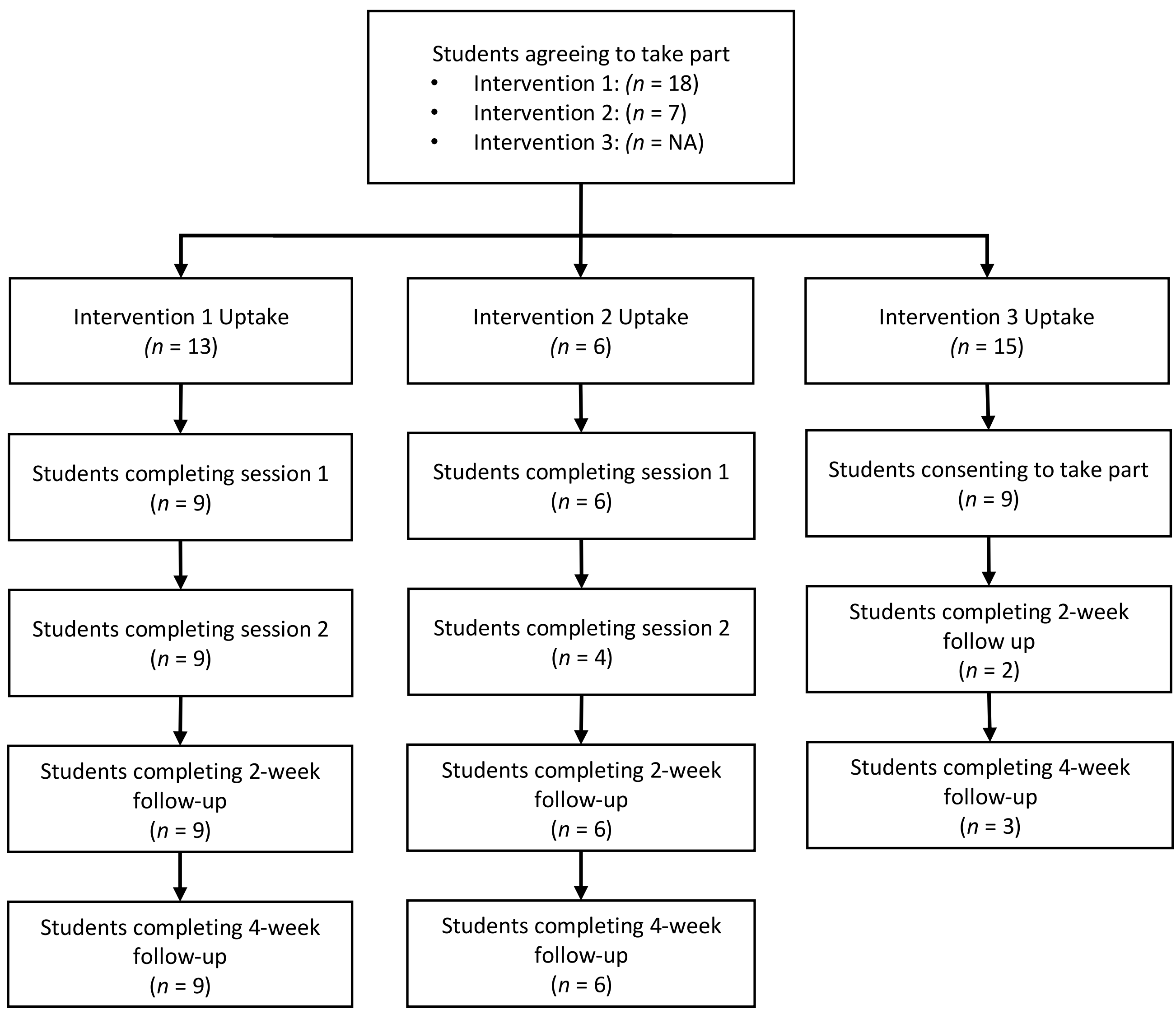


Figure 5.1. Recruitment flow chart across all three pilot interventions.

Table 5.2. Summary of participants demographics split by intervention.

	Intervention 1 (Men-Tality)	**Intervention 2 (Psych Strength)**	**Intervention 3 (Man Cave)**	**Total**
n (% male)	9 (100%)	6 (100%)	9 (100%)	24 (100%)
Mean Age in years (SD)	25.44 (8.71)	25.50 (4.51)	22.11 (4.81)	24.21 (6.45)
Ethnicity				
Other White Background	4 (44%)	4 (66%)	0 (0%)	8 (34%)
Pakistani	0 (0%)	1 (17%)	4 (44%)	5 (22%)
Black African	0 (0%)	0 (0%)	2 (22%)	2 (8%)
White British	1 (11%)	0 (0%)	1 (11%)	2 (8%)
Chinese	1 (11%)	0 (0%)	0 (0%)	1 (4%)
Indian	1 (11%)	0 (0%)	0 (0%)	1 (4%)
Bangladeshi	0 (0%)	0 (0%)	1 (11%)	1 (4%)
Mixed White and Black Caribbean	0 (0%)	1 (17%)	0 (0%)	1 (4%)
Other Asian Background	1 (11%)	0 (0%)	0 (0%)	1 (4%)
Any other background	1 (11%)	0 (0%)	1 (11%)	2 (8%)
Degree Faculty				
Natural & Mathematical Sciences	3 (33%)	2 (33%)	8 (89%)	13 (55%)
Social Sciences & Public Policy	2 (22%)	2 (33%)	0 (0%)	4 (16%)
Arts & Humanities	1 (11%)	1 (17%)	1 (11%)	3 (13%)
Psychiatry, Psychology & Neuroscience	2 (22%)	0 (0%)	0 (0%)	2 (8%)
Life Science & Medicine	0 (0%)	1 (17%)	0 (0%)	1 (4%)
School of Law	1 (11%)	0 (0%)	0 (0%)	1 (4%)
Level of Study				
Undergraduate	4 (44%)	1 (17%)	7 (78%)	12 (50%)
Postgraduate (Masters or PhD)	5 (56%)	5 (83%)	2 (22%)	12 (50%)
Has previously sought help for mental health				
Yes	4 (44%)	5 (83%)	2 (22%)	11 (46%)
No	4 (44%)	0 (0%)	6 (67%)	10 (41%)
Prefer not to say	1 (11%)	1 (17%)	1 (11%)	3 (13%)

Aim 1: To assess the overall acceptability for all three interventions.

Mean (SD) scores for all acceptability domains (general acceptability, affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness and self-efficacy) are summarised in table 5.4. All three interventions were rated favourably regarding their overall acceptability with 76% (n = 13) rating the intervention as 'acceptable' and 24% (n = 4) rating the intervention as 'completely acceptable'. Similarly, 82% (n = 14) of participants either 'liked' or 'strongly liked' their respective intervention, whilst only 18% (n = 3) had 'no opinion'. When asked how much the intervention aligned with their beliefs about mental health and help-seeking, (ethicality) 88% (n = 15) were in 'agreement' or 'strong agreement', 6% (n = 1) had 'no opinion', whilst 6% (n = 1) 'disagreed'. Participants were also asked whether the intervention improved their overall mental health/well-being and their attitudes towards seeking help (perceived effectiveness). For overall mental health/well-being, 47% (n = 8) 'agreed', 35% (n = 6) had 'no opinion' and 18% (n = 3) 'disagreed'. Similarly, for attitudes towards seeking help, 65% (n = 11) either 'agreed' or 'strongly agreed' whilst 35% (n = 6) had 'no opinion'. When asked whether it was clear how engaging in the intervention helped to manage their mental health (intervention coherence), 76% (n = 13) 'agreed' or 'strongly agreed' that it was clear and 24% (n = 4) had 'no opinion'. Additionally, two negatively phrased items were included to identify how much effort it took to engage (burden) and how much engaging interfered with other priorities (opportunity costs). 65% (n = 11) felt engaging took 'very little effort' or 'no effort at all', 18% (n = 3) had 'no opinion', 12% (n = 2) took 'a lot of effort' and 6% (n = 1) required a 'huge effort'. When asked whether the intervention interfered with their other priorities, 76% (n = 13) 'disagreed' or 'strongly disagreed' and 24% (n = 4) had 'no opinion'. Lastly, participants were asked how confident they would feel about engaging with the intervention again (self-efficacy), 71% (n = 12) felt 'confident' or 'very confident' about engaging again, whilst 29% (n = 5) had 'no opinion'. The final question included within the TFAQ captures general feedback obtained through a written text box. 12 of the 17 participants completing the TFAQ provided verbal feedback (Table 5.3).

Table 5.3. Verbal feedback obtained from the TFAQ.

Comment
"I only hope that more people would participate in this, as mental well-being is often neglected" (1)
"Good overview of mental health issues and ways to cope and where to get help" (1)
"I found it enjoyable, FIFA is a great way to get people together" (1)
"Although I can see how some of the strategies discussed may help some people, in my case they seem unlikely to work" (1)
"Was useful, learnt new techniques, forced me to reflect more on my own wellbeing" (1)
"Would have been useful to go through ways of 'nudging' us to do beneficial activities for mental health so they become a habit" (1)
"To take care of yourself is taking care of your mental health. This is the first and most important step to begin with if you want to improve" (1)
"Not sure that 2x2 hour workshop brings big changes, but the atmosphere was good" (2)
"Very good overall" (2)
"I had only come for one session, so perhaps I most likely wasn't able to benefit too much as far as mental health is concerned but I certainly did leave happier after my session" (3)
"I didn't know how I could have engaged more beyond my lengthy discussion with one of the organisers, apart from that I was too tentative to get involved" (3)
"I have no strong opinions. I feel it may be useful for some more vulnerable guys, but I believe men should be able to deal with their problems themselves and these kinds of things don't appeal to most men" (3)

*number refers to the intervention. (1) = Intervention 1, (2) = Intervention 2, (3) = Intervention 3

Aim 2: To assess differences in acceptability scores between the interventions.

As indicated by a series of one-way ANOVA's, no significant differences were observed for all the domains on the TFAQ (overall acceptability, affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness and self-efficacy) (Table 5.4).

Table 5.4. Summary of Means, SD and One-Way ANOVA for all interventions scores for acceptability.

TFAQ Domain	Mean (*SD*) Intervention 1 (Men-Tality)	Intervention 2 (Psych Strength)	Intervention 3 (Man Cave)	One-Way ANOVA between the three pilot interventions *F*	df	Error	*p*
Acceptability	4.78 (0.44)	4.75 (0.50)	4.75 (0.50)	0.01	2	14	0.993
Affective Attitude	4.11 (0.78)	4.50 (0.58)	4.25 (0.96)	0.34	2	14	0.717
Burden [R]	2.11 (1.17)	2.25 (0.96)	3.25 (0.96)	1.59	2	14	0.238
Ethicality	4.33 (0.71)	4.25 (0.50)	3.50 (1.00)	1.82	2	14	0.198
Intervention Coherence (help-seeking)	4.22 (0.67)	3.75 (0.50)	3.75 (0.96)	0.94	2	14	0.415
Opportunity Costs [R]	2.00 (0.71)	1.75 (0.96)	1.75 (0.96)	0.20	2	14	0.825
Perceived Effectiveness (help-seeking)	4.00 (0.71)	4.00 (0.82)	3.25 (0.50)	1.78	2	14	0.204
Perceived Effectiveness (mental health)	3.44 (0.73)	3.00 (1.15)	3.25 (0.50)	0.44	2	14	0.656
Self-Efficacy	3.89 (0.60)	3.75 (0.96)	4.00 (0.82)	0.12	2	14	0.892

[R] Items are reverse coded, lower scores indicate better acceptability.
* $p < 0.05$

Aim 3: To examine the types of male students who engage with the interventions regarding their help-seeking attitudes, self-stigma, conformity to masculine norms, mental health status, ethnicity, previous help-seeking, age, level of study, and degree faculty.

Baseline Help-Seeking Attitudes

Across the three interventions, scores for help-seeking attitudes as measured by the ATSPPH-SF were significantly different at baseline (Table 5.5). A Bonferroni post-hoc test revealed that help-seeking attitudes were significantly lower for intervention 3 when compared to intervention 1 ($p = 0.006$). No significant differences were observed between intervention 1 and 2 ($p = 0.892$), or between intervention 2 and 3 ($p = 0.147$).

When comparing help-seeking attitudes at baseline to male student norms highlighted in previous research (Elahi, Schweinle, & Anderson, 2008), participants in intervention 1 had significantly more positive help-seeking attitudes, $t(8) = 3.917$, p = 0.004, 95% CI (2.28 to 8.81), $d = 1.13$. No significant differences for help-seeking attitudes were observed for intervention 2, $t(5) = 2.311$, p = .069, 95% CI (-0.35 to 6.55), $d = 0.69$, or

intervention 3, $t(8) = 1.013$, p = .341, 95% CI (-5.05 to 2.14), $d = 0.31$, when compared to male student norms (Elahi, Schweinle, & Anderson, 2008).

Baseline Self-Stigma

Upon visual inspection, baseline self-stigma appeared lower for both interventions 1 and 2 when compared to intervention 3. However, this difference was not significant (Table 5.5). A one-sample's t-test highlighted that baseline self-stigma for intervention 1 was significantly lower than male student norms outlined in previous research (Vogel, Wade, & Haake, 2006), $t(8) = 2.71$, $p = 0.027$, 95% CI (-8.41 to -0.68), $d = 0.70$. This pattern was also observed for intervention 2, whereby baseline self-stigma was significantly lower when compared to male student norms, $t(5) = 2.57$, $p = 0.050$, 95% CI (-13.52 to -0.01), $d = 0.95$. However, for intervention 3, baseline self-stigma was not significantly different to male student norms, $t(7) = 0.37$, $p = 0.726$, 95% CI (-8.24 to 6.04), $d = 0.13$.

Baseline Conformity to Masculine Norms

Across the three interventions, only the domains of winning and heterosexual self-preservation revealed significant differences (Table 5.5). Employing the Bonferroni post-hoc test, winning was significantly higher for intervention 2 when compared to intervention 1 ($p = 0.013$). There were no significant differences for winning between intervention's 1 and 3 ($p = 1.00$), or between intervention 2 and 3 ($p = 0.067$).

Similarly, the Bonferroni post-hoc test for heterosexual self-preservation revealed to be significantly higher for intervention 3 when compared to intervention 1 ($p = 0.019$). There were no significant differences for hetero-sexual self-preservation between interventions 1 and 2 ($p = 1.00$), or between interventions 2 and 3 ($p = 0.223$).

Furthermore, when comparing conformity to masculine norms to male student norms as highlighted in previous research (Parent & Moradi, 2011), those attending intervention 1 scored significantly lower on total conformity to masculine norms, $t(8) = 5.102$, p = 0.001, 95% CI (-0.581 to -0.219), $d = 1.67$, power over women, $t(8) = 4.728$, p = 0.001, 95% CI (-0.972 to -0.335), $d = 1.31$, and heterosexual self-preservation $t(8) = 6.340$, p < 0.001, 95% CI (-1.445 to -0.674), $d = 1.81$. No significant differences were observed for emotional control, winning,

playboy, violence, self-reliance, risk taking, and primacy of work when comparing intervention 1 to male student norms.

For those attending intervention 2, scores for heterosexual self-preservation were significantly lower compared to male student norms, $t(5) = 2.933$, p = 0.033, 95% CI (-1.395 to -0.092), $d = 1.16$. All other domains of, total conformity to masculine norms, emotional control, winning, playboy, violence, self-reliance, risk-taking, power over women, and primacy of work did not differ significantly to male student norms. Lastly, participants attending intervention 3 did not have any significant differences across all domains when compared to male student norms.

Baseline Mental Health Status

As measured by the WEMWBS, mental health status did not differ significantly at baseline between the three interventions (Table 5.5). Mental health status at baseline for intervention 1 did not differ significantly from male student's norms as highlighted in previous research (Tennant, et al., 2007), $t(8) = 0.509$, p = 0.624, 95% CI (-4.60 to 7.21), $d = 0.17$. This was also observed for intervention 2, $t(5) = 1.130$, p = 0.310, 95% CI (-20.11 to 7.83), $d = 0.56$, and intervention 3, $t(8) = 0.551$, p = 0.597, 95% CI (-11.67 to 7.17), $d = 0.21$.

Ethnicity, Previous Help-Seeking, Age, Level of Study, and Degree Faculty at Baseline

Furthermore, of the participants engaging within the three interventions, significant differences were observed for ethnicity, whereby intervention 3 engaged more ethnic minorities: Fisher's Exact, $p = 0.021$, Cramer's V = 0.707 and for those who have previously sought help for mental health compared to those who have not: Fisher's Exact, $p = 0.038$, Cramer's V = 0.58. No significant differences were observed for age as confirmed by a one-way ANOVA: $F(2, 21) = 0.745$, $p = 0.487$. Lastly, Fisher's exact test revealed no significant differences between the interventions for level of study ($p = 0.089$) or degree faculty ($p = 0.106$).

Table 5.5. Summary of Means, SD and One-Way ANOVA for all intervention's baseline scores for help-seeking attitudes, mental health status, self-stigma, and conformity to masculine norms.

Scale	Mean (*SD*)				One-Way ANOVA between the three pilot interventions			
	Intervention 1 (Men-Tality)	Intervention 2 (Psych Strength)	Intervention 3 (Man Cave)	Male student norms	*F*	df	Error	*p*
Baseline Help-Seeking Attitudes (ATSPPHS-SF)	21.44 (4.25)	19.00 (3.29)	14.22 (5.29)	15.90 (5.44)	6.39	2	21	0.007*
Baseline Mental Health Status (WEMWBS)	50.44 (7.68)	43.00 (13.31)	46.89 (13.07)	49.14 (7.87)	0.83	2	21	0.451
Baseline Self-Stigma (SSOSH)	22.56 (5.03)	20.33 (6.44)	26.00 (8.96)	27.10 (7.70)	1.26	2	20	0.306
Baseline Conformity to Masculine Norms (CMNI-46)								
Total	1.11 (0.23)	1.36 (0.34)	1.42 (0.44)	1.51 (0.25)	2.07	2	21	0.152
Emotional Control	1.15 (0.60)	0.97 (0.87)	1.46 (0.66)	1.45 (0.54)	1.01	2	21	0.381
Winning	1.37 (0.43)	2.14 (0.62)	1.54 (0.38)	1.66 (0.45)	5.33	2	21	0.013*
Playboy	1.08 (0.43)	1.29 (0.75)	1.44 (0.68)	1.28 (0.65)	0.78	2	21	0.470
Violence	1.43 (0.55)	1.61 (0.64)	1.41 (0.80)	1.84 (0.49)	0.20	2	21	0.823
Self-Reliance	1.04 (0.44)	1.43 (0.94)	1.37 (0.88)	1.33 (0.49)	0.65	2	21	0.532
Risk Taking	1.36 (0.53)	1.27 (0.84)	1.49 (0.41)	1.45 (0.46)	0.28	2	21	0.761
Power Over Women	0.42 (0.41)	0.63 (0.44)	0.89 (1.11)	1.07 (0.57)	0.75	2	21	0.486
Primacy of Work	1.22 (0.67)	1.63 (0.74)	1.20 (0.36)	1.36 (0.54)	1.08	2	21	0.357
Heterosexual Self-Preservation	0.74 (0.50)	1.06 (0.62)	1.76 (0.88)	1.80 (0.66)	4.79	2	21	0.007*

* $p < 0.05$

Key: ATSPPHS-SF, Attitudes Towards Seeking Professional Psychological Help Scale – Short Form; WEMWBS, Warwick-Edinburgh Mental Well-Being Scale; CMNI-46, Conformity to Masculine Norms Inventory; SSOSH, Self-Stigma of Seeking-Help scale.

Aim 4: To assess the interventions effectiveness for improving help-seeking attitudes, behaviours, and mental health status at post-, 2-week, and 4-week follow up for all three interventions.

Post-Effectiveness for Help-Seeking Attitudes & Behaviours

Certainly, the primary aim for pilot studies should be to assess feasibility and acceptability (Thabane, et al., 2010). Nonetheless, despite the small sample sizes, exploratory analysis was conducted to examine changes to help-seeking attitudes and behaviours at follow up. For intervention's 1 and 2, no significant changes in help-seeking attitudes were observed at post-intervention, 2-week follow up, or 4-week follow up when compared to baseline (Table 5.7). Similarly, no significant changes to help-seeking attitudes were observed in intervention 3 for 2-week follow up or 4-week follow-up when compared to baseline (Table 5.7).

With regards to help-seeking behaviours occurring in the past 2 weeks captured by the AHSQ, more than half (50%) of participants completing the questionnaire sought help at any time from at least 1 source (Table 5.6). Only a positive increase in students seeking help in the past two weeks was observed for intervention 1 at post follow up (+11%) (Table 5.6).

Table 5.6. Frequency and percentages of where participants sought help in the last 2 weeks at baseline, post, 2-week follow up and 4-week follow up for all interventions.

	Intervention 1 (Men-Tality)				Intervention 2 (Psych Strength)				Intervention 3 (Man Cave)			
Timepoint	Baseline	Post	2WFU	4WFU	Baseline	Post	2WFU	4WFU	Baseline	Post	2WFU	4WFU
n total	9	9	9	9	6	3	6	6	9	0	2	3
Partner	22% (2)	22% (2)	22% (2)	11% (1)	50% (3)	33% (1)	67% (4)	67% (4)	11% (1)	-	0% (0)	0% (0)
Friend	44% (4)	67% (6)	67% (6)	44% (4)	100% (6)	67% (2)	83% (5)	83% (5)	33% (1)	-	100% (2)	67% (2)
Parent	22% (2)	22% (2)	33% (3)	22% (2)	67% (4)	33% (1)	50% (3)	67% (4)	44% (4)	-	100% (2)	0% (0)
Other Relative	11% (1)	11% (1)	11% (1)	11% (1)	33% (2)	0% (0)	67% (4)	33% (2)	0% (0)	-	0% (0)	33% (1)
Mental Health Professional	0% (0)	0% (0)	0% (0)	0% (0)	17% (1)	33% (1)	0% (0)	33% (2)	11% (1)	-	0% (0)	0% (0)
Phone help line	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	-	0% (0)	0% (0)
Doctor / GP	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	33% (1)	0% (0)	0% (0)	11% (1)	-	0% (0)	0% (0)
Teacher	33% (3)	33% (3)	11% (1)	0% (0)	17% (1)	0% (0)	33% (2)	17% (1)	22% (2)	-	0% (0)	0% (0)
Other	0 (0)	0% (0)	0% (0)	11% (1)	17% (1)	33% (1)	0% (0)	17% (1)	11% (1)	-	50% (1)	0% (0)
Not sought help	11% (1)	0% (0)	22% (2)	44% (4)	0% (0)	33% (1)	0% (0)	17% (1)	33% (3)	-	0% (0)	33% (1)
% Seeking Help*	**89% (8)**	**100% (9)**	**78% (7)**	**56% (5)**	**100% (6)**	**67% (2)**	**100% (6)**	**83% (5)**	**67% (6)**	**-**	**100% (5)**	**67% (2)**

*percentages are calculated from total number of participants completing the AHSQ at the respective time point.
Note: numbers in parentheses is the number of responses (n).

Post-Effectiveness for Mental Health Status

As outlined previously, the primary aim of pilot studies is to assess their feasibility and acceptability (Thabane, et al., 2010). As with help-seeking, exploratory analysis was conducted to examine any changes to mental health status at follow up. Indeed, these findings should be interpretated tentatively due to small sample sizes and differences in drop-out rates between the interventions. Intervention 1 and 2 did not yield any significant improvement to mental health status at post-, 2-week, or 4-week follow up when compared to baseline (Table 5.7). Similarly, no significant changes to mental health status were observed in intervention 3 at 2-week or 4-week follow up when compared to baseline (Table 5.7).

Table 5.7. Summary of Means (SD) and test for significance (t-tests) for post-, 2-week, and 4-week follow up change in scores for help-seeking attitudes and mental health status.

	Mean (*SD*)			
Intervention	Baseline	Post	2-Week Follow Up	4-Week Follow Up
Help-Seeking Attitudes (ATSPPHS-SF)				
Intervention 1 (Men-Tality)	21.44 (4.25)	22.11 (3.95)	21.11 (4.17)	22.44 (3.81)
Intervention 2 (Psych Strength)	19.00 (3.29)	19.33 (5.69)	20.83 (4.62)	20.67 (5.20)
Intervention 3 (Man Cave)	14.22 (5.29)	-	20.00 (8.49)	14.67 (12.66)
Mental Health Status (WEMWBS)				
Intervention 1 (Men-Tality)	50.44 (7.68)	49.67 (7.78)	48.67 (7.86)	49.89 (9.78)
Intervention 2 (Psych Strength)	43.00 (13.31)	32.67 (7.37)	44.67 (8.19)	44.33 (9.35)
Intervention 3 (Man Cave)	46.89 (13.07)	-	46.00 (22.63)	53.67 (12.90)

* $p < 0.05$
All comparisons are made with Baseline as the reference group.

Discussion

All three interventions were rated positively regarding their overall acceptability, affective attitude, ethicality, self-efficacy, intervention coherence for help-seeking, and perceived effectiveness for help-seeking and well-being (aim 1). All interventions were rated equally acceptable (aim 2), indicating that the BCT's embedded across these interventions are acceptable strategies to engage male students. Regarding our third aim, only intervention 3 (Man Cave) was significantly better at engaging male students who were less likely to have sought help before, held more negative help-seeking attitudes, and who endorsed self-

stigmatising beliefs and conformity to masculine norms similar to that of male student norms. Intervention 1 (Men-Tality) was significantly better at engaging male students who endorsed less self-stigmatising beliefs, less conformity to masculine norms (particularly heterosexual self-preservation and power over women), and higher help-seeking attitudes than expected for this population group. Intervention 2 (Psychological Strength) was also significantly better at engaging male students who endorsed less self-stigmatising beliefs compared to male student norms. Students attending intervention 2 exhibited similar help-seeking attitudes as expected for this population group, however appeared to score significantly higher for the masculine trait of winning, and lower for heterosexual self-preservation. No significant changes to help-seeking attitudes or mental health outcomes at follow-up were observed (aim 4), although such findings may be difficult to interpret due to small sample sizes and limited follow-up data.

Self-stigma was only lower for interventions 1 and 2 when compared to male student norms suggesting that intervention 3 engaged a more representative sample of male students with high self-stigma. Majority of participants attending intervention 3 had not previously sought help for mental health difficulties which may be due to higher self-stigma. This is an important consideration when designing future male-sensitive interventions, as self-stigma is a key barrier to engaging with mental health support (Wu, et al., 2017; Levant, Kamaradova, & Prasko, 2014). Informal approaches are likely to be more acceptable to male students with high self-stigma, particularly if they have not engaged with mental health support previously.

Participants attending interventions 1 and 2 had significantly lower total conformity to masculine norms, power over women, and heterosexual self-preservation than expected for this population group. Indeed, these maladaptive masculine traits are barriers to help-seeking as total conformity to masculine norms negatively influence help-seeking attitudes (Seidler, et al., 2016; Ramaeker & Petrie, 2019; Vogel, et al., 2011; Wimer & Levant, 2011), power over women contributes to worse mental health outcomes (Wong, et al., 2017), and greater heterosexual self-preservation can be seen as a dimension of anti-femininity contributing to greater help-seeking reluctance (Sileo & Kershaw, 2020). Additionally, winning was significantly higher for participants in intervention 2 which can be considered as an adaptive trait as it has been shown to encourage help-seeking and act as a protective factor from mental health difficulties (Iwamoto, et al., 2018). These findings indicate that those attending interventions 1 and 2 represent an atypical subgroup of male students who may be

more amenable to therapy as they experience less barriers (and more facilitators) when seeking help for mental health. This was not observed for intervention 3 as no significant differences to conformity to masculine norms was identified when compared to male student norms. The informal approaches and strategies seen in intervention 3 appeared to be more effective at engaging male students whose conformity to masculine norms are representative of the wider male student population.

Similarly, interventions 1 and 2 had higher help-seeking attitudes at baseline indicating that these students already held positive attitudes to help-seeking. Previous studies highlight that students who recently used mental health support score higher on the ATSPHH-SF compared to those who do not (Elahi, Schweinle, & Anderson, 2008). Significantly lower help-seeking attitudes were seen in intervention 3 at baseline. These participants scored lower than what was expected for this population group, presenting with similar scores for those who do not use mental health support (Elahi, Schweinle, & Anderson, 2008). Additionally, participants in intervention 3 were significantly less likely to have accessed mental health support in the past when compared to participants in interventions 1 and 2. Once again, although this study was small, these findings indicate that the informal drop-in intervention (intervention 3; Man Cave), appeared to be better at engaging male students who are likely to be representative of the wider male student population where they hold negative help-seeking attitudes and are less likely to have engaged with mental health support before.

For all three interventions, no significant changes to mental health status were observed at post-intervention, 2-week, or 4-week follow up when compared to baseline, possibly due to small sample sizes and loss of follow-up data. However, mental health status at baseline did not differ from male student norms. Across all three interventions, only 5 participants (20%) scored equal to or below 40 on the WEMWBS at baseline which can be used to indicate major depression (Taggart, Stewart-Brown, & Parkinson, 2015). Therefore, the majority of participants would not fulfil diagnostic criteria for depression and no significant changes to mental health status are likely to be due to a ceiling effect. Participants who scored equal to or below 40 on the WEMWBS were equally distributed across the three interventions, with one participant in intervention 1, two participants in interventions 2 and 3. Similarly, no significant changes to help-seeking attitudes or behaviours at post-intervention, 2-week, or 4-week follow up were observed. Certainly, these pilot interventions

are likely to be underpowered to detect any significant changes and such findings should be interpreted tentatively. Instead, more attention should be given to their acceptability.

Overall, the three interventions engaged different subgroups of male students. Interventions 1 and 2 engaged male students who held pre-existing positive help-seeking attitudes, had lower self-stigma, who are more likely to have engaged with mental health support previously, and had lower conformity to maladaptive masculine traits. Intervention 3 appeared better at engaging male students who had higher conformity to maladaptive masculine traits, higher self-stigma, negative perceptions of help-seeking, and who were less likely to have come in to contact with mental health services before. As self-stigma, conformity to masculine norms, and negative help-seeking attitudes have been highlighted as key barriers to engaging with mental health support (Ramaeker & Petrie, 2019; Wimer & Levant, 2011; Vogel, et al., 2011; Levant, et al., 2013), participants engaging with intervention 3 are likely to be representative of the wider male student cohort who are a hard-to-reach group. Similarly, participants attending intervention 3 were more likely to be from an ethnic minority background which is also associated with reduced help-seeking behaviours for mental health difficulties (Parent, et al., 2018; Twentyman & Frank, 2017; Guo, et al., 2015). There may be cause for concern for this hard-to-reach group if they were to experience emotional distress at a later date. Having more barriers to navigate through may reduce their willingness to engage with support when needed. This is likely to reduce their opportunity for support, place them at greater risk of emotional distress, and potentially suicide.

Considering all three interventions were rated equally acceptable, a one-size fits all approach to engage male students is not recommended. As both the formal and informal interventions were deemed equally acceptable, both these strategies may be required within a university setting to engage different types of male students. Informal drop-in interventions may not improve mental health outcomes, but instead help engage hard-to-reach male students, provide a point of contact, and triage them to appropriate mental health support if needed. Certainly, informal spaces can assist with building rapport, trust, and familiarity with support which are often associated with future help-seeking (Seidler, et al., 2018; Liddon, et al., 2019; Gulliver, Griffiths, & Christensen, 2012).

Student mental health research tends to ignore gender and sex differences (Howard, et al., 2017; Ryan, et al., 2019). Such investigations do not position themselves to be gender-sensitive and instead adopt a gender-neutral approach to mental health research. Due to this,

it is likely that the male students who do take part are not representative of the wider male student population who are hard-to-reach (Howard, et al., 2017; Ryan, et al., 2019). Gender-neutral approaches may undermine the validity and efficiency of scientific findings, resulting in the inappropriate application of findings contributing to a detrimental impact for both male and female students (Howard, et al., 2017). Future research is required to explore the overall effectiveness and acceptability of informal interventions such as drop-in's, social spaces, or student workshops for male students that are not primarily focused on mental health and well-being.

Strengths & Limitations

A strength of this investigation is that the components identified from our systematic review and qualitative work consisting of: delivering mental health information, explaining how to identify mental health symptoms, incorporating active-problem solving techniques to cope with distress, sign-posting mental health services, re-framing help-seeking to align with masculine values, avoiding labels of mental health; and to use both formal and informal approaches were acceptable for male students (Sagar-Ouriaghliet al., 2019; Sagar-Ouriaghli, et al., 2020a; Sagar-Ouriaghli, et al., 2020b). Furthermore, this chapter provides a detailed description of the intervention's active ingredients through the use of BCTs to enable healthcare and education providers to replicate, implement, and refine the proposed interventions.

By obtaining scores for self-stigma, previous mental health support, and conformity to masculine norms a richer picture of the types of male students who did engage is provided. This enhances the clinical applications of the current findings and provides more constructive evidence as to how to engage male students who are often hard to reach and potentially at greater risk of mental health. This is also a different approach than that traditionally used in mental health services, but may be more similar to the informal method used in the men's sheds movement (Wilson & Cordier, 2013; Morgan, Hayes, Williamson, & Ford, 2007).

Despite this, there are limitations. Although a sample size of 24 was obtained, this was split across three different interventions with smaller sample sizes. It is likely that these are underpowered to detect any significant changes (Maxwell, 2004; Krzywinski & Altman, 2013). Nonetheless, pilot interventions remain essential as they are informative about the research process and can indicate likely outcomes (Van Teijlingen & Hundley, 2001). Instead, pilot

studies are the best way to assess feasibility and attention should be given to the descriptive nature of each sample and the acceptability of the interventions (Thabane, et al., 2010).

Intervention 3 was an informal drop-in whereby students could attend without pre-registering, come in and out as they pleased, and attend as few sessions as they liked. As this was a formal investigation, informed consent and the completion of questionnaires was still required. This discouraged certain students from attending and was a barrier for 6 students who opted against consenting to take part. Of those who did consent, reassurance surrounding confidentiality and anonymity of the data collected was required. Indeed, this may align with this hard-to-reach group as they may be less familiar with mental health support - including research, less trusting of mental health professionals, and more fearful of how they will be perceived (i.e. stigma) (Yousaf, Grunfeld, & Hunter, 2015). This is important to consider, as research processes can be a barrier when evaluating and engaging male students with mental health initiatives.

Due to logistical difficulties within the research team and to prevent cross-contamination between the interventions, it was not possible to pilot all three interventions at the same time. This led to different recruitment approaches, with intervention 1 making use of the welcome fair at the start of the academic year when students have more time available and motivation to engage (Sagar-Ouriaghli, et al., 2020a). Intervention 2 was delivered after the Christmas/winter-break. Students at this stage have different time resources available. They may have more time due to feeling more settled with their academic studies, or less time due to coursework, exams, and other deadlines. Similarly, greater emotional stress related to coursework and exam pressure may be present, this may encourage them to access support or reduce their availability to seek help (Sagar-Ouriaghli, et al., 2020a). Intervention 3 was delivered towards the end of the term (as opposed to the start as seen in interventions 1 and 2), causing other restrictions. The fourth week of delivering the drop-in coincided with student reading week – where students course content is solely delivered online and via textbooks. This meant there were less students utilising the café and reduced the opportunity for students to engage. These differences may have impacted the sample of students engaging, acceptability scores, and uptake.

Conclusion

The current investigation provides insight into different strategies and approaches to designing gender-sensitive mental health interventions for male students. Although formal and structured mental health interventions that provide mental health information alongside self-help techniques and skills are acceptable to male students, more informal approaches such as drop-ins or social spaces are equally acceptable. Furthermore, these informal approaches may be more acceptable and have better uptake for hard-to-reach male students who hold stigmatising beliefs, conform to maladaptive masculine traits, have pre-existing negative help-seeking attitudes, are of ethnic minority backgrounds, and who are less likely to have come in to contact with mental health services in the past – which is more representative of the male student cohort. Indeed, informal interventions may provide better uptake of male students and improve their engagement. Such approaches will help to facilitate help-seeking behaviours, increasing the opportunity to combat mental health difficulties, and possibly reduce the risk of suicide. Moving forward, future research examining the effectiveness and acceptability of informal mental health initiatives and how best to tailor them to male students is required as this remains a relatively unexplored therapeutic opportunity that has a lot of promise.

Chapter 6:

Discussion

Introduction **177**

Summary of Chapters **177**

Key Findings **182**

Engaging Vulnerable and Hard-to-Reach Male Students 182

Novel Framework for Developing Male-Sensitive Interventions........ 184

A Model of Male Help-Seeking 185

Implications **192**

A Male-Friendly Tool to Evaluate Pre-existing Services and Individual Factors 192

The Feasibility and Scalability of Gender-Sensitive Interventions 194

Social and Political Implications........ 197

Strengths of this Thesis **199**

Complementary Research Methods 200

Contribution to the Evidence Base 201

Limitations of this Thesis **202**

Generalisability and External Validity........ 203

Research as a Barrier 205

Future Directions **206**

Standardising BCTs 207

Research and Intervention Recommendations 208

Potential Obstacles........ 210

Conclusion of this Thesis **211**

Introduction

Recently there has been an increasing demand for male-sensitive mental health interventions (Bilsker, Fogarty, & Wakefield, 2018), reflected by the increase in evidence-based recommendations on how to design effective and feasible interventions for men and male students (Seaton, et al., 2019; Men's Health Forum, 2015; Robertson, Bagnall, & Walker, 2015; Patrick & Robertson, 2016; Pollard, 2016; River, 2018; Robertson, et al., 2018; Kivari, et al., 2018; Baker, 2016; Cochran & Rabinowitz, 2003; Monaem, et al., 2007; Seidler, et al., 2017; Oliffe & Han, 2014; McKelley & Rochlen, 2007). Despite the theoretical understanding of help-seeking and the subsequent recommendations being grounded in evidence-based work, the real-world interventions that have been developed, designed, and tested on men and male students often fail to refer to, incorporate or build upon these evidence-based recommendations. Subsequently, there appears to be a disconnect between evidence-based recommendations and the lack of evidence-based interventions that have been designed based on these. To address this gap, the aim of the current PhD was to design and develop possible interventions for male students to improve their uptake and engagement with mental health initiatives whilst being grounded in evidence-based practice. By doing so, it is hoped that a detailed evaluation and future refinement can be completed to enrich the evidence base and improve the steps taken when designing future mental health initiatives for male students. Three gender-sensitive pilot interventions were developed and evaluated in accordance to the MRC's framework for developing complex interventions. This involved incorporating evidence from pre-existing published literature, carrying out a systematic review of mental health help-seeking interventions for men, and a qualitative focus groups study conducted with male students.

Summary of Chapters

The rationale and reasoning as to why there is a need for mental health initiatives tailored specifically for men was outlined in Chapter 1. In this chapter, evidence for men and male students being at higher risk of suicide coupled with a lower propensity to seek help were discussed. In summary, some of the most widely cited reasons why men and male students were not engaging with mental health support were various forms of stigma, conformity to masculine norms, inadequate mental health literacy, other demographic factors such as age,

ethnicity and sexual orientation, and how current mental health services and research fail to acknowledge the role of gender.

Although there is extensive evidence about why men fail to engage and what the pertinent barriers are, there is less consensus as to what works and what can encourage them to seek help. This is an essential piece of information that is needed to design effective and acceptable interventions for men and male students. To identify such information, chapter 2 presented a systematic review in accordance with the PRISMA guidelines that identified specific strategies male-sensitive mental health interventions have used to improve help-seeking (Sagar-Ouriaghli, et al., 2019). Due to the heterogenous populations and interventions, it was not appropriate to conduct a meta-analysis as the results would not be meaningful (Higgins & Green, 2005). Instead, 18 key behaviour change techniques (BCTs) (Michie, et al., 2013) were identified and were then categorised into seven key processes that could encourage men to seek help. These key processes were: (1) incorporating male role models to normalise mental health symptoms and reduce stigma, (2) providing mental health information to improve mental health literacy, (3) teaching men how to recognise and manage symptoms to assist with symptom identification, (4) adopting more active-problem-solving approaches as men prefer solution focused frameworks, (5) to encourage and motivate men to seek help, (6) sign-post mental health services as men need guidance on how and where they can access support, and lastly, (7) to embed male stereotypes such as responsibility and strength within interventions and recruitment material (Sagar-Ouriaghli, et al., 2019). Despite the heterogeneity of interventions, these key processes were nevertheless consistent across male-sensitive interventions for a range of mental health diagnoses. Furthermore, these key processes mapped well onto other findings found in the evidence base regarding men's help-seeking. For instance, incorporating male role models within mental health campaigns to reduce stigma can be seen in the media with famous television stars and celebrities often being the face of these initiatives (Guardian, 2017). In a research context, this has also been supported as using celebrities is an effective tool for reducing mental health stigma (Ferrari, 2016).

Similarly, providing mental health information to improve mental health literacy and teaching men how to identify mental health symptoms is congruent with the wider evidence base, as multiple findings have reported that men tend to have poorer mental health literacy, which has a direct impact on help-seeking (Lee, et al., 2020; Hadjimina & Furnham, 2017;

Cotton, et al., 2006; Haavik, et al., 2017). Another example is that conformity to masculine norms is frequently reported as a key barrier to help-seeking, and by highlighting that effective interventions appear to frame help-seeking to align with positive male values (e.g. help-seeking is a sign of responsibility) fits this narrative. Despite these findings, there may be other key processes that were not identified. The BCTTv1 has 93 BCTs (Michie, et al., 2013) and the systematic review outlined in chapter 1 only identified 18 by two reviewers during the systematic review. Subsequently, it is not possible to reach a totally definitive conclusion that these are the only and most effective techniques but looked the most promising.

Following this, chapter 3 explores whether these same recommendations, or if any other more nuanced considerations, would be recommended by male students themselves. Qualitative focus groups were therefore conducted with 24 male students to identify what they thought was important when designing mental health interventions. The results from the focus groups highlighted the importance of protecting male vulnerability, providing a masculine narrative of help-seeking, male students' difficulty knowing when and how to seek help, and how to promote mental health interventions that would engage male students. Furthermore, this qualitative investigation identified that the format and structure of the intervention was also important, although interestingly the participants failed to reach consensus as to what this should be, with half preferring a 'formal' format and half an 'informal' format. These findings provide greater insight into the barriers male students face when seeking help and what practical solutions can be implemented to combat them. As with the systematic review, despite the differences found in the focus groups, these findings largely coincided with much of the evidence base – highlighting that male students require mental health initiatives to feel safe and protect their emotional vulnerability, possibly as a way of overcoming stigmatising beliefs (Seidler, et al., 2018; Gulliver, Griffiths, & Christensen, 2012; Rickwood, et al., 2005). Similarly, irrespective of intervention preference (i.e. formal vs informal) male-students expressed how masculine norms can also deter them from seeking help, and once again re-iterated the findings from the systematic review by highlighting that if help-seeking was indeed normalised and positioned to fit with positive masculine norms, they would be more likely to access support (Sagar-Ouriaghli, et al., 2020a). Furthermore, the focus groups provided additional contextual information about the barriers already outlined within the literature, particularly with issues relating to mental health literacy. The focus groups provided additional information regarding how mental health symptoms should be

explained or communicated, for example explicit information about when specific symptoms warrant formal professional help to provide a means for self-evaluating their own well-being, which would encourage help-seeking (Sagar-Ouriaghli, et al., 2020a). Lastly, other more subtle recommendations that have not been widely discussed were identified. This included suggestions about formal and informal interventions, and how to promote/advertise mental health initiatives to male students. Nonetheless, the focus group study has limitations. The absence of participant validation and the occurrence of reducing the data to identify themes limits the extent to which these findings can be applied to other contexts, as these methodological issues may result in some of the themes not aligning with participants' views or more subtle themes being overlooked (Braun & Clarke, 2006; Alhojailan, 2012).

Taking the findings from the systematic review (chapter 2) and focus group investigation (chapter 3), chapter 4 then described how to synthesise these recommendations in conjunction with additional published theoretical evidence to develop a framework for designing mental health interventions to address help-seeking in male students. To do so, the MRC's framework for developing complex intervention's was adhered to (Craig, et al., 2008; O'Cathain, et al., 2019). Here, additional frameworks and theory-informed models were utilised. This includes the Access to Care Model (Gask, et al., 2012), the COM-B model of behaviour change (Michie, Van Stralen, & West, 2011), the Behaviour Change Wheel (Michie, Van Stralen, & West, 2011), and the GUIDED checklist (Duncan, et al., 2020). The new proposed framework identified 17 key factors which have been highlighted to influence male students help-seeking behaviours (Table 4.1). These specific factors encourage a detailed and transparent account of how to develop mental health interventions for male students by mapping intervention content to these factors. By incorporating intervention content that is specific to these 17 factors through the use of the COM-B model of behaviour change (Michie, Van Stralen, & West, 2011) and BCTTv1 (Michie, et al., 2013), the intention is for this work to be replicable and informative for future researchers and healthcare providers. Despite this, the 17 factors highlighted in chapter 4 are derived from a range of different sources, some of which are specific to the adult male help-seeking literature. In turn, this may introduce bias and limit the extent to which these recommendations can be applied to male students. Similarly, by adopting this systemic, all-encompassing approach, more nuanced recommendations for different sub-groups of male students may be overlooked. Nonetheless, this framework is the only framework tailored

specifically to the development of gender-sensitive interventions for male students and provides a comprehensive overview of the evidence base.

Lastly, chapter 5 reported on using the framework to develop and pilot three gender-sensitive mental health interventions for male students to compare three different intervention approaches (formal psycho-educational model vs positive masculinity model vs informal drop-in model) regarding their acceptability and uptake/engagement, with particular focus on which male students who engaged. Secondary outcomes pertaining to help-seeking attitudes, help-seeking behaviours, and mental health status were also examined. A range of techniques and strategies were deployed within these interventions as indicated by past research. The findings indicated that all three pilot-interventions were acceptable for male students, but the informal 'drop-in' intervention (Intervention 3; Man Cave) may be more effective at engaging hard-to-reach male students who had greater conformity to maladaptive masculine traits, higher self-stigma, negative perceptions of help-seeking, were less likely to have sought mental health support previously, and who were from an ethnic minority background. The findings could be seen as quite surprising as many of the previous findings have related to more formal, largely psycho-educational, interventions. It may be that engaging men may need a more informal approach even though the intervention may be more formal and psycho-educational. The potential of this informal intervention supports evidence from a less well-researched approach, which has been evaluating interventions such as 'Men's sheds' (UK Men's Sheds Association, n.d; Milligan, et al., 2013).

By synthesising previous recommendations and operationalising them through the use of the BCTTv1, it was possible to design three new feasible and acceptable interventions for male students, irrespective of the intervention structure and format. Furthermore, the addition of an informal intervention that incorporated content that provided information about mental health symptoms and services, used male-friendly language, and made use of active problem-solving techniques, demonstrated that it is also feasible to engage male students who traditionally do not come into contact with mental health support, or who are typically hard-to-reach. This was not observed in the formal interventions even though the BCTs utilised by them were the same.

However, as this was a feasibility study recruiting a small number of participants, it is not possible to say whether this intervention is efficacious with regards to changes in (formal or informal) help-seeking or mental health outcomes (Maxwell, 2004; Krzywinski & Altman,

2013). Only preliminary, yet important, insights into the acceptability of the interventions can be obtained (Thabane, et al., 2010). Lastly, as this was a feasibility study with limited resources, it was not possible to deliver the interventions at the same time point within the academic year. Consequently, this could have introduced selection bias and sampling bias into these interventions and differences in uptake may be due to this, as opposed to the intervention content/format directly. Nonetheless, it provides preliminary insight into how to design feasible and acceptable mental health interventions for male students and what the important features healthcare/university providers should consider when trying to engage more male students.

Key Findings

As discussed throughout, key barriers of stigma, conformity to masculine norms, mental health literacy, and prior help-seeking attitudes all interplay with one's willingness to seek support. Male students who hold high stigma (especially self-stigma), endorse particular masculine norms, and who have poor mental health literacy, will be less inclined to reach out for mental health support. Certainly, this PhD candidate has held these barriers, alongside other factors, at the forefront of his mind during the development and evaluation process of the pilot interventions. By doing so, greater insight into the types of male students who do engage with services, and how different intervention structures can engage different types of male students in the context of particular help-seeking barriers has been provided. The key findings from this PhD research include greater understanding of what has worked previously in male-sensitive mental health interventions. Insight into what male students themselves wish to see in mental health initiatives and a novel framework on how best to design interventions that are acceptable to male students has also been provided. Such findings enable better replication and guidance for intervention providers, and preliminary results as to how best to engage hard-to-reach male students who have greater barriers to help-seeking.

Engaging Vulnerable and Hard-to-Reach Male Students

Despite all three pilot interventions being feasible and acceptable, specific attention must be given to the type of male students each intervention attracted. Both interventions 1 (Men-

Tality) and 2 (Psychological Strength) engaged male students who held relatively low self-stigma, low conformity to masculine norms and maladaptive masculine traits such as power over women and heterosexual self-preservation, higher conformity to adaptive masculine traits such as winning, more favourable help-seeking attitudes, and who were more likely to have sought mental health help in the past. This indicates that both the formal interventions (Intervention 1; Men-Tality and Intervention 2; Psychological Strength) were better at engaging male students who have relatively few barriers when it comes to engaging with mental health support. Indeed, this may be reflective of pre-existing mental health services, whereby the men that do actually engage represent a small minority of men who have fewer barriers to overcome from the outset.

Conversely, male students attending the informal intervention (Intervention 3; Man Cave) held higher stigmatising beliefs, greater conformity to masculine norms and maladaptive traits, lower help-seeking attitudes, and were less likely to have sought help in the past than expected for this population group. These students are likely to be more representative of the male students who fail to engage with mental health support and are at greater risk of suicide and substance misuse, since they have significantly more attitudinal barriers to navigate through when it comes to managing their mental health.

Considering these points, informal interventions similar to intervention 3 (Man Cave), indicates the promise such interventions may have with engaging male students who are typically hard to reach and reluctant to engage with support. Furthermore, high self-stigma, greater conformity to masculine norms, poor help-seeking attitudes, and previous service use have been shown to increase the risk of suicide (Oexle, et al., 2017; Oliffe, Han, Ogrodniczuk, Phillips, & Roy, 2011; Apesoa-Varano, Barker, & Hinton, 2018; Coleman, Feigelman, & Rosen, 2020; Cleary, 2017). Therefore, it is possible that informal interventions may be more suitable for male students who have not engaged with mental health support in the past and who are at greater risk of suicide. While this needs further testing, this finding could be used to develop and refine new mental health initiatives to engage vulnerable male students, thus helping to reduce the gender disparity seen in mental health service use.

Certainly, this finding supports other current approaches that have developed to increase engagement. Support groups such as Men’s Sheds, ManHealth, Men’s Speak, and the ManKind Project all appear to do well at engaging men and encouraging them to talk about their mental health (ManHealth, 2020; Men's Speak, 2020; The ManKind Project, 2020).

These approaches provide informal spaces to make new friends and create safe spaces to talk about mental health (similar to the informal intervention presented within chapter 5). The primary goal is to create a safe place for men to hang out and talk about their emotional struggles. Occasionally they provide social events such as running, skydiving, or camping to provide more social opportunities to meet and socialise with other men (ManHealth, 2020; Men's Speak, 2020; The ManKind Project, 2020). Despite their success and appeal to men, they lack formal evaluation in the context of research and science. Formal evaluation through the use of RCTs to investigate the acceptability, feasibility and effectiveness of these interventions is required. Nonetheless, they provide preliminary insight into what could be the most suitable way to engage the majority of men and male students with mental health support. Hopefully, this will then lead to a greater willingness to seek formal help if necessary.

Novel Framework for Developing Male-Sensitive Interventions

Although previous mental health interventions have been designed specifically for men and male students to improve their uptake, engagement, and outcomes in a mental health context (Watkins, et al., 2017; Syzdek, et al., 2016), this PhD research provides the first in-depth theoretical framework that outlines the specific factors relevant to help-seeking in men, how these factors can be mapped onto a model of behaviour change, and what specific behaviour change techniques are needed to elicit this behaviour change. This framework therefore provides insight into how such interventions should be developed for them to be acceptable. The development of such a framework provides a novel contribution to the literature, allowing for an improved understanding of help-seeking in men and male students.

More specifically, this framework attempts to provide solutions about how to overcome the current issues faced by education and service providers as the evidence base is primarily focused on ‘why’ men and male students do not engage, as opposed to ‘how’ this issue can be resolved. Subsequently, the information and recommendations provided within this framework can be utilised by other researchers and service providers to test, evaluate, and further refine mental health interventions for men and male students. Furthermore, as seen throughout this PhD, the specific BCTs that can be employed within mental health interventions to help men and male students improve their uptake and engagement are discussed. This can be seen within the systematic review, intervention development, and intervention evaluation.

A Model of Male Help-Seeking

The extensive and complex process that men and male students must navigate through to engage with and receive appropriate mental health support has been highlighted throughout this thesis. The pertinent barriers that appear to influence help-seeking behaviours in men and male students often revolve around mental health literacy, conformity to masculine norms, various types of stigma, gender biases seen in mental health services, and the lack of male-appropriate treatment options. Throughout the course of this PhD, it has become increasingly apparent that all these barriers are equally important in reducing men's willingness to seek help for mental health. As demonstrated in chapter 5, there are a range of factors that appear important when understanding male help-seeking. By being able to conceptualise and provide a comprehensive list of particular barriers and facilitators that are involved in the pathway to help-seeking, greater ease and clarity can be achieved when attempting to understand this complex process. Furthermore, these barriers do not occur within a vacuum and are often seen to influence or interact with one another. This helps to explain the complex nature of help-seeking and the difficulty service providers have with engaging men with mental health support. As this PhD has given considered attention to all barriers and an extensive synthesis of the evidence base about male help-seeking, a deep and enriched understanding of help-seeking in men has been gained by the PhD candidate. This enriched understanding derives from consolidating and reading peer-reviewed publications throughout the course of this PhD, since a deep synthesis of help-seeking is required in order to produce such a thesis. This understanding can be summarised through a theoretical model within this thesis (Figure 6.1). Thus, a key finding from this PhD research is a more detailed and comprehensive understanding of help-seeking in men and male students. This can be depicted as a theoretical systemic model to help understand these barriers and their interacting effects (Figure 6.1).

This model includes a large number of barriers and facilitators that have been shown to influence male help-seeking in the literature. Maladaptive coping is placed within the centre of the model as this is typically the end point men and male students reach when they decide not to seek help, or when the help they have sought is unsuitable, requiring them to find other means to manage their emotional distress. The model highlights an extreme example of maladaptive coping as suicide, which is often characterised as an act of poor self-

control, avoidance of failure or weakness, a way to uphold emotional self-sufficiency, and an escape from emotional despair (Möller-Leimkühler, 2003; Rasmussen, Hjelmeland, & Dieserud, 2018; River, 2018; Oliffe, Ogrodniczuk, Bottorff, Johnson, & Hoyak, 2012). It has also been seen as a sign of depression (Baker, 2018a; Baker, 2020), even though studies often show that this is not the case (Batty, et al., 2018). However, maladaptive coping can extend to any coping strategy men deploy to cope with emotional distress that results in negative consequences. This may include alcohol/substance abuse, gambling, working excessively, social withdrawal, and negative ideation (Meehan, Peirson, & Fridjhon, 2007; Möller-Leimkühler, 2003; Player, et al., 2015).

The red boxes outlined in figure 6.1 highlight broader, more general barriers which have their own sub-components. For example, mental health literacy can be divided into knowledge of mental health symptoms, knowledge of mental health services, ability to self-identify mental health symptoms, and the ability to identify suitable mental health services for the presenting problem. Any deficiency in these respective domains can negatively influence help-seeking via multiple different pathways, for example: poor mental health literacy leads to an in increase stigma, reduction in one's willingness to seek help if the presenting problem is poorly understood, uncertainty around the types of support they are eligible to receive, and diminished trust in mental health services if the individual has limited knowledge about services and how they operate, particularly when referring to confidentiality (Figure 6.1).

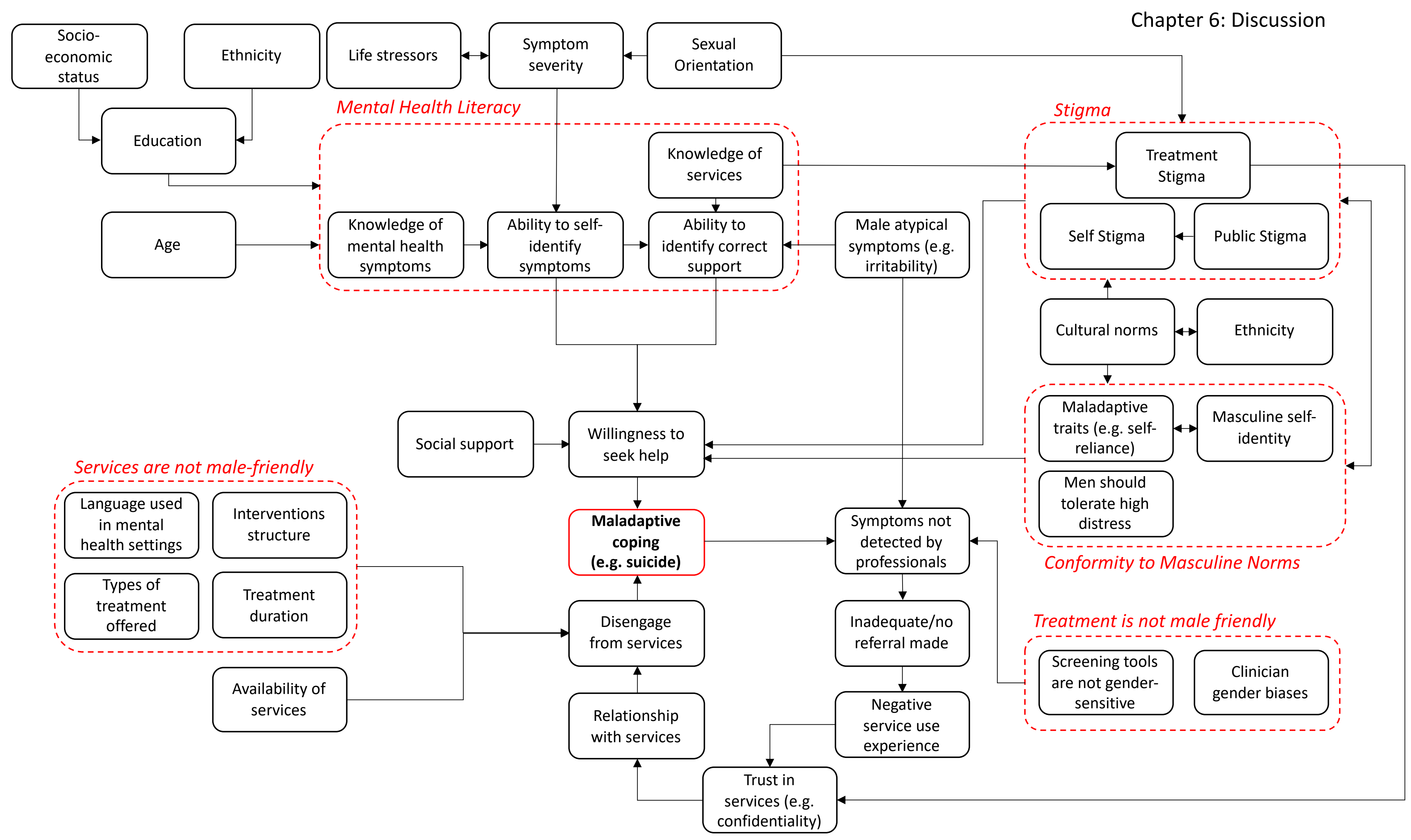


Figure 6.1. A Theoretical Model of Male Help-Seeking.

This model therefore provides insight and direction for service providers about how to interrupt and change maladaptive coping/poor help-seeking for male students and engage them with mental health support. This model can help offer alternative explanations as to why some men and male students seek help whilst others do not, as there may be differences situated anywhere along this very long pathway to male students seeking and obtaining help. For example, this model can offer alternative explanations as to why some interventions can elicit positive help-seeking whilst others do not. For instance, a promising therapeutic intervention (i.e., help-giving intervention such as psychoeducation) may be developed but is unable to engage the correct population group. By referring to this model, this process can be explained by factors that occur prior to engaging within the help-promotion process, such as mental health literacy, a range of demographic factors, stigma, and conformity to masculine norms, which can negatively influence one's willingness to seek help. Alternatively, evidence-based stigma campaigns and interventions may still fail to engage men with mental health services possibly due to other interacting factors such as not accommodating men and male students of different masculine configurations or the interventions they engage with are not male friendly (i.e., unsuitable help-giving such as the absence of solution focused approaches).

Another case for this theoretical model is that it provides a framework in which researchers in this field can test the relationship/influence of these constructs on help-seeking. Greater insight into the psychological processes which occur along any of these paths (denoted by arrows) would be of great value for this field. One example might include investigating the relationship between male atypical depressive symptoms and the ability to identify the correct support further. Another example could explore what specific cultural norms/practices influence the presentation of mental health stigma and certain masculine norms. As the understanding of these pathway interactions improve, a better understanding of male help-seeking can be achieved, and more effective recommendations and interventions can be proposed.

Certainly, each domain can be targeted individually, however it is advisable to take a more systemic approach, as this is likely to be a complex issue that requires multiple working parts to elicit behaviour change. Different services are likely to have different patterns of providing support and it will be important to analyse and understand where the weaker points might be. For example, there may not be any gender sensitive interventions.

Conversely, there may be, but the way the service is provided does not help men who are feeling vulnerable about seeking help, or their current approach to sign-posting services may not be clear enough.

By interrupting these negative pathways to maladaptive coping, more positive help-seeking behaviours can be achieved. Furthermore, this model highlights the types of content and strategies to address. For instance, addressing stigma and conformity to masculine norms can be addressed through workshops, campaigning, and additional supportive information that is provided to university students, enabling a direct improvement in help-seeking that takes a bottom-up approach. Likewise, if mental health literacy is highlighted as a weak area, then more can be offered in this area.

Similarly, changing the types of services provided and making the treatment process more male friendly highlights institutional or structural changes that can facilitate help-seeking. In this instance, training, policy initiatives, and service management could have an in-direct effect on help-seeking that arises from a top-down approach. As we have depicted above, a second model can be drawn to highlight particular strategies in each domain that can combat maladaptive coping and facilitate help-seeking (Figure 6.2). This second model (Figure 6.2) serves a different purpose to the first. The first model provides a thorough theoretical overview of male help-seeking, whilst also offering potential research areas to explore and better understand. This second model goes a step further and provides suggestions about the type of interventions to deploy at each stage. Here, it becomes apparent that the target area/population of a newly developed intervention is of great importance, and where one intervention seeks to combat a range of these barriers, more bespoke and tailored content is required. For instance, it may not necessarily be appropriate to provide masculine narratives of help-seeking or adopt a positive masculinity approach (conformity to masculine norms) if we know the target population present with poor mental health literacy as this is unlikely to elicit change. Additionally, upgrading services and training clinicians that are not aware of gender differences in the context of mental health (better help-giving due to male friendly treatment) is unlikely to improve male service engagement if mental health stigma is high in the community they wish to serve (an area for help-promotion). Given this, efforts to better understand the specific barriers experienced by males and male student populations that intervention providers and/or public health interventions wish to serve is needed (refer to model 1, Figure 6.1). Where a comprehensive

understanding of the population of interest is achieved, appropriate intervention strategies can be developed. In a case where the population of interest has more than two key barriers (e.g., high stigma and unfriendly male services), a newly developed intervention will need to address both of these in tandem and provide help-promotion (to tackle stigma) and change help-giving (to make services more male friendly by using male friendly language or offering short treatment options). Indeed, this is something to consider for the future of the field and will be discussed in the future directions section of this chapter.

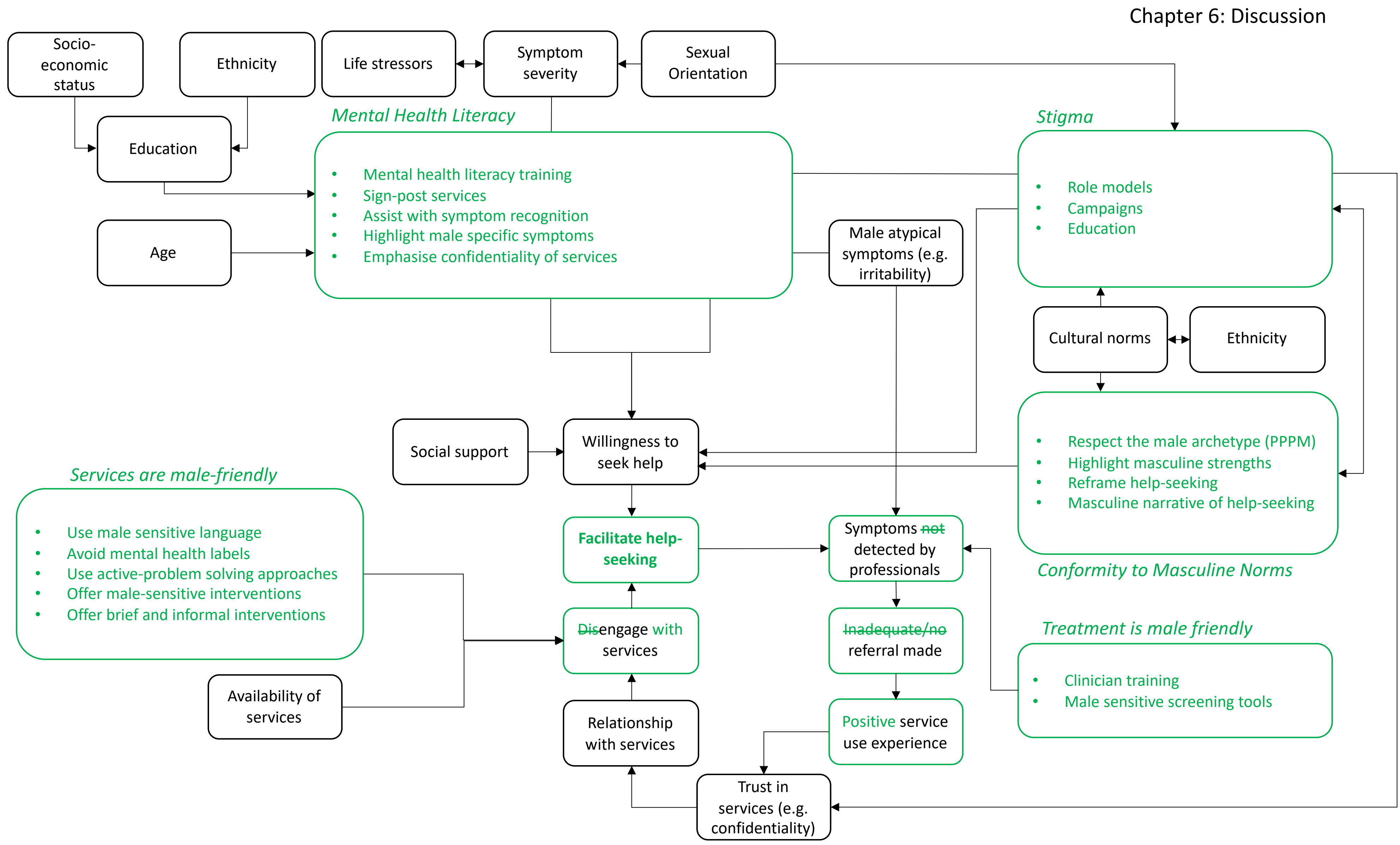


Figure 6.2. An Intervention Model to Facilitate Help-seeking.

As far as the current PhD candidate is aware, both these models of male help-seeking appear to be the most comprehensive to date. Previous models of male help-seeking or male-suicide appear too one-dimensional, explaining men's reluctance to seek help as a reflection of a psychological abandonment mechanism (Kingerlee, 2012), whereas others attribute poor help-seeking simply to inadequate mental health services (River, 2018). Similarly, male suicide is only explained by stressful life events, impulsivity, and hopeless in the presence of a mental health disorder (Mann, et al., 2010; Oliffe, et al., 2012). Other models explain suicide in the context of just one of the factors listed above, such as masculinity, (Pirkis, et al., 2017), or mental distress (Biddle, Donovan, Sharp, & Gunnell, 2007). They often fail to acknowledge the interaction between these different factors. Although these models are supported by evidence, they only tell part of the story. The current models provide a more systemic explanation of men's help-seeking and suicide, incorporating a multitude of different factors as well as their interacting effects.

The proposed models also synthesise evidence from male help-seeking across different age groups, including both students and non-students. As mentioned previously when discussing the framework for developing gender-sensitive interventions for male students, this model must be interpreted slightly tentatively as the recommendations and interactions between some of these factors may not transfer directly to male-students, or additional interacting effects or other factors may need to be added to the model. Nonetheless, it provides a more comprehensive explanation of help-seeking seen in men and male students that is multidimensional, incorporating the complex interactions between various different factors.

Implications

The specific implications for each investigation are outlined in their respective chapters. Implications regarding the pilot interventions are discussed in detail within chapter 5. Here, broader implications about the impact of this work shall be discussed and the broader relevant practical and clinical applications will now be addressed.

A Male-Friendly Tool to Evaluate Pre-existing Services and Individual Factors

Following on from the models outlining the complex components that contribute to men and male students engaging in maladaptive coping strategies such as suicide (Figure 6.1 and 6.2),

it would be possible to develop a tool to assess how male-friendly pre-existing services are. Factors such as mental health literacy, conformity to masculine norms, stigma, and other key demographic factors (e.g. age and sexual orientation) lie outside the control of mental health services, but it may be possible to assess the different factors (e.g. mental health literacy, stigma, conformity to masculine norms) of the target male population group and provide appropriate training. For example, if a service identifies that men are not coming forward because they perceive that particular service as stigmatising or because they do not understand the benefits of the treatments offered (i.e. mental health literacy), different strategies can be deployed to address this. Stigma may be reduced by 'Time to Change' training events (Evans-Lacko, et al., 2014; Henderson, et al., 2012) and mental health first aid may be possible to organise to improve mental health literacy. Other more bespoke training may also be possible.

Alternatively, we could also evaluate how accommodating and considerate services are towards men generally. Factors pertaining to male-friendly services and male-friendly treatment are much more the direct responsibility of the service provider. Therefore, a tool such as a questionnaire or checklist could be used to evaluate how male-friendly a particular mental health service is. An example checklist is outlined in table 6.1.

Table 6.1. Male-friendly Service Checklist.

Question	Factor	✓
Are male role models/service user experiences used with the promotion or advertising of the service?	Stigma	
Is the service accessible by different groups of men? (this includes advertising in male spaces, settings, or environments)	Mental health literacy	
Is it clear that the service is confidential?	Mental health literacy	
Does the service welcome those with atypical symptoms? (e.g. substance misuse, irritability, violence)	Mental health literacy	
Does the service acknowledge male needs, values, or norms within treatment?	Masculine norms	
Does the service align engagement with male values? (e.g. "take responsibility for your health")	Masculine norms	
Does the service need/include male sensitive diagnostic measures?	Male-friendly treatment	
Does the service include male gender within diversity training? Are your clinicians aware of gender differences or their own gender biases (if there are any)?	Male-friendly treatment	

Does the service incorporate non-mental health labels? (e.g. stress instead of depression/anxiety)	Male-friendly services
Does the service offer problem-focused or solution focused approaches where possible (e.g. motivational interviewing)?	Male-friendly services
Does the service provide male-only interventions (group or individual treatment)?	Male-friendly services
Does the service offer informal interventions?	Male-friendly services
Does the service offer short/brief interventions?	Male-friendly services

A composite score from this checklist can be obtained, where higher scores indicate a more male-friendly service. Indeed, this would be useful for service providers as it can support them with insight into what they are currently doing well and areas they might need to improve on. Certainly, it is likely to be informative about how to engage more men with their service if needed. Such a tool will need to be evaluated further, through more formal means of assessment. In this instance, consulting service providers, male service users, stakeholders, researchers, and male charities are recommended as participants, as this will assist with identifying key questions that are important for these stakeholders.

If mental health services do proceed in this manner with attempts to make their services more male-friendly, considerations about the impact this will have on women, LGBTQ+ groups, and other left behind or disadvantaged groups (e.g. black and minority ethnic groups) also need to be considered. Certainly, other sub-groups or disadvantaged populations are likely to compete for resources. In the event that funding is allocated to more male-friendly services, wider social political debates surrounding male-privilege could arise. This issue will be discussed in more detail under the social and political implications section of this chapter.

The Feasibility and Scalability of Gender-Sensitive Interventions

A pertinent theme that emerges from each chapter within this thesis is the difficulty service providers have with engaging men and male students with mental health support. Therefore, it stands to good reason that there is a need to develop gender-sensitive interventions for male students to overcome this. The penultimate investigation evaluating the pilot interventions highlights that it is feasible to design gender-sensitive interventions specifically for male students that they deem acceptable. All three pilot interventions, irrespective of

their name, format, and content were deemed acceptable by the participants. The mean scores for overall acceptability, affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectives, and self-efficacy were rated favourably. Furthermore, no significant differences in regard to acceptability were observed between the interventions which may indicate that a specific intervention model (e.g. psycho-educational, positive masculinity, or informal drop-in) is not the key ingredient in developing an acceptable intervention for this population group. However, intervention 3 (informal drop-in) appeared better at engaging hard-to-reach male students, indicating that it was more acceptable to this particular sub-group of male students. This hard-to-reach group is likely to be more representative of the wider male student population, since key barriers at baseline (help-seeking attitudes, self-stigma, and conformity to masculine norms) did not differ from male student norms. This was different for interventions 1 (psycho-educational model) and 2 (positive masculinity model), as the participants either had more positive help-seeking attitudes, lower self-stigma, or higher and lower degrees of conformity to certain adaptive and maladaptive masculine traits when compared to male student norms, respectively. However, as these interventions were not offered at the same time, some caution is needed to be exercised when interpreting these results.

All the pilot interventions delivered as part of this PhD research were brief, delivered by a PhD and university student, and required minimal equipment/resources. Although preliminary, there is indication that the same or similar initiatives are likely to be cost-effective, resource light, and affordable for universities, thus making it possible to scale up the proposed pilot interventions across multiple universities. However, as these pilot interventions still presented difficulties with a low uptake of male students and no formal evaluation of their cost-effectiveness was undertaken as part of this PhD, further testing is essential to examine the interventions that engaged the most students and which may have led to the greatest amount of help-seeking after the brief intervention. Nonetheless, a detailed framework on how these pilot interventions were designed and what features are important to include within male-sensitive interventions has been outlined in chapter 4 and is published in the International Journal of Environmental Research and Public Health and made available via open-access (Sagar-Ouriaghli, et al, 2020b). This allows for such interventions to be scaled as university service providers can replicate or adapt acceptable male-sensitive interventions to their financial needs and resource requirements.

Furthermore, online interventions or e-interventions may assist with the feasibility and scalability of future mental health interventions for male students. Online mental health interventions have shown promise in helping reduce mental health stigma and improve mental health literacy (Griffiths, Christensen, Jorm, Evans, & Groves, 2004), which are key barriers to help-seeking. Similarly, young adults, including young men, are more likely to use the internet to look up information about mental health issues (Mitchell, McMillan, & Hagan, 2017). Certainly, online interventions can feel safer for men and male students as they are likely to have greater anonymity and confidentiality, whilst facilitating independence in a manner that is non-confrontational (Mitchell, McMillan, & Hagan, 2017; Ellis, et al., 2014), which are also important facilitators of help-seeking. Considering this, it may be possible to adapt the pilot interventions outlined in this PhD and incorporate similar BCTs into an online intervention. In turn, this could help reduce help-seeking barriers, reach a larger audience of male students, and provide support 24 hours a day at potentially a reduced cost (Ellis, et al., 2014). However, online mental health interventions often have moderate-to-high dropout rates, whereas face-to-face interventions are better at retaining participants (Clarke, Kuosmanen, & Barry, 2015). Similarly, young men have different preferences for online interventions compared to what is currently offered. Young men (16-24 years old) prefer online mental health interventions that are action-based and focus more on shifting behaviour and stigma as opposed to just providing general mental health information (i.e. mental health literacy) (Ellis, et al., 2013). This supports the current findings and suggests that online-interventions also need to incorporate gender-sensitive adaptations for them to be acceptable for male students. Considering the need for gender-sensitive adaptations regardless of the intervention being online or face-to-face and that online interventions suffer from higher attrition, a blended approach that incorporates online interventions to supplement face-to-face support is probably a more promising avenue to explore (Ellis, et al., 2013; Erbe, Eichert, Riper, & Ebert, 2017; van der Vaart, et al., 2014).

To summarise, the findings from these pilot interventions demonstrate that it is feasible to develop acceptable mental health interventions that are specifically tailored towards male students. Informal interventions may have potential to be more effective at engaging hard-to-reach male students, and that following further testing in larger studies, to confirm these findings as well as evaluate effectiveness in promoting help-seeking, they may be scalable to other universities.

Social and Political Implications

Although throughout this PhD the importance of male-sensitive or male-only spaces that address men's resistance to engage with mental health support has been highlighted, they may be faced with wider social and political obstacles. Gamma bias is a recent theory that can be described as the magnification of female successes and male acts of harm, whilst minimising male successes and female acts of harm (Seager & Barry, 2019a). Bearing this in mind, when delivering mental health initiatives that are specifically designed and provisioned for men, they have the possibility of being perceived as perpetuating patriarchal and male-dominated environments which can have an adverse effect on women's opportunities (Born, Ranehill, & Sandberg, 2018). As mentioned earlier, developing or evaluating the degree to which services are male-friendly will in turn lead to competition for resources. Where funding and resources are allocated to adapt pre-existing services to be more male-friendly, or the introduction of new, male-friendly services, they are likely to elicit social and political resistance, as it has the potential to be perceived as breaching human rights and equal opportunity laws as these could be seen as part of a call for 'greater' need for male support (White, 2002). In turn, there is a risk that they may face resistance from feminist or other political groups, as by highlighting the vulnerability and disadvantage men experience in the context of mental health may provoke wider debate of male privilege, gender pay gap, and men as perpetrators of sexual harassment (The Lancet, 2018; Fortin, Bell, & Böhm, 2017; Kearl, 2018). The points of male privilege, gender pay gap, and sexual harassment are extremely important, but in this context, they serve as tools to de-legitimise the overwhelming apparent need men have for mental services that are gender-sensitive. Certainly, these arguments can be misleading as they seek to position one gender against another (White, 2002). This PhD research has outlined that there are certain features of being male which are not cross-transferable, and fundamental differences in help-seeking between men and women cannot be ignored at a social and cultural level (White, 2002). To improve the health and well-being of men, services need to be provisioned in a way that make them equitable to all, and the consideration of gender-sensitive services (for both men and women) is a promising solution.

Furthermore, it is important to appreciate that gender is not a dichotomy. Male-specific spaces may reinforce the dichotomy of gender and gender segregation which may

inadvertently cause harm to transgendered and gender-non-conforming individuals (Doan, 2010; Herman, 2013). Indeed, this was an area of concern within the current PhD research when piloting three gender-sensitive interventions. To address this, the interventions were marketed to students who identified as male, allowing for it to be encompassing for gender-non-confirming individuals. Furthermore, in order to obtain ethical approval for the three interventions, it was essential for them to be accessible to students who 'identified' as male to align with the universities inclusivity policies on gender. However, it is important to acknowledge that by emphasising this, it may have deterred some male students with high conformity masculine norms where homophobia and sexual prejudice are central to hegemonic masculinity ideals (Diefendorf & Bridges, 2020). Subsequently, universities may tread lightly around this subject and be hesitant to deliver such initiatives as male-only clubs or groups can be perceived negatively by the public and the media (Fogg, 2013), especially if it is not made clear that such spaces are for the benefit of males as opposed to the exclusion of other genders (Reid, 2018).

Even if male-only spaces are marketed and explained correctly, so as not to undervalue other genders, issues may still arise. Men's right movements often utilise male suffering as a means to exercise anti-feminist sentiments (Salter, 2016). Men's rights movements and discourses often over emphasise male gender inequality such as male victims of rape, female social privilege, the feminist movement creating social inequality for men, and male victims of domestic violence (Rafail & Freitas, 2019). Although promoting and delivering male mental health initiatives is essential and necessary for the health and well-being of men, they may be hi-jacked by men's rights movements as a means to justify, normalise, and acquire sympathy for men in order to uphold or obtain power over women (Salter, 2016). Certainly, male rights movements run the risk of adopting and perpetuating extremist views of male suffrage, male inequality, adversarial attitude towards legal institutions, and negative views of ex-female-partners (Rafail & Freitas, 2019; Alschech & Siani, 2019).

Despite the potential backlash universities may face due to the political and social climate, some universities such as Birkbeck University of London in the UK, have started to pay more attention to the higher prevalence of male student suicide and their lack of engagement with mental health support. Birkbeck University launched a series of male targeted campaigns to challenge traditional masculine stereotypes, delivered information through videos and podcasts about the university's counselling services, and explored

different therapy options to help encourage male students to engage with mental health support (Hemmings, 2019; Birkbeck, University of London, 2017). This was deemed a success, resulting in a 6% increase in the numbers of male students engaging with the outreach team (Hemmings, 2019; Birkbeck, University of London, 2017). Certainly, this provides preliminary evidence and hope that universities can engage their male students with mental health support if time and consideration is given.

Strengths of this Thesis

This thesis comprises four research studies; a systematic review (study 1), a qualitative focus group study (study 2), intervention development (study 3), and a feasibility study (study 4) that have their own respective strengths. In turn, each study has used a number of different research methods. In the systematic review, when it became clear that it was going to be difficult to summarise a series of heterogeneous studies using different intervention methods and different client groups, the BCTTv1 (Michie, et al., 2013) – a validated taxonomy to identify behaviour change factors was utilised to identify the active ingredients utilised within previous male-sensitive help-seeking interventions. Indeed, this was a novel method used to synthesise male-sensitive help-seeking interventions that has not been applied to this area before. For study 2, an important component included the consultation of the YPMHAG when developing a topic guide for the focus groups. In study 3, a variety of research frameworks were used to develop an intervention. This included the MRC's framework for developing a complex intervention (O'Cathain, et al., 2019; Craig, et al., 2008), the Access to Care model outlining how people with common mental health problems engage with services (Gask et al., 2012), the COM-B model of behaviour change (Michie, Van Stralen, & West, 2011), the APEASE criteria (Michie, Van Stralen, & West, 2011), and the GUIDED checklist (Duncan, et al., 2020). Lastly, for study 4, a broad set of quantitative measures were used with regards to help-seeking attitudes and behaviours, self-stigma, conformity to masculine norms and previous engagement with mental health support to provide a detailed understanding of the types of male participants who did engage with the pilot interventions.

Complementary Research Methods

As part of these four research studies, different research methods were utilised that are complementary in nature. As mentioned, this included a systematic review of previous literature, qualitative focus groups, and a quantitative evaluation of three pilot interventions. Certainly, different research methods have their own respective merits. For instance, systematic reviews allow for an up-to-date summary of the current research knowledge by collating all of the empirical evidence that fits specifically within the eligibility criteria to answer a specific question (Higgins, et al., 2019). The systematic approach allows for potential selection and reporting bias to be minimised, resulting in more reliable conclusions and decisions to be made (Higgins, et al., 2019).

Additionally, qualitative work, such as the focus groups conducted within this thesis, allow for a deeper understanding of a particular problem by giving attention to aspects of reality that cannot be easily quantified, by focusing on exploring and understanding the dynamics of social relationships and interactions (Queirós, Faria, & Almeida, 2017). Moreover, qualitative research provides more detail regarding the nuances within a social context, which would otherwise be missed from quantitative research methods including systematic reviews (Cardano, 2018). The incorporation of qualitative methods enables research to be conducted in otherwise invisible settings, capturing unique and rich sets of data (Cardano, 2018).

In addition to the systematic review and qualitative focus group investigation, this PhD research also utilised quantitative methods to evaluate the acceptability and feasibility of three gender-sensitive pilot interventions for male students. Quantitative approaches allow for rigorous and controlled designs to examine a particular phenomenon using precise measurements (Rutberg & Bouikidis, 2018). Quantitative research adopts structured procedures and formal instruments within data collection to allow for objectivity for such measurements and subsequently any inferences made about the sample population (Queirós, Faria, & Almeida, 2017). More specifically, the pilot interventions can be regarded as part of a feasibility study due to the intention to evaluate the acceptability of the interventions (Bowen, et al., 2009; Eldridge, et al., 2016). Feasibility studies are used to determine whether an intervention is appropriate for further testing, providing valuable insight as to whether the proposed ideas can be adapted to be relevant and sustainable (Bowen, et al., 2009).

Subsequently, the combination of the systematic review, qualitative and quantitative research methods result in this thesis having a mixed-methods approach. The use of mixed

methods allows for a complementary approach that overcomes the weaknesses of each methodology (Kelle, 2006; Rutberg & Bouikidis, 2018). By adopting a mixed-methods approach in a sequential manner, the qualitative focus groups assisted with re-affirming concepts identified from the systematic review, identified additional core issues, and to develop theoretical concepts and hypotheses which were then examined in the subsequent quantitative feasibility study to examine whether the concepts were relevant in the broader social and real-world contexts (Kelle, 2006). In addition, a mixed methods approach aligns with the MRC's guidance on designing complex interventions in health research as there is value to be achieved through the use of a range of research methods to inform the development and evaluation of complex interventions (Blackwood, O'Halloran, & Porter, 2010; Moore, et al., 2015).

Contribution to the Evidence Base

This PhD research includes three peer-reviewed articles that have been published in open access journals (Sagar-Ouriaghli, et al., 2019; Sagar-Ouriaghli, et al., 2020a; Sagar-Ouriaghli, et al., 2020b). This demonstrates that the research in this PhD made positive contributions to the research field of men's mental health and male help-seeking. Moreover, as all three of these articles are available in open access journals, they have the capability to reach a wider audience and further accelerate the understanding of this field.

Alongside the publications, a model of help-seeking is presented, which makes an additional contribution and has produced, to the authors' knowledge, the most comprehensive model addressing this area seen to date. This provides a theoretical understanding that draws together a range of different concepts and explanations of poor help-seeking in one coherent model. In turn, this model highlights the complex and systematic nature of help-seeking in men whilst also providing clear recommendations about how to alter or improve these negative help-seeking pathways. For instance, figure 6.2 presents the same model but with gender-sensitive recommendations on how to improve mental health literacy and stigma, accommodate masculine norms, and ways to adapt both treatment and services that are likely to facilitate help-seeking in men and reduce the possibility of maladaptive coping. Indeed, the intention is to publish the findings of the pilot interventions and this model within peer-reviewed journals as stand-alone contributions.

Despite these positive contributions, further testing and evaluation is needed to refine, support or refute certain concepts and important factors that have been proposed. Nonetheless, the work produced as part of this PhD research will provide others with a starting point for their own research, and the prospect of the ideas presented within this thesis being challenged and tested further.

Limitations of this Thesis

Alongside strengths, the four research studies have their own respective limitations. These have been discussed in each chapter and include: the lack of complete accuracy when coding BCTs in previous interventions, due to issues surrounding inter-rater reliability or the limited description of previous interventions within the systematic review. Data reduction arising from thematic analysis and the absence of data validation from participants taking part in the focus groups, may lead to the identification of less representative or valid themes (focus groups). There may be some issues arising when synthesising the systematic review findings and previous published literature into a male framework of help-seeking, as some of these recommendations draw upon evidence from the adult male help-seeking literature, and so these findings may not translate directly to students (intervention development/framework). Lastly, the small sample size obtained when piloting and evaluating the interventions is underpowered to detect any significant changes to help-seeking or other outcomes. Additionally, as the pilot interventions were delivered at different timepoints within the academic year, it limits the conclusions that can be made regarding the acceptability and feasibility of the pilot interventions. Indeed, intervention 3 did appear to be better at engaging ‘hard-to-reach’ male students, but this may be attributed to the time in which the intervention was delivered (late spring term) as opposed to the content or structure of the intervention itself. The same may be true for the other two pilot interventions, whereby different sub-groups of male students may have been recruited due to the time in which they were delivered (autumn and early spring terms) as opposed to the content and structure of the intervention. In addition to these, there are more general limitations that span across all the studies included within this thesis.

Generalisability and External Validity

It needs to be noted that this framework and other discussion points within this thesis draws upon evidence from both the adult male population (i.e. non-students) and student population (i.e. not exclusively male). Indeed, male students appear to intersect between two population groups which have generated a lot of research interest, those being men and students. However, limited evidence and research that is specifically tailored towards male students remains. To obtain a richer understanding of male students help-seeking, evidence from men of all age groups and students of various genders have been synthesised together. As a consequence of this, some of the recommendations presented within this thesis may not transfer directly to male-students or additional, more nuanced findings may have been overlooked. Alternatively, the findings may be applicable to both male-students and older men. Nevertheless, the findings presented within this thesis must be interpreted with some caution, as help-seeking attitudes for men across age groups do differ, as do the types of barriers faced by male students in comparison to other students of different genders (Mackenzie, Gekoski, & Knox, 2006; Mackenzie, et al., 2008).

The current framework has yet to be formally tested and evaluated and this may also present limitations. It is not clear how effective or applicable this will be to real-world scenarios. Despite this, the proposed framework enabled the development of three acceptable gender-sensitive pilot interventions as part of this PhD and it is hoped that future developments can build upon, make adaptations to, and refine the proposed framework to enhance the quality, effectiveness, and acceptability of future male-sensitive interventions. In turn, it is hoped that this framework allows for the development of further acceptable and effective interventions tailored specifically towards men and male students to improve their engagement with mental health support, helping to reduce the gender disparity seen in mental health service use and suicide.

Despite this PhD candidate developing three pilot interventions that are grounded in evidence-based practice, it is not clear how scalable or generalisable such findings will be to other university settings. Both the focus group investigation that helped contribute to the development of the pilot interventions and the investigation that sought to evaluate the proposed interventions recruited students from one university based in the UK, London. This specific University is ranked within the top 50 universities in the world and is one of the oldest

and most prestigious universities in the UK (Complete University Guide, 2020; QS Top Universities, 2020). Certainly, this indicates that a relatively high level of secondary education is required to attend and this is important to consider, as level of education has been shown to effect help-seeking for academic difficulties as well as influencing the relationship between conformity to masculine norms and self-stigma, which are both barriers to mental health help-seeking (Hammer, Vogel, & Heimerdinger-Edwards, 2013; Taplin, Yum, Jegede, Fan, & Chan, 2001). Lower levels of education in male students is also associated with poorer mental health literacy, which is also likely to intersect with lower mental health help-seeking (Kaneko & Motohashi, 2007).

Furthermore, students living away from home at a London University are also eligible to receive a larger maintenance loan (~£2,800 more per year than a non-London University) due to the cost of living in the capital being higher than other parts of the UK (Gov.UK, 2020). In turn, this may also reflect differences in social economic status that are not representative of other parts of the country. Lower social economic status can exacerbate the reduced willingness men have to access mental health support and reduces the number of potential services (e.g. private healthcare) they could access due to issues relating to costs (Möller-Leimkühler, 2002; Parent, et al., 2018).

Although other western countries like the US and Australia have similar difficulties with mental health prevalence, impact on academic functioning, and engaging men with mental health support, it cannot be said with certainty that the recommendations and findings reported throughout this PhD will translate perfectly to other countries (Carter, Pagliano, Francis, & Thorne, 2017). Indeed, additional research is needed within each country to highlight any subtle differences that may be important (Bentley, et al., 2016). This can also assist with communicating such findings within the respective governments framework for policy makers to bring about change.

All these factors reduce the generalisability and external validity of the findings presented throughout this PhD research. Although a range of evidence from various countries has been included and drawn upon, which is likely to reduce this potential risk, the findings presented should be interpreted rather tentatively when thinking about global or international applications outside of the UK. Similarly, this may also apply to different universities within the UK, as the focus group investigation and pilot interventions were

conducted at one London university and therefore findings may not be generalisable on a national scale.

Research as a Barrier

As mentioned in chapter 5 when discussing three gender-sensitive interventions that were evaluated as part of this PhD research, the very nature of conducting research appeared to act as a barrier in and of itself. As seen across all three pilot interventions, the number of participants taking part remained relatively small, with 24 students in total and a maximum of just 9 students per intervention. Indeed, this is a common difficulty found within mental health research, as young men are often under-represented and may be more reluctant to participate in research due to fears of stigma and confidentiality (Ellis, et al., 2014). This reduces the strength of evidence provided as small samples reduce the statistical power of analyses, leading to the reduced probability of finding a true effect, reduced probability of an effect being true when one is found, or an exaggeration of a true effect if discovered (Button, et al., 2013). Furthermore, the small samples sizes highlight the continued difficulty with engaging this population group with research and services. Specifically, for the informal drop-in intervention (Intervention 3; Man Cave) many students expressed concerns relating to the anonymity and the confidentiality of their data. In some instances, students who did seem initially interested decided to opt out of participating due to these concerns. Considering this point more broadly in the context of this PhD research, the recommendations and findings proposed must be interpreted cautiously. If barriers such as being unfamiliar with mental health support/research, not trusting medical professionals, and being fearful of how they are perceived by others (i.e. stigma) are present (Yousaf, Popat, & Hunter, 2015; Woodall, Morgan, Sloan, & Howard, 2010), it is possible that the men who are at risk of suicide and not seeking mental health support do not participate in research. This can result in the recommendations being unrepresentative and less effective for the population they wish to serve. To overcome this, further research is needed to identify best practice for engaging men and male students with mental health research. This is likely to be an iterative process, but because of significant time restraints, this was not feasible to examine this within the current three-year PhD. Ultimately, this iterative process on how best to engage men and male students with research and services needs constant refinement as things progress, with the end goal being the completion of large-scale externally funded RCTs.

Thinking outside the current PhD, such issues may pertain within pre-existing medical practices and recommendations. Research is used to inform medical care and guidelines for mental health. In the UK, government bodies such as the National Institute for Health and Care Excellence (NICE) have the role of improving outcomes for people using the NHS and other health services by producing guidelines that are based on scientific evidence (National Institute for Health and Care Excellence, 2020). As men and male students who are at high risk of suicide are often underrepresented in mental health research (Ellis, et al., 2014), it is possible that such research practices have partly contributed to the lack of effective and gender-sensitive interventions for men, as gender is often ignored in mental health research and the barriers that reduce the likelihood of help-seeking are also the barriers that prevent men from engaging with research (Howard, et al., 2017).

Future Directions

This PhD research has demonstrated that it would be feasible to develop gender-sensitive interventions for male students that they deem acceptable. The pilot interventions demonstrated that informal interventions may be more likely to engage hard-to-reach male students about their mental health. Indeed, these pilot interventions are not a scaled model of the final intervention but have provided key insights into how best to engage this population group (Craig, et al., 2008). Moving forward, to better understand the intervention's true effectiveness, cost-effectiveness, and the change processes involved, further investigation is required. A larger scale RCT would be needed to demonstrate positive changes to help-seeking attitudes. This also presents an opportunity to compare the acceptability of these male-sensitive interventions to treatment-as-usual (TAU). In addition, a well powered RCT can also provide information regarding cost-effectiveness, change process that has been embedded within these interventions, how to optimise future interventions, and how to better disseminate and implement successful interventions to assist with evaluating their long-term effectiveness (Craig, et al., 2008; O'Cathain, et al., 2019).

Standardising BCTs

Throughout this thesis, the incorporation of BCTs has been a consistent feature. Not only has the use of BCTs shown to be a promising method when synthesising heterogenous interventions for men (Sagar-Ouriaghli et al., 2019), but also that they can be used as a basis when seeking to design and to develop a male-sensitive intervention. As discussed within the systematic review (chapter 2) of this thesis*,* BCTs refer to the observable and replicable components that are embedded within an intervention designed to elicit behaviour change (Michie, et al., 2013). A core component of the BCT approach is to help assist with replicability of interventions, as they break down an intervention into the smaller working parts that can be identified (active ingredients). Through applying this approach of employing standardised BCTs*,* much more promising results can be achieved in the context of male help-seeking interventions. Specifically, future male-sensitive interventions could benefit from adopting this framework. This approach has been outlined in chapter 4, whereby a framework for developing mental health help-seeking interventions for male students has been provided (Sagar-Ouriaghli et al., 2020b)*.* Clear depiction of what BCTs have been embedded within future male-specific interventions will allow for further refinement and evaluation within this research field. Researchers, intervention developers, and funding bodies may seek to encourage this approach. If the majority of researchers within the field of men's help-seeking operate within this framework, two key benefits can be achieved. Firstly, a standardised reporting method will allow intervention iterations to be designed more quickly, with guidance about which active ingredients do and do not work. This will also help to save both time and money, without reducing effectiveness or acceptability. Secondly, the acceptability and effectiveness of interventions stand to greatly improve. By having a specific framework within the male help-seeking field, a shared understanding, communication, and consistent approach can be attained. In turn, it is hoped that it will be easier to identify the 'core' components and active ingredients about what makes an intervention successful when it comes to improving help-seeking among men and male students.

Despite this goal, requiring researchers and intervention developers to adopt such a system may present challenges and face resistance. Utilising BCTs and the BCTTv1 (Michie, et al., 2013) requires additional steps, time, and resources. For instance, having a comprehensive understanding of the 93 unique BCTs, how they can be operationalised, and how to identify them is needed. Training courses may be required to upskill existing

researchers to be able to correctly code and recognise BCTs which is free to complete on: Welcome – BCT Taxonomy Training (http://www.bct-taxonomy.com/). Furthermore, this additional step is likely to be time intensive, meaning funding applications and grant proposals will need to accommodate this into their deadlines, deliverables and milestones. Due to increased time and planning needed to embed such practices, researchers may be hesitant to adopt this approach. To avoid creating additional barriers for researchers and grant holders, an alternative solution may be to develop advocacy groups. Advocacy groups in this context may seek to promote, educate, and inform as many researchers as possible within the field of men's mental health, male help-seeking, and possibly those in other disciplines, to utilise and report BCTs within interventions. Furthermore, increased awareness of BCTs may also help reduce gaps between disciplines or those working in silos. Opportunities to do this may arise in the form of conferences, open-access materials (similar to the work published in this thesis), or even through certification which would provide an incentive for those who are able to follow this approach. Some uncertainty around the implementation of BCTs still remains, as it is often unclear which specific BCTs are needed to change different behaviours, for whom, when these are most effective, how the techniques interact with one another, who should deliver them, and what a sufficient delivery 'dose' looks like. Nonetheless, over time it is hoped that employing BCTs systematically will enable evidence to accumulate to address these concerns and develop more effective interventions. Standardisation of how interventions are designed, reported, and evaluated can be reached as this will provide a foundation in which the field of men's mental health and help-seeking can continue to progress forward in a systematic fashion and possibly at an accelerated rate.

Research and Intervention Recommendations

Extending the rationale of incorporating BCTs into future male-sensitive help-seeking interventions, it would be worthwhile exploring the pathways outlined in the two theoretical models of male help-seeking presented earlier in this thesis (Figure 6.1 and 6.2). Figure 6.1. provides a conceptual understanding and a systemic overview of the barriers and 'pathway' men experience when seeking help or engaging in maladaptive behaviours such as suicide. This model provides the most comprehensive model of male help-seeking to date, incorporating a range of different barriers that have all been discussed in the wider literature. Future researchers may wish to further test these pathways to ensure this model is robust

and can be used as a framework for those working in the field of male help-seeking. Similarly, more nuanced understanding of these interactions or possibly new barriers/interactions may emerge from future research. In this instance, we welcome the model be adapted, refined and improved to incorporate these new considerations. An improved understanding of the barriers and facilitators within this model will also allow for better and more concise mapping onto the BCW (Michie, Atkins, & West, 2014), COM-B model of behaviour change (Michie, Van Stralen, & West, 2011), and subsequently BCTs. Having a comprehensive and detailed understanding of help-seeking in men that can also be depicted in a way that is easily interpretable (i.e., through a visual model), is imperative to help move this field forward. Currently, much of the literature appears disconnected due to researchers operating in silos, unaware of one another's contributions. Synthesising the key findings and research contributions in a theoretical model can help create a shared understanding of the men's help-seeking literature, make it easier to facilitate collaboration between experts, attract new researchers into the field, and further grow this extremely important discipline.

In addition to the future directions within a purely research context, this field may wish to pay more attention to the development, implementation, and evaluation of interventions. Again, standardising the BCTs employed here is likely to have the biggest impact within this field as discussed above. Furthermore, figure 6.2 provides a second model of how the negative pathways to maladaptive coping can be disrupted via interventions to help facilitate help-seeking. Here, depending on the area of interest or target area (e.g., stigma, mental health literacy, masculine norms, and the type of help being given), different interventions may be better suited. For instance, psychoeducation interventions discussing mental health symptoms and mental health services may be best suited to improve mental health literacy. Conversely, adapting mental health services to use male-sensitive language, offer different therapeutic approaches, changing the structure and format of interventions will be of greater interest when attempting to make services more male friendly (i.e., to improve the quality of help-giving). In the instance where a more holistic approach is sought through efforts to improve help-promotion and help-giving, it may be best to incorporate various intervention features that address multiple barriers. As discussed in the introduction of this thesis, help-promotion and help-giving can be two theoretically distinct processes, however for more real-world application it is likely that intervention providers will need to consider both help-promotion and help-giving in tandem in order to elicit the biggest impact

in help-seeking. Lastly, it is recommended that the BCTs and the theoretical framework for developing complex help-seeking interventions for male students (chapter 4) is referred to and followed. Detailed guidance on how best to model process and outcomes via the COM-B model of behaviour (Michie, Van Stralen, & West, 2011) and BCW (Michie, Atkins, & West, 2014) is provided. An example of how to report the incorporation of BCTs within an intervention that emphasise that components function (i.e., target area) is provided in table 4.3. Adhering to other intervention reporting systems such as TIDieR (Hoffman et al., 2014) and CONSORT is also advised (Eldridge et al., 2016; Lancaster & Thabane, 2019).

The core message that is needed to help guide this field of research forward is appropriate reporting. The current field of male student's mental health help-seeking is still in its infancy and appears more disconnected in comparison to other fields. Therefore, the majority of the academic and clinical contributions typically operate in silos. In some instances, new contributions fail to acknowledge or even refer to past evidence. This becomes inefficient and fragments the evidence base. Through standardising and adopting a transparent reporting method, a greater chance of knowledge being improved, shared, past on, and built upon can be attained. Until this can be addressed, it is likely that this field will continue to progress slowly leaving a significant proportion of men without suitable support.

Potential Obstacles

Given that the key message for the future directions of this field is to move towards appropriate reporting, the biggest obstacle is whether such a framework will be adopted by academics and researchers. As aforementioned, advocacy groups, buy in from funding bodies, and possibly even the need to offer certification in men's help-seeking research may combat this obstacle. Providing greater visibility and highlighting the importance of standardising the way in which help-seeking interventions are reported is likely to assist with encouraging researchers to accommodate this approach in their own investigations.

Another potential obstacle that this field may face in the future is the social and political implications. This was discussed in greater detail earlier within this chapter, with the core issues pertaining to the risk of perpetuating patriarchal environments, facing resistance from feminist or other political groups, a societal shift away from gender as a dichotomy, and the risk of being hi-jacked by men's rights movements. These features may present additional barriers with conducting research and applying for funding. Indeed, this was observed within

the current PhD whereby the male-sensitive pilot interventions had to be marketed to students who 'identified' as male to allow for gender non-confirming individuals to attend in order to comply with the university's gender inclusivity policies. This may have discouraged male students with high conformity to hegemonic masculine ideals from attending (as homophobia and sexual prejudice are central ideals) (Diefendorf & Bridges, 2020).

We cannot say with certainty if these factors will indeed hinder the development of gender-sensitive help-seeking interventions for male students. However, it is important to consider this and continue to monitor the social and political landscape, particularly in the context of gender, to ensure that gender-sensitive interventions (for all genders), can be developed.

Conclusion of this Thesis

The primary objective within this thesis was to develop and evaluate a mental health intervention designed specifically for male students to improve their uptake and mental health help-seeking behaviours and attitudes. To achieve this, a systematic review of previous help-seeking interventions for men was conducted to identify the key components that are likely to improve help-seeking in men and a qualitative focus group investigation was run to further highlight key features and recommendations that male students themselves deem important for them to engage with mental health support. Thirdly, the findings from the systematic review and focus group investigation were synthesised alongside previous evidence in accordance to the MRC's framework for developing complex interventions to help design acceptable mental health interventions for male students. Lastly, the acceptability of three gender-sensitive pilot interventions for male students were assessed, highlighting that an informal and unstructured approach might be more acceptable for hard-to-reach male students who have higher conformity to maladaptive masculine traits, higher self-stigma, lower help-seeking attitudes, less familiar with mental health service use, and are from an ethnic minority background. Continued investigation, through the use of a small-scale RCT followed by a full-scale RCT, would aid in the evaluation of these gender-sensitive approaches and to investigate how they may be effective at engaging male students with mental health initiatives. Indeed, with more interventions tailored towards the needs of male students it is hoped that the disparity in suicide rates and reluctance to seek help can be reduced.

References

Addis, M. E. (2008). Gender and depression in men. *Clinical Psychology: Science and Practice, 15*(3), 153-168.

Addis, M. E., & Mahalik, J. R. (2003). Men, Masculinity and the Contexts of Help Seeking. *American Psychologist, 58*(1), 5-14.

Afifi, M. (2007). Gender differences in mental health. *Singapore Medical Journal, 48*(5), 385-391.

Alhojailan, M. I. (2012). Thematic analysis: A critical review of its process and evaluation. *West East Journal of Social Sciences, 1*(1), 39-47.

Almedia, J., Johnson, R. M., Corliss, H. L., Molnar, B. E., & Azarel, D. (2009). Emotional Distress Among LGBT Youth: The Influence of Perceived Discrimination Based on Sexual Orientation. *Journal of Youth and Adolescence, 38*(7), 1001-10014.

Alonso, J., Angermeyer, M. C., Bernert, S., Bruffaerts, R., Brugha, T. S., Bryson, H., de Girolamo, G., et al. (2004). Use of mental health services in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatricia Scandinavica, 109*(s420), 47-54.

Alschech, J., & Siani, M. (2019). "Father's Rights" Activism, Discourse, Groups and Impacts: Findings from a Scoping Review of the Literature. *Journal of Divorce & Remarriage, 60*(5), 362-388.

Amarendra, G., Koen, L., Imke, B., Glenn, K., Ellen, S. A., Ann, B., Maitra, S., Laurence, C. (2018). Age of onset of non-suicidal self injury in Dutch-speaking adolescents and emerging adults: an event history analysis of pooled data. *Comprehensive Psychiatry, 80*, 170-178.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

American Psychological Association, Boys and Men Guidelines Group. (2018). *APA guidelines for psychological practice with boys and men.* Retrieved from: http://www.apa.org/about/policy/psychological-practice-boys-men-guidelines.pdf

Anderson, E. A., Eastman-Mueller, P. H., Henderson, S., & Even, S. (2015). Man Up Monday: An integrated public health approach to increase sexually transmitted infection

awareness and testing among male students at a Midwest University. *Journal of American College Health, 64*(2), 147-151.

Angst, J., Gamma, A., Gastpar, M., Lépine, J. P., Mendlewicz, J., & Tylee, A. (2002). Gender differences in depression. *European archives of psychiatry and clinical neuroscience, 252*(5), 201-209.

Apesoa-Varano, E. C., Barker, J. C., & Hinton, L. (2018). "If You Were Like Me, You Would Consider It Too": Suicide, Older Men, and Masculinity. *Society and Mental Health, 8*(2), 157-173.

Appleby, L., Kapur, N., Shaw, J., Hunt, I. M., Flynn, S., Ibrahim, S., Turnbull, P., Gianatsi, M., Tham, S. (2016). *The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness. Making Mental Health Care Safer: Annual Report and 20-year Review.* University of Manchester.

Appleton, A., James, R., & Larsen, J. (2018). The Association between Mental Wellbeing, Levels of Harmful Drinking, and Drinking Motivations: A Cross-Sectional Study of the UK Adult Population. *International Journal of Environmental Research and Public Health, 15*(7), 1333-1343.

Archer, M., Brown, J. S., Idusohan, H., Coventry, S., Manoharan, A., & Espie, C. A. (2009). The development and evaluation of a large-scale self-referral CBT-I intervention for men who have insomnia: an exploratory study. *Behavioural and Cognitive Psychotherapy, 37*(3), 239-248.

Armijo-Olivo, S., Stiles, C. R., Hagen, N. A., Biondo, P. D., & Cummings, G. G. (2012). Assessment of study quality for systematic reviews: a comparison of the Cochrane Collaboration Risk of Bias Tool and the Effective Public Health Practice Project Quality Assessment Tool: methodological research. *Journal of Evaluation in Clinical Practice, 18*(1), 12-18.

Auerbach, R. P., Alonso, J., Axinn, W. G., Cuijpers, P., Ebert, D. D., Green, J. G., Hwang, I., et al. (2016). Mental disorders among college students in the WHO world mental health surverys. *Psychological Medicine, 46*(14), 2955-2907.

Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, G., et al. (2018). The WHO World Mental Health Surveys International College Student Project: Prevalence and Distribution of Mental Disorders. *Journal of Abnormal Psychology, 127*(7), 623-638.

Australian Bureau of Statistics. (2007). *National Survey of Mental Health and Wellbeing: Summary of Results.* Canberra: Australian Bureau of Statistics.

Baams, L., De Luca, S. M., & Brownson, C. (2018). Use of Mental Health Services Among College Students by Sexual Orientation. *LGBT Health, 5*(7), 421-430.

Baillie, A. J. (2005). Predictive gender and education bias in Kessler's psychological distress scale (K10). *Social Psychiatry and Psychiatric Epidemiology, 40*(9), 743-748.

Baker, C. (2018a). *Mental health statistics for England: prevalence, services and funding.* London: House of Commons Library Briefing.

Baker, C. (2020). *Mental health statistics for England: prevalence, services and funding.* London: House of commons Library.

Baker, P. (2016). Men's health: an overlooked inequality. *British Journal of Nursing, 25*(19), 1054-1057.

Baker, P. (2018b). Men's Health: time for a new approach. *Physical Therapy Reviews, 23*(2), 144-150.

Barker, F., Atkins, L., & de Lusignan, S. (2016). Applying the COM-B behaviour model and behaviour change wheel to develop an intervention to improve hearing-aid use in adult auditory rehabilitation. *International Journal of Audiology, 55*(3), S90-S98.

Barker, G., Ricardo, C., Nascimento, M., Olukoya, A., & Santos, C. (2010). Questioning gender norms with men to improve health outcomes: evidence of impact. *Global public health, 5*(5), 539-553.

Barkham, M., Broglia, E., Dufour, G., Fudge, M., Knowles, L., Percy, A., Turner, A., Williams, C., SCORE Consortium. (2019). Towards an evidence-base for student wellbeing and mental health: Definitions, developmental transitions and data sets. *Counselling and Psychotherapy Research*, 19(4), 1-7.

Batty, D. G., Kivimäki, M., Bell, S., Gale, C. R., Shipley, M., Whitley, E., & Gunnell, D. (2018). Psychosocial characteristics as potential predictors of suicide in adults: an overview of the evidence with new results from prospective cohort studies. *Translational Psychiatry, 8*(1), 1-15.

Baugher, A. R., & Gazmararian, J. A. (2015). Masculine gender role stress and violence: A literature review and future directions. *Aggression and Violence Behavior, 24*, 107-112.

Bebbington, P. E., & McManus, S. (2020). Revisiting the one in four: the prevalence of psychiatric disorders in the population of England 2000-2004. *The British Journal of Psychiatry, 216*(1), 55-57.

Bedwey, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The Perception of Academic Stress Scale. *Health Psychology Open, 2*(2), 1-9.

Begun, A. L., Early, T. J., & Hodge, A. (2016). Mental health and substance abuse service engagement by men and women during community reentry following incarceration. *Administration and Policy in Mental Health and Mental Health Services Research, 43*(2), 207-218.

Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety and stress in a sample of college students. *Journal of Affective Disorders, 173*(1), 90-96.

Bentley, R., Pevalin, D., Baker, E., Mason, K., Reeves, A., & Beer, A. (2016). Housing Affordability, Tenure, and Mental Health in Australia and the United Kingdom: A comparative panel analysis. *Housing Studies, 31*(2), 208-222.

Berger, J. L., Addis, M. E., Green, J. D., Mackowiak, C., & Goldberg, V. (2013). Men's Reactions to Mental Health Labels, Forms of Help-Seeking, and Sources of Help-Seeking Advice. *Psychology of Men & Masculinity, 14*(4), 433-443.

Berger, J. M., Levant, R., McMillan, K. K., Kelleher, W., & Sellers, A. (2005). Impact of Gender Role Conflict, Traditional Masculinity Ideology, Alexithymia, and Age on Men's Attitudes Toward Psychological Help-Seeking. *Psychology of Men & Masculinity, 6*(1), 73-78.

Berke, D. S., Reidy, D. E., Miller, J. D., & Zeichner, A. (2016). Take it Like a Man: Gender-Threatened Men's Experience of Gender Role Discrepancy, Emotion Activation, and Pain Tolerance. *Psychology of Men & Masculinity, 18*(1), 62-69.

Biddle, L., Donovan, J., Sharp, D., Gunnell, D. (2007). Explaining non help-seeking amongst young adults with mental distress: a dynamic interpretive model of illness behaviour. *Sociology of Health and Illness, 29*(7), 983-1002.

Bilsker, D., Fogarty, A. S., & Wakefield, M. A. (2018). Critical Issues in Men's Mental Health. *The Canadian Journal of Psychiatry, 63*(9), 590-596.

Birkbeck, University of London. (2017). *Birkbeck Helping More Men To Access Counselling*. Retrieved from: http://www.bbk.ac.uk/news/birkbeck-helping-more-men-to-access-counselling

Birtel, M. D., Wood, L., & Kempa, N. J. (2017). Stigma and social support in substance abuse: Implications for mental health and well-being. *Psychiatry Research, 252*, 1-8.

Blackwood, B., O'Halloran, P., & Porter, S. (2010). On the problems of mixing RCTs with qualitative research: the case of the MRC framework for the evaluation of complex healthcare interventions. *Journal of Research in Nursing, 15*(6), 511-521.

Blanco, C., Okuda, M., Wright, C., Hasin, D.S., Grant, B.F., Liu, S.M., Olfson, M. (2008). Mental health of college students and their non-college-attending peers. Results from the national epidemiologic study on alcohol and related conditions. *Archives of general psychiatry, 65*(12), 1429-1437.

Blazina, C., & Marks, L. I. (2001). College men's affective reactions to individual therapy, psycoeducational workshops, and men's support group brochures: The influence of gender-role conflict and power dynamics upon help-seeking attitudes. *Psychotherapy: Theory, Research, Practice, Training, 38*(3), 297-305.

Bonabi, H., Müller, M., Ajdacic-Gross, V., Eisele, J., Rodgers, S., Seifritz, E., & Rössler, W. (2016). Mental health literacy, attitudes to help seeking, and perceived need as predictors of mental health service use: a longitudinal study. *The Journal of Nervous and Mental Disease, 204*(4), 321-324.

Born, A., Ranehill, E., & Sandberg, A. (2018). A man's world? - The Impact of Male Dominated Environments on Female Leadership. *Unpublished manuscript, University of Gothenberg*.

Bowen, D.J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., Bakken, S., Kaplan, C.P., Squiers, L., Fabrizio, C., & Fernandez, M. (2009). How we design feasibility studies. *American Journal of Preventive Medicine, 36*(5), 452-457.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Braun, V., & Clarke, V. (2019). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 1-6.

Bremer, D., Lüdecke, D., & von dem Knesebeck, O. (2019). Social Relationships, Age and the Use of Preventive Health Services: Findings from the German Ageing Survey. *International Journal of Environmental Research and Public Health, 16*(21), 4272-4286.

Brenner, R. E., Engel, K. E., Vogel, D. L., Tucker, J. R., Yamawaki, N., & Lannin, D. G. (2018). Intersecting cultural identities and help-seeking attitudes: the role of religious commitment, gender, and self-stigma of seeking help. *Mental Health, Religion & Culture, 21*(6), 578-587.

Brijnath, B., Protheroe, J., Mahtani, K. R., & Antoniades, J. (2016). Do Web-Based Mental Health Literacy Interventions Improve the Mental Health Literacy of Adult Consumers? Results from a systematic review. *Journal of Medical Internet Research, 18*(6), e165.

Broglia, E., Millings, A., & Barkham, M. (2017). Challenges to addressing student mental health in embedded counselling services: a survey of UK higher and further education institutions. *British Journal of Guidance and Counselling*, 1-15.

Brown, J.S.L., Lisk, S., Stevelink, S.M., Michelson, D., & Van Lieshout, R. (In submission). Enabling people to seek help for evidence-based treatments for mental health problems in the community: The NEPSAC ‘Bridge’ model. *British Journal of Psychiatry Open*.

Brown, J. S., Sagar-Ouriaghli, I., & Sullivan, L. (2019). Help-seeking among men for mental health problems. In J. A. Barry, R. Kingerlee, M. Seager, & L. Sullivan, *The Palgrave Handbook of Male Psychology and Mental Health* (pp. 397-415). Cham: Palgrave Macmillan.

Brown, P. (2016). *The invisible problem? Improving students' mental health.* Retrieved from: https://www.hepi.ac.uk/2016/09/22/3592/

Bruffaerts, R., Mortier, P., Kiekens, G., Auerbach, R. P., Cuijpers, P., Demyttenaere, K., Green, J.G., Knock, M.K., Kessler, R. C. (2018). Mental health problems in college freshmen: Prevalence and academic functioning. *Journal of affective disorders, 225*, 97-103.

Burton, R., Henn, C., Lavoie, D., O'Connor, R., Perkins, C., Sweeny, K., Greaves, F., Ferguson, B., Beynon, C., Belloni, A., Musto, V., Marsden, J., Sheron, N., Wolff, A. (2016). *The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review.* London: Public Health England.

Button, K. S., Ioannidis, J. P., Mokrysz, C., Nosek, B. A., Flint, J., Robinson, E. S., & Munafò, M. R. (2013). Power failure: why small sample size undermines the reliability of neuroscience. *Nature Reviews Neuroscience, 14*(5), 365-376.

Cadigan, J. M., Lee, C. M., & Larimer, M. E. (2019). Young adult mental health: A prospective examination of service utilization, perceived unmet service needs, attitudes, and barriers to service use. *Prevention Science, 20*(3), 366-376.

Calear, A. L., Banfield, M., Batterham, P. J., Morse, A. R., Forbes, O., Carron-Arthur, B., & Fisk, M. (2017). Silence is deadly: a cluster-randomised controlled trial of a mental health help-seeking intervention for young men. *BMC Public Health, 17*(1), 834-842.

Call, J. B., & Shafer, K. (2018). Gendered Manifestations of Depression and Help Seeking Among Men. *American Journal of Men's Health, 12*(1), 41-51.

Cane, J., Richardson, M., Johnston, M., Ladha, R., & Michie, S. (2015). From lists of behaviour change techniques (BCTs) to structured hierarchies: comparison of two methods of developing a hierarchy of BCTs. *British Journal of Health Psychology, 20*(1), 130-150.

Cardano, M. (2018). The problem of invisibility and the eloquence of small things: reflections on the strengths of qualitative research. *Rev Gaúcha de Enfermagem, 39*, e82654.

Carter, M. A., Pagliano, P., Francis, A., & Thorne, M. (2017). Australian University Students and Mental Health: Viewpoints from the literature. *International Journal of Innovation, Creativity and Change, 3*(3), 1-25.

Cavanagh, A., Wilson, C. J., Kavanagh, D. J., & Caputi, P. (2017). Differences in the expression of symptoms in men versus women with depression: a systematic review and meta-analysis. *Harvard Review of Psychiatry, 25*(1), 29-38.

Chang, Q., Yip, P. S., & Chen, Y. (2019). Gender inequality and suicide gender rations in the world. *Journal of Affective Disorders, 243*, 297-304.

Cheshire, A., Peters, D., & Ridge, D. (2016). How do we improve men's mental health via primary care? An evaluation of the Atlas Men's Well-being Pilot Programme for stressed/distressed men. *BMC family practice, 17*(1), 13-24.

Chuick, C. D., Greenfield, J. M., Greenberg, S. T., Shepard, S. J., Cochran, S. V., & Haley, J. T. (2009). A qualitative investigation of depression in men. *Psychology of Men & Masculinity, 10*(4), 302-313.

Cía, A. H., Stagnaro, J. C., Gaxiola, S. A., Vommaro, H., Loera, G., Medina-Mora, M. E., Sustas, S., Benjet, C., Kessler, R. C. (2018). Lifetime prevalence and age-of-onset of mental disorders in adults from the Argentinean Study of Mental Health Epidemiology. *Social Psychiatry and Psychiatric Epidemiology, 53*(4), 341-350.

Clarke, A. M., Kuosmanen, T., & Barry, M. M. (2015). A Systematic Review of Online Youth Mental Health Promotion and Prevention Interventions. *Journal of Youth and Adolescence*, *44*(1), 90-113.

Cleary, A. (2017). Help-seeking patterns and attitudes to treatment amongst men who attempted suicide. *Journal of Mental Health, 26*(3), 220-224.

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J.S.L., Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*(1), 11-27.

Clough, B. A., Nazareth, S. M., & Casey, L. M. (2019). Making the grade: a pilot investigation of an e-intervention to increase mental health literacy and help-seeking intentions among international university students. *British Journal of Guidance & Counselling*, 48(3), 347-359.

Clough, B. A., Nazareth, S. M., Day, J. J., & Casey, L. M. (2019). A comparison of mental health literacy, attitudes, and help-seeking intentions among domestic and international teritary students. *British Journal of Guidance & Counselling, 47*(1), 123-135.

Cochran, S. V., & Rabinowitz, F. E. (2003). Gender-Sensitive Recommendations for Assessment and Treatment of Depression in Men. *Professional Psychology: Research and Practice, 34*(2), 132-140.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*(1), 37-46.

Coleman, D., Feigelman, W., & Rosen, Z. (2020). Association of High Traditional Masculinity and Risk of Suicide Death: A Secondary Analysis of the Add Health Study. *JAMA Psychiatry, 77*(4), 435-437.

Complete University Guide. (2020). Retrieved from: https://www.thecompleteuniversityguide.co.uk/universities/kings-college-london-university-of-london

Connell, R. (1995). *Masculinities.* Cambridge: Polity.

Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic Masculinity: Rethinking the Concept. *Gender & Society, 19*(6), 829-859.

Corrigan, P. W., & Shapiro, J. R. (2010). Measuring the Impact of Programs that Challenge the Public Stigma of Mental Illness. *Clinical Psychology Review, 30*(8), 907-922.

Corrigan, P. W., & Watson, A. C. (2002). The Paradox of Self-Stigma and Mental Illness. *Clinical Psychology: Science and Practice, 9*(1), 35-53.

Corrigan, P. W., Rafacz, J., & Rüsch, N. (2011). Examining a progressive model of self-stigma and its impact on people with serious mental illness. *Psychiatry Research, 189*(3), 339-343.

Cotton, S. M., Wright, A., Harris, M. G., Jorm, A. F., & McGorry, P. D. (2006). Influence of gender on mental health literacy in young Australians. *Australian and New Zealand Journal of Psychiatry, 40*(9), 790-796.

Coughlan, S. (2019). The symbolic target of 50% at university reached. *BBC News.* Retrieved from: https://www.bbc.co.uk/news/education-49841620#:~:text=Figures%20from%20the%20Department%20for,before%20the%20age%20of%2030.

Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Social Science & Medicine, 50*(10), 1385-1401.

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ, 337*, a1655.

Creighton, G., Oliffe, J., Ogrodniczuk, J., & Frank, B. (2017). "You've Gotta Be That Tough Crust Exterior Man": Depression and suicide in Rural-Based Men. *Qualitative Health Research, 27*(12), 1882-1891.

Critical Appraisal Skills Programme. (n.d.). *Making Sense of Evidence*. Retrieved from: http://www.casp-uk.net/casp-tools-checklists

Davies, J., McCrae, B. P., Frank, J., Dochnahl, A., Pickering, T., Harrison, B., Zakrzewski, M., Wilson, K. (2000). Identifying Male College Students' Perceived Health Needs, Barriers to Seeking Help, and Recommendations to Help Men Adopt Healthier Lifestyles. *Journal of American College Health*, 48(6), 259-267.

de la Cruz, L. F., Kolvenbach, S., Vidal-Ribas, P., Jassi, A., Llorens, M., Patel, N., Weinman, J., Hatch, S.L., Bhugra, D., Mataix-Cols, D. (2016). Illness perception, help-seeking attitudes, and knowledge related to obsessive-compulsive disorder across different ethnic groups: a community survey. *Social Psychiatry and Psychiatric Epidemiology, 51*(3), 455-464.

de Lijster, J. M., Dierckx, B., Utens, E. M., Verhulst, F. C., Zieldorff, C., Dieleman, G. C., & Legerstee, J. S. (2017). The Age of Onset of Anxiety Disorders: A Meta-Analysis. *The Canadian Journal of Psychiatry, 62*(4), 237-246.

Deeks, A., Lombard, C., Michelmore, J., & Teede, H. (2009). The effects of gender and age on health related behaviors. *BMC Public Health, 9*(1), 213-221.

Deeks, J. J., Dinnes, J., D'amico, R., Sowden, A. J., Sakarovitch, C., Song, F., Petticrew, M., Altman, D. G. (2003). Evaluating non-randomised intervention studies. *Health Technology Assessment, 7*(27).

Dennahardt, A. A., & Murphy, J. G. (2013). Prevention and treatment of college student drug use: A review of the literature. *Addictive Behaviors, 38*(10), 2607-2618.

Department of Education. (2018). *New package of measures announced on student mental health*. Retrieved from: https://www.gov.uk/government/news/new-package-of-measures-announced-on-student-mental-health

Des Jarlais, D. C., Lyles, C., Crepaz, N., & Trend Group. (2004). Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: the TREND statement. *American Journal of Public Health, 94*(3), 361-366.

Diefendorf, S., & Bridges, T. (2020). On the enduring relationship between masculinity and homophobia. *Sexualities, 23*(7), 1264-1284.

Diehl, K., Jansen, C., Ischanova, K., Hilger-Kolb, J. (2018). Loneliness at universities: Determinants of emotional and social loneliness among students. *International Journal of Environmental Research and Public Health, 15*(9), 1865-1879.

Dion, M. R., Devaney, B., McConnell, S., Ford, M., Hill, H., & Winston, P. (2003). *Helping unwed parents build strong and healthy marriages. A Conceptual Framework for interventions.* Washinton, DC: Mathematica Policy Research, Inc.

Disabato, D. J., Short, J. L., Lameira, D. M., Bagley, K. D., & Wong, S. J. (2018). Predicting help-seeking behavior: The impact of knowing someone close who has sought help. *Journal of American College Health, 66*(8), 731-738.

Diviak, K. R., Wahl, S. K., O'Keefe, J. J., Mermelstein, R. J., & Flay, B. R. (2006). Recruitment and retention of adolescents in a smoking trajectory study: who participates and lessons learned. *Substance Use & Misuse*, *41*(2), 175-182.

Dixon-Woods, M., Cavers, D., Agarwal, S., Annandale, E., Arthur, A., Harvey, J., Hsu, R., Katbamna, S., Olsen, R., Smith, L., Riley, R., Sutton, A. J. (2006). Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Medical Research Methodology*, *6*(1), 1-13.

Doan, P. L. (2010). The tyranny of gendered spaces - reflections from beyond the gender dichotomy. *Gender, Place and Culture, 17*(5), 635-654.

Doherty, T. D., & Kartalova-O'Doherty, Y. (2010). Gender and self-reported mental health problems: predictors of help seeking from a general practitioner. *British Journal of Health Psychology, 15*(1), 213-228.

Donohue, B., Dickens, Y., Lancer, K., Covassin, T., Hash, A., Miller A, & Genet, J. (2004). Improving athletes' perspectives of sport psychology consultation: A controlled evaluation of two intervention methods. *Behavior Modification, 28*(2), 182-193.

Duffy, M. E., Twenge, J. M., & Joiner, T. E. (2019). Trends in Mood and Anxiety Symptoms and Suicide-Related Outcomes Amongst U.S. Undergraduates, 2007-2018: Evidence from Two National Surveys. *Journal of Adolescent Health, 65*(5), 590-598.

Duncan, E., O'Cathain, A., Rousseau, N., Croot, L., Sworn, K., Turner, K. M., Yardley, L., Hoddinott, P. (2020). Guidance for reporting intervention development studies in health research (GUIDED): an evidence-based consensus study. *BMJ Open, 10*(4), e033516.

Dunne, T., Bishop, L., Avery, S., & Darcy, S. (2017). A Review of Effective Youth Engagement Strategies of Mental Health and Substance Use Interventions. *Journal of Adolescent Health, 60*(5), 487-512.

Dwight-Johnson, M., Sherbourne, C. D., Liao, D., & Wells, K. B. (2000). Treatment Preferences Among Depressed Primary Care Patients. *Journal of General Internal Medicine, 15*(8), 527-534.

Edwards, S., Tinning, L., Brown, J. S., Boardman, J., & Weinman, J. (2007). Reluctance to seek help and the perception of anxiety and depression in the United Kingdom: a pilot vignette study. *The Journal of Nervous and Mental Disease, 195*(3), 258-261.

Eisenberg, D. (2019). Countering the troubling increase in mental health symptoms among US college students. *Journal of Adolescent Health, 65*(5), 573-574.

Eisenberg, D., Downs, M. F., Golberstein, E., & Zivin, K. (2009). Stigma and Help Seeking for Mental Health Among College Students. *Medical Care Research and Review, 66*(5), 522-541.

Eisenberg, D., Golberstein, E., & Gollust, S. E. (2007). Help-seeking and access to mental health care in a university student population. *Medical Care, 45*(7), 594-601.

Eisenberg, D., Golberstein, E., & Hunt, J. B. (2009). Mental Health and Academic Success in College. *Journal of Economic Analysis & Policy, 9*(1).

Eisenberg, D., Lipson, S., & Posselt, J. (2016). Promoting resilience, retention, and mental health. *Student Services*, *156,* 87-95.

Eisenberg, D., Speer, N., & Hunt, J. B. (2012). Attitudes and beliefs about treatment among college students with untreated mental health problems. *Psychiatric Services, 63*(7), 711-713.

Elahi, J. D., Schweinle, W., & Anderson, S. M. (2008). Reliability and validity of the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form. *Psychiatry Research, 159*(3), 320-329.

Eldridge, S. M., Chan, C. L., Campbell, M. J., Bond, C. M., Hopewell, S., Thabane, L., & Lancaster, G. A. (2016). CONSORT 2010 statement: extension to randomised pilot and feasibility trials. *BMJ, 355*, i5239.

Ellis, L. A., McCabe, K. L., Rahilly, K. A., Nicholas, M. A., Davenport, T. A., Burns, J. M., & Hickie, I. B. (2014). Encouraging young men's participation in mental health research and treatment: perspectives in our technological age. *Clinical Investigation, 4*(10), 881-888.

Emslie, C., Ridge, D., Ziebland, S., & Hunt, K. (2006). Men's accounts of depression: reconstructing or resisting hegemonic masculinity? *Social Science & Medicine, 62*(9), 2246-2257.

Englar-Carlson, M., & Kiselica, M. S. (2013). Affirming the strengths in men: A positive masculinity approach to assisting male clients. *Journal of Counseling & Development, 91*(4), 399-409.

Erbe, D., Eichert, H. C., Riper, H., & Ebert, D. D. (2017). Blending Face-to-Face and Internet-Based Interventions for the Treatment of Mental Disorders in Adults: Systematic

Review. *Journal of Medical Internet Research, 19*(9), e306.

Erentzen, C., Quinlan, J. A., & Mar, R. A. (2018). Sometimes you need more than a wingman: Masculinity, femininity, and the role of humor in men's mental health help-seeking campaigns. *Journal of Social and Clinical Psychology, 37*(2), 128-157.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *Americal Journal of Theoretical and Applied Statistics, 5*(1), 1-4.

Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology, 36*(3), 282-284.

Evans-Lacko, S., Corker, E., Williams, P., Henderson, C., & Thornicroft, G. (2014). Effect of the Time to Change anti-stigma campaign on trends in mental-illness-related public stigma among the English population in 2003-13: an analysis of survey data. *The Lancet Psychiatry, 1*(2), 121-128.

Evans-Lacko, S., London, J., Little, K., Henderson, C., & Thornicroft, G. (2010). Evaluation of a brief anti-stigma campaign in Cambridge: do short-term campaigns work? *BMC Public Health, 10*(1), 339-345.

Farrer, L., Leach, L., Griffiths, K. M., Christensen, H., & Jorm, A. F. (2008). Age differences in mental health literacy. *BMC Public Health, 8*(1), 125-133.

Ferrari, A. (2016). Using celebrities in abnormal psychology as teaching tools to decrease stigma and increase help seeking. *Teaching of Psychology, 43*(4), 329-333.

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368-373.

Fischer, E. H., & Turner, J. L. (1970). Orientations to seeking professional help: development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*(1), 79-90.

Fleming, P. J., Lee, J. G., & Dworkin, S. L. (2014). "Real Men Don't": constructions of masculinity and inadvertent harm in public health interventions. *American Journal of Public Health, 104*(6), 1029-1035.

Fogarty, A. S., Proudfoot, J., Whittle, E. L., Player, M. J., Christensen, H., Hadzi-Pavlovic, D., & Wilhelm, K. (2015). Men's use of positive strategies for preventing and managing depression: A qualitative investigation. *Journal of Affective Disorders, 188*, 179-187.

Fogg, A. (2013). *Men-only clubs are bad, but banning them would be worse*. Retrieved from: https://www.theguardian.com/commentisfree/2013/jul/19/men-only-clubs-bad-banning-worse-golf

Forbes, M. K., Crome, E., Sunderland, M., & Wuthrich, V. M. (2017). Perceived needs for mental health care and barriers to treatment across age groups. *Aging & Mental Health, 21*(10), 1072-1078.

Fortin, N. M., Bell, B., & Böhm, M. J. (2017). Top Earnings Inequality and the Gender Pay Gap: Canada, Sweden and the United Kingdom. *Labour Economics*, *47,* 107-123.

Fragoso, J. M., & Kashubeck, S. (2000). Machismo, Gender Role Conflict, and Mental Health in Mexican American Men. *Psychology of Men & Masculinities, 1*(2), 87-97.

Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2009). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology and Health, 25*(10), 1229-1245.

Gask, L., Bower, P., Lamb, J., Burroughs, H., Chew-Graham, C., Edwards, S., Hibbert, D., Kovandžić, M., Lovell, K., Rogers, A., Waheed, W., Dowrick, C., & AMP Research Group. (2012). Improving access to psychosocial interventions for common mental health problems in the United Kingdom: narrative review and development of a conceptual model for complex interventions. *BMC Health Services Research*, *12*, 249-262.

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British dental journal, 204*(6), 291-295.

Golberstein, E., Eisenberg, D., & Gollust, S. E. (2009). Perceived stigma and help-seeking behavior: Longitudinal Evidence From the Healthy Minds Study. *Psychiatric Services, 60*(9), 1254-1256.

Gonzalez, J. M., Alegría, M., Prihoda, T. J., Copeland, L. A., & Zeber, J. E. (2011). How the relationship of attitudes toward mental health treatment and service use differs by age, gender, ethnicity/race and education. *Social Psychiatry and Psychiatric Epidemiology, 46*(1), 45-57.

Gonzalez, J. M., Tinsley, H. A., & Kreuder, K. R. (2002). Effects of psychoeducational interventions on opinions of mental illness, attitudes toward help seeking, and

expectations about psychotherapy in college students. *Journal of College Student Development, 43*(1), 51-63.

Gorczynski, P., Sims-schouten, W., Hill, D., & Wilson, J. C. (2017). Examining mental health literacy, help seeking behaviours, and mental health outcomes in UK university students. *The Journal of Mental Health Training, Education and Practice, 12*(2), 111-120.

Gorski, E. (2010). Stoic, stubborn, or sensitive: How masculinity affects men's help-seeking and help-referring behaviors. *UW-L Journal of Undergraduate Research*, 1-6.

Gov.UK. (2020). *Student Finance*. Retrieved from: https://www.gov.uk/student-finance/new-fulltime-students

Griffiths, K. M., & Christensen, H. (2006). Review of randomised controlled trials of Internet interventions for mental disorders and related conditions. *Clinical Psychologist*, *10*(1), 16-29.

Griffiths, K M., Christensen, H., Jorm, A F., Evans, K., & Groves, C. (2004). Effect of web-based depression literacy and cognitive-behavioural therapy interventions on stigmatisting attitudes to depression. *British Journal of Psychiatry, 185*(4), 342-349.

Guardian. (2017). *So low sometimes': why Stormzy talking about his depression is so important*. Retrieved from: https://www.theguardian.com/commentisfree/2017/mar/03/stormzy-depression-grime-mental-illness-black-men

Guest, G., Namey, E., & McKenna, K. (2017). How Many Focus Groups Are Enough? Building an Evidence Base for Nonprobability Samples Sizes. *Field Methods, 29*(1), 3-22.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry, 10*(11), 113-122.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. *BMC Psychiatry, 12*, 157-171.

Gulliver, A., Griffiths, K. M., Christensen, H., & Brewer, J. L. (2012a). A systematic review of help-seeking interventions for depression, anxiety and general psychological distress. *BMC Psychiatry, 12*(1), 81-93.

Gulliver, A., Griffiths, K. M., Christensen, H., Mackinnon, A., Calear, A. L., Parsons, A., Bennett, K., Batterham, P.J., & Stanimirovic, R. (2012b). Internet-Based Interventions to Promote Mental Health Help-Seeking in Elite Athletes: An Exploratory Randomized Controlled Trial. *Journal of Medical Internet Research, 14*(3), e69.

Gunnell, D., Caul, S., Appleby, L., John, A., & Hawton, K. (2020). The incidence of suicide in University students in England and Wales 2000/2001 - 2016/2017: Record linkage study. *Journal of affective disorders, 261*, 113-120.

Guo, S., Nguyen, H., Weiss, B., Ngo, V., & Lau, A. S. (2015). Linkages between mental health need and help-seeking behavior among adolescents: Moderating role of ethnicity and cultural values. *Journal of counseling psychology, 62*(4), 682-693.

Haavik, L., Joa, I., Hatloy, K., Stain, H. J., & Langeveld, J. (2017). Help seeking for mental health problems in an adolescent population: the effect of gender. *Journal of Mental Health, 28*(5), 467-474.

Hadjimina, E., & Furnham, A. (2017). Influence of age and gender on mental health literacy of anxiety disorders. *Psychiatry Research, 251*, 8-13.

Hammer, J. H., & Vogel, D. L. (2010). Men's help seeking for depression: The efficacy of a male-sensitive brochure about counseling. *The Counseling Psychologist, 38*(2), 296-313.

Hammer, J. H., Vogel, D. L., & Heimerdinger-Edwards, S. R. (2013). Men's Help Seeking: Examination of Differences Across Community Size, Education, and Income. *Psychology of Men & Masculinity, 14*(1), 65-75.

Hammer, J., & Vogel, D. (2010). Men's Help seeking for depression: The efficacy of a male-sensitive brochure about counselling. *The Counselling Psychologist, 38*(2), 296-313.

Han, B., Compton, W.M., Gfroerer, J., & McKeon, R. (2014). Mental health treatment patterns among adults with recent suicide attempts in the United States. *American Journal of Public Health, 104*(12), 2359-2368.

Han, D.-Y., Chen, S.-H., Hwang, K.-K., & Wei, H.-L. (2006). Effects of psychoeducation for depression on help-seeking willingness: Biological attribution versus destigmatization. *Psychiatry and clinical neuroscience, 60*(6), 662-668.

Hancock, M. E., Amankwaa, L., Revell, M. A., & Mueller, D. (2016). Focus Group Data Saturation: A New Approach to Data Analysis. *The Qualitative Report, 21*(11), 2124-2130.

Hansen, B. H., Oerbeck, B., Skirbekk, B., Petrovski, B. E., & Kristensen, H. (2018). Neurodevelopmental disorders: prevalence and comorbidity in children referred to mental health services. *Nordic Journal of Psychiatry, 72*(1-8), 285-291.

Hardcastle, S. J., Fortier, M., Blake, N., & Hagger, M. S. (2017). Identifying content-based and relational techniques to change behaviour in motivational interviewing. *Health Psychology Review, 11*(1), 1-16.

Harper, D., & Thompson, A. R. (2011). *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners.* John Wiley & Sons.

Harris, M. G., Diminic, S., Reavley, N., Baxter, A., Pirkis, J., & Whiteford, H. A. (2015). Males' mental health disadvantage: An estimation of gender-specific changes in service utilisation for mental and substance use disorders in Australia. *Australian & New Zealand Journal of Psychiatry, 49*(9), 821-832.

Haugen, P. T., McCrillis, A. M., Smid, G. E., & Nijdam, M. J. (2017). Mental Health Stigma and Barriers to Mental Health Care for First Responders: A Systematic Review and Meta-Analysis. *Journal of Psychiatry Research, 94*, 218-229.

HeadsUpGuys. (n.d). Retrieved from: https://headsupguys.org/

Hearn, J. (2015). Men's health and well-being: the case against a separate field. *International Journal of Men's Health, 14*(3), 301-314.

Heath, P. J., Brenner, R. E., Vogel, D. L., Lannin, D. G., & Strass, H. A. (2017). Masculinity and barriers to seeking counselling: The buffering role of self-compassion. *Journal of Counseling Psychology, 64*(1), 94-103.

Hemmings, C. (2019). *How can universities get men to talk about mental health?* Retrieved from: https://www.bbc.co.uk/news/education-49157596

Henderson, C., Corker, E., Lewis-Holmes, E., Hamilton, S., Flach, C., Rose, D., Williams, P., Pinfold, V., & Thornicroft, G. (2012). England's time to change antistigma campaign: one-year outcomes of service user-rated experiences of discrimination. *Psychiatric Services, 63*(5), 451-457.

Hennink, M. M., Kaiser, B. N., & Weber, M. B. (2019). What Influences Saturation? Estimating Sample Sizes in Focus Group Research. *Qualitative Health Research, 29*(10), 1483-1496.

Herman, J. L. (2013). Gendered Restrooms and Minority Stress: The Public Regulation of Gender and its Impact on Transgender People's Lives. *Journal of Public Management & Social Policy*, *19*(1), 65-80.

Higgins, J. P., & Green, S. (2005). *Cochrane Handbook for Systematic Reviews of Interventions.*

Higgins, J. P., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (2019). *Cochrane Handbook for Systematic Reviews of Interventions.* Chichester: John Wiley & Sons Ltd.

Hjorth, C. F., Bilgrav, L., Frandsen, L. S., Overgaard, C., Torp-Pedersen, C., Nielsen, B., & Bøggild, H. (2016). Mental health and school dropout across educational levels and genders: a 4.8-year follow-up study. *BMC Public Health, 16*(1), 976-988.

Hoffman, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., Altman, D.G., Barbour, V., Macdonald, H., Johnston, M., Lamb, S.E., Dixon-Woods, M., McCulloch, P., Wyatt, J.C., Chan, A., & Michie, S. (2014). Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. *BMJ, 348*, g1687.

Hom, M. A., Stanley, I. H., & Jonier Jr, T. E. (2015). Evaluating factors an interventions that influence help-seeking and mental health service utilization among suicidal individuals: a review of the literature. *Clinical Psychology Review, 40*, 28-39.

Horrell, L., Goldsmith, K.A., Tylee, A.T., Schmidt, U.H., Murphy, C.L., Bonin, E., Beecham, J., Kelly, J., Raikundalia, S., Brown, J.S.L. (2014). One-day cognitive-behavioural therapy self-confidence workshops for people with depression: randomised controlled trial. *The British Journal of Psychiatry, 204*(3), 222-223.

Houle, J., Villaggi, B., Beaulieu, M., Lespérance, F., Rondeau, G., & Lambert, J. (2013). Treatment preferences in patients with first episode depression. *Journal of Affective Disorders, 147*(1-3), 94-100.

House, J., Marasli, P., Lister, M., & Brown, J. S. (2018). Male views on help-seeking for depression: A Q methodology study. *Psychology and Psychotherapy: Theory, Research and Practice, 91*(1), 117-140.

Howard, L. M., Ehrlich, A. M., Gamlen, F., & Oram, S. (2017). Gender-neutral mental health research is sex and gender biased. *The Lancet Psychiatry, 4*(1), 9-11.

Hunt, K., Wyke, S., Gray, C. M., Anderson, A. S., Brady, A., Bunn, C., Donnan, P.T., Fenwick, E., Grieve, E., Leishman, J., Miller, E., Mutrie, N., Rauchhaus, P., White, A., & Treweek, S. (2014). A gender-sensitised weight loss and healthy living programme for overweight and obese men delivered by Scottish Premier League football clubs (FFIT): a pragmatic randomised controlled trial. *The Lancet, 383*(9924), 1211-1221.

Iwamoto, D. K., Brady, J., Kaya, A., & Park, A. (2018). Masculinity and depression: a longitudinal investigation of multidimensional masculine norms among college men. *American journal of men's health, 12*(6), 1873-1881.

Jackson, N., & Waters, E. (2005). Criteria for the systematic review of health promotion and public health interventions. *Health Promotion International, 20*(4), 367-374.

Johnson, J. L., Oliffe, J. L., Kelly, M. T., Galdas, P., & Ogrodniczuk, J. S. (2012). Men's discourses of help-seeking in the context of depression. *Sociology of Health and Illness, 34*(3), 345-361.

Jones, P. B. (2013). Adult mental health disorders and their age of onset. *The British Journal of Psychiatry, 202*(s54), s5-s10.

Jorm, A. F. (2012). Mental health literacy: empowering the community to take action for better mental health. *American Psychologist, 67*(3), 231-243.

Kam, B., Mendoza, H., & Masuda, A. (2019). Mental Health Help-Seeking Experience and Attitudes in Latina/o American, Asian American, Black American, and White American College Students. *International Journal for the Advancement of Counselling, 41*(4), 492-508.

Kaneko, Y., & Motohashi, Y. (2007). Male gender and low education with poor mental health literacy: a population-based study. *Journal of epidemiology, 17*(4), 114-119.

Kaya, A., Iwamoto, D. K., Brady, J., Clinton, L., & Grivel, M. (2019). The Role of Masculine Norms and Gender Role Conflict on Prospective Well-Being Among Men. *Psychology of Men & Masculinity, 20*(1), 142-147.

Kearl, H. (2018). *The facts behidn the #MeToo movement: A national study on sexual harassment.* Reston: Stop Street Harassment.

Kelle, U. (2006). Combining qualitative and quantitative methods in research practice: purposes and advantages. *Qualitative Research in Psychology, 3*(4), 293-311.

Kelley, M. L., Heffer, R. W., Gresham, F. M., & Elliot, S. N. (1989). Development of a modified treatment evaluation inventory. *Journal of Psychopathology and Behavioral Assessment, 11*(3), 235-247.

Kelly, C. M., Jorm, A. F., & Wright, A. (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Medical Journal of Australia, 187*(S7), S26-S30.

Kendel, F., Wirtz, M., Dunkel, A., Lehmkuhl, E., Hetzer, R., & Regitz-Zagrosek, V. (2010). Screening for depression: Rasch analysis of the dimensional structure of the PHQ-9 and the HADS-D. *Journal of Affective Disorders, 122*(3), 241-246.

Kerr, L. K., & Kerr Jr, L. D. (2001). Screening tools for depression in primary care: the effects of culture, gender and somatic symptoms on the detection of depression. *Western Journal of Medicine, 175*(5), 349-352.

Kessler, R. C., Angermeyer, M., Anthony, J. C., De Graff, R., Demyttenaere, K., Gasquet, I., de Girolamo, G., Gluzman, S., Gureje, O., Haro, J.M., Kawakami, N., Karam, A., et al. (2007). Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry, 6*(3), 168-176.

Keyworth, C., Epton, T., Goldthorpe, J., Calam, R., & Armitage, C. J. (2020). Acceptability, reliabilty, and validity of a brief measure of capabilities, opportunities, and motivations ("COM-B"). *British Journal of Health Psychology*, *25*(3), 474-501.

Kierans, C., Robertson, S., & Mair, M. D. (2007). Formal health services in informal settings: findings from the Preston Men's Health Project. *Journal of Men's Health and Gender, 4*(4), 440-447.

Kilpatrick, D. G., Acierno, R., Saunders, B., Resnick, H. S., Best, C. L., & Schnurr, P. P. (2000). Risk factors for adolescent substance abuse and dependence: data from a national sample. *Journal of Consulting and Clinical Psychology, 68*(1), 19-30.

Kim, J. E., & Zane, N. (2016). Help-seeking intentions among Asian American and White American Students in Psychological Distress: Application of the Health Belief Model. *Cultural Diversity and Ethnic Minority Psychology, 22*(3), 311-321.

Kim, Y. S., Leventhal, B. L., Koh, Y., Fombonne, E., Laska, E., Lim, E., Cheon, K., Kim, S., Kim, Y., Lee, H., Song, D., & Grinker, R. R. (2011). Prevalence of Autism Spectrum Disorder in a Total Population Sample. *American Journal of Psychiatry, 168*(9), 904-912.

Kim, Y. S., Rhee, T. G., Lee, H. Y., Park, B. H., & Sharratt, M. L. (2017). Mental health literacy as a mediator in use of mental health services among older korean adults. *International Psychogeriatrics, 29*(2), 269-279.

King, K. E., Schlichthorst, M., Spittal, M. J., Phelps, A., & Pirkis, J. (2018). Can a documentary increase help-seeking intentions in men? A randomised controlled trial. *Journal of Epidemiology & Community Health, 72*(1), 92-98.

Kingerlee, R. (2012). Conceptualizing men: A transdiagnostic model of male distress. *Psychology and Psychotherapy: Theory, Research, and Practice, 85*(1), 83-99.

Kinniburgh, K. J., Blaustein, M., Spinazzola, J., & Van der Kolk, B. A. (2017). Attachment, Self-Regulation, and Competency: A comprehensive intervention framework for children with complex trauma. *Psychiatric annals, 35*(5), 424-430.

Kiselica, M. S., & Englar-Carlson, M. (2010). Identifying, affirming, and building upon male strengths: The positive psychology/positive masculinity model of psychotherapy with boys and men. *Psychotherapy: Theory, Research, Practice, Training, 47*(3), 276-287.

Kivari, C. A., Oliffe, J. L., Borgen, W. A., & Westwood, M. J. (2018). No Man Left Behind: Effectively Engaging Male Military Veterans in Counseling. *American Journal of Men's Health, 12*(2), 241-251.

Krumm, S., Checchia, C., Koesters, M., Killian, R., & Becker, T. (2017). Men's Views on Depression: A Systematic Review and Metasynthesis of Qualitative Research. *Psychopathology, 50*(2), 107-124.

Krzywinski, M., & Altman, N. (2013). Points of Significance: Power and Sample Size. *Nature Methods, 10*(12), 1139–1140.

Kutcher, S., Wei, Y., & Coniglio, C. (2016). Mental Health Literacy: Past, Present and Future. *The Canadian Journal of Psychiatry, 61*(3), 154-158.

la Roi, C., Kretschmer, T., Veenstra, R., Bos, H., Goossens, L., Verschueren, K., Colpin, H., Leeuwen, K.V., Noortgate, W.V.D., & Dijkstra, J. K. (2020). Sexual orientation, peer relationships, and depressive symptoms: Findings from a sociometric design. *Journal of Applied Developmental Psychology, 66*, 101086.

Lally, J., ó Conghaile, A., Quigley, S., Bainbridge, E., & McDonald, C. (2013). Stigma of mental illness and help-seeking intention in university students. *The Psychiatrist, 37*(8), 253-260.

Lancaster, G. A., & Thabane, L. (2019). Guidelines for reporting non-randomised pilot and feasibility trials. *Pilot and Feasibility Studies, 5*(114), 1-6.

Lane, J. M., & Addis, M. E. (2005). Male gender role conflict and patters of help seeking in Costa Rica and the United States. *Psychology of Men & Masculinity, 6*(3), 155-168.

Lannin, D. G., Vogel, D. L., Brenner, R. E., Abraham, W. T., & Heath, P. J. (2016). Does self-stigma reduce the probability of seeking mental health information? *Journal of Counseling Psychology, 63*(3), 351-358.

Levant, K., Kamaradova, D., & Prasko, J. (2014). Perspectives on perceived stigma and self-stigma in adult male patients with depression. *Neuropsychiatric disease and treatment, 10*, 1399-1405.

Lee, H. Y., Hwang, J., Ball, J. G., Lee, J., Yu, Y., & Albright, D. L. (2020). Mental Health Literacy Affects Mental Health Attitude: Is There a Gender Difference? *American Journal of Health Behavior, 44*(3), 282-291.

Levant, R. F. (2011). Research in the psychology of men and masculinity using the gender role strain paradigm as a framework. *American Psychologist, 66*(8), 765-776.

Levant, R. F., Stefanov, D. G., Rankin, T. J., Halter, M. J., Mellinger, C., & Williams, C. M. (2013). Moderated path analysis of the relationships between masculinity and men's attitudes toward seeking psychological help. *Journal of Counselling Psychology, 60*(3), 392-406.

Liddle, S. K., Deane, F. P., Batterham, M., & Vella, S. A. (2019). A brief sports-based mental health literacy program for adolescent males: A cluster-randomized controlled trial. *Journal of Applied Sport Psychology*, 1-25.

Liddon, L., Kingerlee, R., & Barry, J. A. (2018). Gender differences in preferences for psychological treatment, coping strategies, and triggers for help-seeking. *British Journal of Clinical Psychology, 57*(1), 42-58.

Liddon, L., Kingerlee, R., Seager, M., & Barry, J. A. (2019). What are the factors that make a male-friendly therapy? In J. A. Barry, R. Kingerlee, M. Seager, & L. Sullivan, *The Palgrave Handbook of Male Psychology and Mental Health* (pp. 671-694). Cham: Palgrave Macmillan.

Lindsey, M. A., Joe, S., & Nebbitt, V. (2010). Family Matters: The Role of Mental Health Stigma and Social Support on Depressive Symptoms and Subsequent Help Seeking Among African American Boys. *Journal of Black Psychology, 36*(4), 458-482.

Liu, C. H., Stevens, C., Wong, S. H., Yasui, M., & Chen, J. A. (2019). The prevalence and predictors of mental health diagnoses and suicide among US college students: Implications for addressing disparities in service use. *Depression and anxiety, 36*(1), 8-17.

Liu, W. M., & Iwamoto, D. K. (2007). Conformity to masculine norms, asian values, coping strategies, peer group influences and substance use among asian american men. *Psychology of Men & Masculinity, 8*(1), 25-39.

Lo, K., Gupta, T., & Keating, J. L. (2018). Interventions to Promote Mental Health Literacy in University Students and Their Clinical Educators. A systematic review of randomised controlled trials. *Health Professions Education, 4*(3), 161-175.

Luitel, N. P., Jordans, M. J., Kohrt, B. A., Rathod, S. D., & Komproe, I. H. (2017). Treatment gap and barriers for mental health care: A cross-sectional community survey in Nepal. *PLoS One, 12*(8), e0183223.

Möller-Leimkühler, A. M. (2002). Barriers to help-seeking by men: a review of sociocultural and clinical literature with particular reference to depression. *Journal of Affective Disorders, 71*(1), 1-9.

Möller-Leimkühler, A. M. (2003). The gender gap in suicide and premature death or: why are men so vulnerable? *European Archives of Psychiatry and Clinical Neuroscience, 253*(1), 1-8.

Macaskill, A. (2013). The mental health of university students in the United Kingdom. *British Journal of Guidance & Counselling, 41*(4), 426-441.

MacInnes, D. L., & Lewis, M. (2008). The evaluation of a short group programme to reduce self-stigma in people with serious and enduring mental health problems. *Journal of Psychiatric and Mental Health Nursing, 15*(1), 59-65.

Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, Gender, and the Underutilization of Mental Health Services: The Influence of Help-seeking Attitudes. *Aging and Mental Health, 10*(6), 574-582.

Mackenzie, C. S., Scott, T., Mather, A., & Sareen, J. (2008). Older adults' help-seeking attitudes and treatment beliefs concerning mental health problems. *American Journal of Geriatric Psychiatry, 16*(12), 1010-1019.

Mackenzie, C. S., Visperas, A., Ogrondniczuk, J. S., Oliffe, J. L., & Nurmi, M. A. (2019). Age and sex differences in self-stigma and public stigma concerning depression and suicide in men. *Stigma and Health, 4*(2), 233-241.

MacNeil, B. A., Hudson, C. C., & Leung, P. (2018). It's raining men: descriptive results for engaging men with eating disorders in a specialized male assessment and treatment track (MATT). *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity, 23*(6), 817-824.

Mahalik, J. R., Good, G. E., Tager, D., Levant, R. F., & Mackowiak, C. (2012). Developing a taxonomy of helpful and harmful practices for clinical work with boys and men. *Journal of counseling psychology, 59*(4), 591-603.

Mahalik, J. R., Locke, B. D., Ludlow, L., & Diemer, M. A. (2003). Development of the Conformity to Masculine Norms Inventory. *Psychology of Men & Masculinity, 4*(1), 3-25.

Man Therapy. (n.d). Retrieved from: https://www.mantherapy.org/

ManHealth. (2020). Retrieved from: https://www.manhealth.org.uk/about/

Mann, C. E., & Himelein, M. J. (2008). Putting the person back into psychopathology: an intervention to reduce mental illness stigma in the classroom. *Social psychiatry and psychiatric epidemiology, 43*(7), 545-551.

Mann, J. J., Apter, A., Bertolote, J., Beautrais, A., Currier, D., Haas, A., Hegerl, U., Lonnqvist, J., Malone, K., Marusic, A., Mehlum, L., Patton, G., Phillips, M., Rutz, W., Rihmer, Z., Schmidtke, A., Shaffer, D., Silverman, M., Varnik, A., Wasserman, D., Yip, P., & Hendin, H. (2010). Suicide Prevention Strategies: A Systematic Review. *JAMA, 294*(16), 2064-2074.

Marcum, J. A. (2017). Clinical Decision-Making, Gender Bias, Virtue Epistemology, and Quality Healthcare. *Topoi, 36*(3), 501-508.

Marsh, J. C., Park, K., Lin, Y., & Bersamira, C. (2018). Gender differences in trends for heroin use and nonmedical prescription opioid use, 2007 - 2014. *Journal of substance abuse treatment, 87*, 79-85.

Martin, L. A., Neighbors, H. W., & Griffith, D. M. (2013). The Experience of Symptoms of Depression in Men vs Women Analysis of the National Comorbidity Survey Replication. *JAMA psychiatry, 70*(10), 1100-1106.

Maxwell, S. E. (2004). The persistence of underpowered studies in psychological research: causes, consequences and remedies. *Psychological methods, 9*(2), 147-163.

McFall, M., Malte, C., Fontana, A., & Rosenheck, R. A. (2000). Effects of an outreach intervention on use of mental health services by veterans with posttraumatic stress disorder. *Psychiatric Services, 51*(3), 369-374.

McHugh, K. R., Votaw, V. R., Sugarman, D. E., & Greenfield, S. F. (2018). Sex and gender differences in substance use disorders. *Clinical Psychology Review, 66*, 12-23.

McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia Medica, 22*(3), 276-282.

McIntyre, J.C., Worsley, J., Corcoran, R., Harrison Woods, P., & Bentall R.P. (2018). Academic and non-academic predictors of student psychological distress: The role of social identify and loneliness. *Journal of Mental Health, 27*(3), 230-239.

McKelley, R. A., & Rochlen, A. B. (2007). The Practice of Coaching: Exploring Alternatives to Therapy for Counseling-Resistant Men. *Psychology of Men & Masculinities, 8*(1), 53-65.

McLafferty, I. (2004). Focus group interviews as a data collecting strategy. *Journal of advanced nursing, 48*(2), 187-194.

McMahon, J., Tiernan, J., & Moane, G. (2020). Differences in gay and heterosexual men's emotional restriction through their femininity: an Irish study. *Journal of Gender Studies, 29*(4), 457-469.

McManus, S., & Gunnell, D. (2020). Trends in mental health, non-suicidal self-harm and suicide attempts in 16-24 year old students and non-students in England, 2000-2014. *Social psychiatry and psychiatric epidemiology, 55*(1), 125-128.

McManus, S., Bebbington, P., Jenkins, R., & Brugha T. (2016). *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014.* Leeds: NHS Digital.

Meehan, S.-A., Peirson, A., & Fridjhon, P. (2007). Suicide Ideation in Adolescent South Africans: The Role of Gender and Coping Strategies. *South African Journal of Psychology, 37*(3), 552-575.

Men's Health Forum. (2015). *How To Make Mental Health Services Work For Men.* Men's Health Forum.

Men's Speak. (2020). *MenSpeak Men's Groups*. Retrieved from: https://mensgroups.co.uk/about/

Mental Health Foundation. (2016). *Fundamental Facts About Mental Health 2016.* London: Mental Health Foundation.

Mergl, R., Koburger, N., Heinrichs, K., Székely, A., Tóth, M. D., Coyne, J., Quinatão, S., Arensman, E., Coffey, C., Maxwell, M., Vãrnick, A., van Audenhove, C., McDaid, D., Sarchiapone, M., Schmidtke, A., Genz, A., Gusmão, R., & Hegerl, U. (2015). What are reasons for the large gender differences in the lethality of suicidal acts? An epidemiological analysis in four European Countries. *PLoS One, 10*(7), e0129062.

Messerschmidt, J. W. (2019). The Salience of "Hegemonic Masculinity". *Men and Masculinities, 22*(1), 85-91.

Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel: A Guide to Designing Interventions.* Great Britain: Silverback Publishing.

Michie, S., Fixsen, D., Grimshaw, J. M., & Eccles, M. P. (2009). Specifying and reporting complex behaviour change interventions: the need for a scientific method. *Implementation Science, 4*(1), 1-6.

Michie, S., Johnston, M., & Carey, R. (2016). Behaviour change techniques. In M. Gellman, & J. Turner, *Encyclopedia of Behavioral Medicine* (pp. 1-8). New York: Springer.

Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., Eccles, M.P., Cane, J., & Wood, C. E. (2013). The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. *Annals of Behavioral Medicine, 46*(1), 81-95.

Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation Science, 6*(1), 42-53.

Michie, S., West, R., Sheals, K., & Godinho, C. A. (2018). Evaluating the effectiveness of behavior change techniques in health-related behavior: a scoping review of methods used. *Translational behavioral medicine, 8*(2), 212-224.

Miller, W. R., & Rollnick, S. (2013). *Motivational Interviewing: Helping people change (3rd ed.).* New York: Guildford Press.

Miller, W. R., & Rose, G. S. (2015). Motivational Interviewing and Decisional Balance: Contrasting Responses to Client Ambivalence. *Behavioural and Cognitive Psychotherapy, 43*(2), 129-141.

Milligan, C., Dowrick, C., Payne, S., Hanratty, B., Irwin, P., Neary, D., & Richardson, D. (2013). *Men's Sheds and other gendered interventions for older men: improving health and wellbeing through social activity. A systematic review and scoping of the evidence base.* Lancaster: Lancaster University Centre for Ageing Research.

Mitchell, C., McMillan, B., & Hagan, T. (2017). Mental health help-seeking behaviours in young adults. *British Journal of General Practice, 67*(654), 8-9.

Moffitt, T. E., Caspi, A., Taylor, A., Kokaua, J., Milne, B. J., Polanczyk, G., & Poulton, R. (2010). How common are common mental disorders? Evidence that lifetime prevalence rates are doubled by prospective versus retrospective ascertainment. *Psychological Medicine, 40*(6), 899-909.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Medicine, 6*(7), e1000097.

Monaem, A., Woods, M., Macdonald, J., Hughes, R., & Orchard, M. (2007). Engaging men in the health system: observations from service providers. *Australian Health Review, 31*(2), 211-216.

Moore, G. F., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., Moore, L., O'Cathain, A., Tinati, T., Wight, D., & Baird, J. (2015). Process evaluation of complex interventions: Medical Research Council Guidance. *BMJ, 350*, h1258.

Morgan, M., Hayes, R., Williamson, M., & Ford, C. (2007). Men's Sheds: A Community Approach to Promoting Mental Health and Well-Being. *International Journal of Mental Health Promotion, 9*(3), 48-52.

Mortier, P., Cuijpers, P., Kiekens, G., Auerbach, R. P., Demyttenaere, K., Green, J. G., Kessler, R.C., Nock, M.K., & Bruffaerts, R. (2018). The prevalence of suicidal thoughts and behaviours among college students: a meta-analysis. *Psychological Medicine, 48*(4), 554-565.

Nam, K. S., Choi, S. I., Lee, J. H., Kim, A. R., & Lee, S. M. (2013). Psychological factors in college student' attitudes toward seeking professional psychological help: A meta-analysis. *Professional Psychology: Research and Practice, 44*(1), 37-45.

Nam, S. K., Chu, H. J., Lee, M. K., Lee, H. J., Kim, N., & Lee, S. M. (2010). A meta-analysis of gender differences in attitudes toward seeking professional psychological help. *Journal of American College Health, 59*(2), 110-116.

National Institute for Health and Care Excellence. (2020). Retrieved from: https://www.nice.org.uk/about/what-we-do

National Institute of Health Research. (2014). *Patient and public involvement in health and social care research: A handbook for researchers.* National Institute of Health Research.

National Institute of Mental Health. (n.d.). *NIMH's 'Real Men. Real Depression' Campaign*. Retrieved from: https://www.nimh.nih.gov/health/topics/men-and-mental-health/men-and-depression/nimhs-real-men-real-depression-campaign.shtml#part_152890

Nearchou, F. A., Bird, N., Costello, A., Duggan, S., Gilroy, J., Long, R., McHugh, L., & Hennessy, E. (2018). Personal and perceived public mental-health stigma as predictors of help-seeking intentions in adolescents. *Journal of Adolescence, 66*, 83-90.

Negash, A., Khan, M. A., Medhin, G., Wondimagegn, D., & Araya, M. (2020). Mental distress, perceived need, and barriers to receive professional mental health care among university students in Ethiopia. *BMC Psychiatry, 20*, 187-202.

NHS Digital, N. A. (2016). *Psychological Therapies: Annual Report on the Use of IAPT Services - England, 2015-16.* Retrieved from: http://webarchive.nationalarchives.gov.uk/20180328133700/http://digital.nhs.uk/catalogue/PUB22110

Nolen-Hoeksema, S. (2004). Gender Differences in Risk Factors and Consequences for Alcohol Use and Problems. *Clinical Psychology Review, 24*(8), 981-1010.

Norman, J. (2004). Gender Bias in the Diagnosis and Treatment of Depression. *International Journal of Mental Health, 33*(2), 32-43.

O'Brein, R., Hunt, K., & Hart, G. (2005). 'It's caveman stuff, but that is to a certain extent how guys still operate': men's accounts of masculinity and help seeking. *Social science & medicine, 61*(3), 503-516.

O'Cathain, A., Croot, L., Duncan , E., Rousseau, N., Sworn, K., Turner, K. M., Yardley, L., & Hoddinott, P. (2019). Guidance on how to develop complex interventions to improve health and healthcare. *BMJ Open, 9*(8), e029954.

Oexle, N., Rüsch, N., Viering, S., Wyss, C., Seifritz, E., Xu, Z., & Kawohl, W. (2017). Self-stigma and suicidality: a longitudinal study. *European Archives of Psychiatry and Clinical Neuroscience, 267*(4), 359-361.

Office for National Statistics. (2017). *Suicides among full-time students, as defined by National Socio-Economic Class (NS-SEC) classification, deaths registered in England and Wales between 2001 and 2016.* Newport: Office for National Statistics.

Office for National Statistics. (2018). *Suicides in the UK: 2018 registrations.* London: Office for National Statistics.

Office for National Statistics. (2020). *Support for students with mental health issues in higher education in England.* London: Office for National Statistics.

Ogrondniczuk, J., Oliffe, J., & Beharry, J. (2018). HeadsUpGuys: Canadian online resource for men with depression. *Canadian Family Physician, 64*(2), 93-94.

Oliffe, J. L., & Han, C. S. (2014). Beyond workers' compensation: Men's mental health in and our of work. *American Journal of Men's Health, 8*(1), 45-53.

Oliffe, J. L., Han, C. S., Ogrodniczuk, J. S., Phillips, C. J., & Roy, P. (2011). Suicide From the Perspectives of Older Men Who Experience Depression: A Gender Analysis. *American Journal of Men's Health, 5*(5), 444-454.

Oliffe, J. L., Ogrodniczuk, J. S., Bottorff, J. L., Johnson, J. L., & Hoyak, K. (2012). "You feel like you can't live anymore": Suicide from perspectives of Canadian men who experience depression. *Social Science & Medicine, 74*(4), 506-514.

Oliver, M. I., Pearson, N., Coe, N., & Gunnell, D. (2005). Help-seeking behaviour in men and women with common mental health problems: cross-sectional study. *The British Journal of Psychiatry, 186*(4), 297-301.

Owen, J., Wong, Y. J., & Rodolfa, E. (2009). Empirical Search For Psychotherapists' Gender Competence in Psychotherapy. *Psychotherapy Theory Research & Practice, 46*(4), 448-458.

Pal, H. R., Yadav, D., Mehta, S., & Mohan, I. (2007). A comparison of brief intervention versus simple advice for alcohol use disorders in a North India community-based sample followed for 3 months. *Alcohol & Alcoholism, 42*(4), 328-332.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method

implementation research. *Administration and policy in mental health and mental health services research, 42*(5), 533-544.

Parent, M. C., & Moradi, B. (2011). An Abbreviated Tool for Assessing Conformity to Masculine Norms: Psychometric Properties of the Conformity to Masculine Norms Inventory-46. *Psychology of Men & Masculinity, 12*(4), 339-353.

Parent, M., Hammer, J. H., Bradstreet, T. C., Schwartz, E. N., & Jobe, T. (2018). Men's Mental Health Help-Seeking Behaviors: An Intersectional Analysis. *American Journal of Men's Health, 12*(1), 64-73.

Patrick, S., & Robertson, S. (2016). Mental health and wellbeing: focus on men's health. *British Journal of Nursing, 25*(21), 1163-1169.

Pedersen, E. R., & Paves, A. P. (2014). Comparing perceived public stigma and personal stigma of mental health treatment seeking in a young adult sample. *Psychiatry Research, 219*(1), 143-150.

Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology, 54*(4), 373-384.

Pedrelli, P., Borsari, B., Lipson, S. K., Heinze, J. E., & Eisenberg, D. (2016). Gender differences in the relationship among major depressive disorder, heavy alcohol use, and mental health treatment engagement among college students. *Journal of studies on alcohol and drugs, 77*(4), 620-628.

Piper, S. E., Bailey, P. E., Lam, L. T., & Kneebone, I. I. (2018). Predictors of mental health literacy in older people. *Archives of Gerontology and Geriatrics, 79*, 52-56.

Pirkis, J., Spittal, M. J., Keogh, L., Mousaferiadis, T., & Currier, D. (2017). Masculinity and sucidial thinking. *Social Psychiatry and Psychiatric Epidemiology, 52*(3), 319-327.

Player, M. J., Proudfoot, J., Fogarty, A., Whittle, E., Spurrier, M., Shand, F., Christensen, H., Hadzi-Pavlovic, D., & Wilhelm, K. (2015). What Interrupts Suicide Attempts in Men: A Qualitative Study. *PLoS One, 10*(6), e0128180.

Pollard, J. (2016). Early and effective intervention in male mental health. *Perspectives in public health, 136*(6), 337-338.

Powell, W., Adams, L. B., Cole-Lewis, Y., Agyemang, A., & Upton, R. D. (2016). Masculinity and race-related factors as barriers to health help-seeking barriers among african-american men. *Behavioral Medicine, 42*(3), 150-163.

Primack, J. M., Addis, M. E., Syzdek, M., & Miller, I. W. (2010). The men's stress workshop: a gender-sensitive treatment for depressed men. *Cognitive and Behavioral Practice, 17*(1), 77-87.

QS Top Universities. (2020). Retrieved from: https://www.topuniversities.com/universities/kings-college-london#wurs

Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. *European Journal of Education Studies, 3*(9), 369-387.

Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. *European Psychiatry, 20*(8), 529-539.

Rafail, P., & Freitas, I. (2019). Grievance Articulation and Community Reactions in the Men's Rights Movement Online. *Social Media + Society, 5*(2), 1-11.

Rafal, G., Gatto, A., & DeBate, R. (2018). Mental health literacy, stigma, and help-seeking behaviors among male college students. *Journal of American College Health, 66*(4), 284-291.

Ramaeker, J., & Petrie, T. A. (2019). "Man up!": Exploring intersections of sport participation, masculinity, psychological distress, and help-seeking attitudes and intentions. *Psychology of Men & Masculinities, 20*(4), 515-527.

Rasmussen, M. L., Hjelmeland, H., & Dieserud, G. (2018). Barriers toward help-seeking among young men prior to suicide. *Death Studies, 42*(2), 96-103.

Ratnayake, P., & Hyde, C. (2019). Mental Health Literacy, Help-Seeking Behaviour and Wellbeing in Young People: Implications for Practice. *The Educational and Development Psychologist, 36*(1), 16-21.

Reavley, N. J., McCann, T. V., & Jorm, A. F. (2012). Mental health literacy in higher education students. *Early intervention in psychiatry, 6*(1), 45-52.

Reid, R. (2018). *Women don't have any problem with male only spaces - as long as theyre not screwing us over*. Retrieved from: https://metro.co.uk/2018/02/02/women-dont-problem-male-spaces-long-not-screwing-us-7282027/

Reinhardt, S., Bischof, G., Grothues, J., John, U., Meyer, C., & Rumpf, H. J. (2008). Gender differences in the efficacy of brief interventions with a stepped cared approach in general practice patients with alcohol-related disorders. *Alcohol & Alcoholism, 43*(3), 334-340.

Rice, S. M., Aucote, H. M., Parker, A. G., Alvarez-Jimenez, M., Filia, K. M., & Amminger, G. P. (2017a). Men's perceived barriers to help seeking for depression: Longitudinal findings relative to symptom onset and duration. *Journal of health psychology, 22*(5), 529-536.

Rice, S. M., Fallon, B. J., Aucote, H. M., Möller-Leimkühler, A., Treeby, M. S., & Amminger, G. P. (2015). Longitudinal sex differences of externalising and internalising depression symptoms trajectories: Implications for assessment of depression in men from an online study. *International Journal of Social Psychiatry, 61*(3), 236-240.

Rice, S. M., Telford, N. R., Rickwood, D. J., & Parker, A. G. (2017b). Young men's access to community-based mental health care: qualitative analysis of barriers and facilitators. *Journal of Mental Health, 27*(1), 59-65.

Richardson, T., Elliott, P., & Roberts, R. (2017). Relationship between loneliness and mental health in students. *Journal of Public Mental Health*, *16*(2), 48-54.

Rickwood, D. J., & Braithwaite, V. A. (1994). Social-psychological factors affecting help-seeking for emotional problems. *Social Science & Medicine, 39*(4), 563-572.

Rickwood, D. J., Mazzer, K. R., & Telford, N. R. (2015). Social influences on seeking help from mental health services, in-person and online, during adolescence and young adulthood. *BMC Psychiatry, 15*(1), 40-49.

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management, 5*, 173-183.

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. V. (2005). Young people's help-seeking for mental health problems. *Australian e-journal for the Advancement of Mental Health, 4*(3), 218-251.

River, J. (2018). Diverse and dynamic interactions: A model of suicidal men’s help seeking as it relates to health services. *American Journal of Men's Health, 12*(1), 150-159.

Robertson, S., Bagnall, A., & Walker, M. (2015). *Evidence for a gender-based approach to mental health programmes: Identifying the key considerations associated with "being male".* Movember Foundation.

Robertson, S., Gough, B., Hanna, E., Raine, G., Robinson, M., Seims, A., & White, A. (2018). Successful mental health promotion with men: the evidence from 'tactic knowledge'. *Health Promotion International, 33*(2), 334-344.

Robertson, S., & Kilvington-Dowd, L. (2019). Masculinity and men's health disparities. *Men's health equity: a handbook.* New York: Routledge

Robertson, S., Williams, B., & Oliffe, J. (2016). The case of retaining a focus on 'Masculinities'. *International Journal of Men's Health, 15*(1).

Robinson, M., & Robertson, S. (2010). The application of social marketing to promote men's health: a brief critique. *International Journal of Men's Health, 9*(1), 50-61.

Rochlen, A. B., & Hoyer, W. D. (2005). Marketing mental health to men: Theoretical and practical considerations. *Journal of Clinical Psychology, 61*(6), 675-684.

Rochlen, A. B., Blazina, C., & Raghunathan, R. (2002). Gender Role Conflict, Attitudes Toward Career Counseling, Career Decision-Making, and Perceptions of Career Counseling Advertising Brochures. *Psychology of Men & Masculinity, 3*(2), 127-137.

Rochlen, A. B., McKelley, R. A., & Pituch, K. A. (2006). A preliminary examination of the "Real Men. Real Depression" campaign. *Psychology of Men & Masculinity, 7*(1), 1-13.

Rochlen, A. B., Whilde, M. R., & Hoyer, W. D. (2005). The Real Men. Real Depression Campaign: Overview, Theoretical Implications, and Research Contributions. *Psychology of Men & Masculinity, 6*(3), 186-194.

Rowlands, G., Sims, J., & Kerry, S. (2005). A lesson learnt: the importance of modelling in randomized controlled trials for complex interventions in primary care. *Family practice, 22*(1), 132-139.

Rutberg, S., & Bouikidis, C. D. (2018). Focusing on the Fundamentals: A Simplistic Differentiation Between Qualitative and Quantitative Research. *Nephrology Nursing Journal, 45*(2), 209-212.

Rutz, W., & Rihmer, Z. (2009). *Suicide in men.* Oxford textbook of suicidology and suicide prevention.

Ryan, G., Marley, I., Still, M., Lyons, Z., & Hood, S. (2017). Use of mental-health services by Australian medical students: a cross-sectional survey. *Australasian Psychiatry, 25*(4), 407-410.

Ryan, J., Lopian, L., Le, B., Edney, S., Van Kessel, G., Plotnikoff, R., Vandelanotte, C., Olds, T., & Maher, C. (2019). It's not raining men: a mixed-methods study investigating methods of improving male recruitment to health behaviour research. *BMC Public Health, 19*(1), 814-823.

Sánchez, F. J., Greenberg, S. T., Liu, W. M., & Vilain, E. (2009). Reported Effects of Masculine Ideals on Gay Men. *Psychology of Men & Masculinity, 10*(1), 73-87.

Sagar-Ouriaghli, I., Brown, J. S., Vinay, T., & Godfrey, E. (2020a). Engaging Male Students with Mental Health Support: A Qualitative Focus Group Study. *BMC Public Health*, *20*(1), 1-14.

Sagar-Ouriaghli, I., Godfrey, E., Bridge, L., Meade, L., & Brown, J. S. (2019). Improving Mental Health Service Utilization Among Men: A Systematic Review and Synthesis of Behavior Change Techniques Within Interventions Targeting Help-Seeking. *American Journal of Men's Health, 13*(3), 1-9.

Sagar-Ouriaghli, I., Godfrey, E., Graham, S., & Brown, J. S. (2020b). Improving Mental Health Help-Seeking Behaviours for Male Students: A Framework for Developing a Complex Intervention. *International Journal of Environmental Research and Public Health, 17*(14), 4965 - 4990.

Salaheddin, K., & Mason, B. (2016). Identifying barriers to mental health help-seeking among young adults in the UK: a cross-sectional survey. *British Journal of General Practice, 66*(651), e686-e692.

Salk, R. H., Hyde, J. S., & Abramson, L. Y. (2017). Gender Differences in Depression in Representative National Samples: Meta-Analyses of Diagnoses and Symptoms. *Psychological Bulletin, 143*(8), 783-822.

Salokangas, R. K., Vaahtera, K., Pacriev, S., Sohlman, B., & Lehtinen, V. (2002). Gender differences in depressive symptoms. An artefact caused by measurement instruments? *Journal of Affective Disorders, 68*(2-3), 215-220.

Salter, M. (2016). Men's rights or Men's Needs? Anti-Feminism in Australian Men's Health Promotion. *Canadian Journal of Women and the Law, 28*(1), 69-90.

Salvati, M., Ioverno, S., Giacomantonio, M., & Baiocco, R. (2016). Attitude Toward Gay Men in an Italian Sample: Masculinity and Sexual Orientation Make a Difference. *Sexual Research and Social Policy, 13*(2), 109-118.

Schnyder, N., Panczak, R., Groth, N., & Schultze-Lutter, F. (2017). Association between mental health-related stigma and active help-seeking: systematic review and meta-analysis. *The British Journal of Psychiatry, 210*(4), 261-268.

Schoen, E., Brock, R., & Hannon, J. (2019). Gender bias, other specified and unspecified feeding and eating disorders, and college students: a vignette study. *Eating disorders, 27*(3), 291-304.

Seager, M., & Barry, J. A. (2019a). Cognitive distortions in thinking about gender issues: gamma bias and the gender distortion matrix. In Barry, J.A., Seager, M., Kingerlee, R., & Sullivan, L. *The Palgrave Handbook of Male Psychology and Mental Health* (pp. 87-104). Cham: Macmillan.

Seager, M., & Barry, J. A. (2019b). Positive Masculinity: Including Masculinity as a Valued Aspect of Humanity. In J. A. Barry, R. Kingerlee, M. Seager, & L. Sullivan, *The Palgrave Handbook of Male Psychology and Mental Health* (pp. 105-122). Palgrave Macmillan.

Seamark, D., & Gabriel, L. (2018). Barriers to support: a qualitative exploration into the help-seeking and avoidance factors of young adults. *British Journal of Guidance & Counselling*, *46*(1), 120-131.

Seaton, C. L., Bottorff, J. L., Oliffe, J. L., Medhurst, K., & DeLeenheer, D. (2019). Mental Health Promotion in Male-Dominated Workplaces: Perspectives of Male Employees and Workplace Representatives. *Psychology of Men & Masculinities, 20*(4), 541-552.

Seehuus, M., Moeller, R. W., & Peisch, V. (2019). Gender effects on mental health symptoms and treatment in college students. *Journal of American College Health*, 1-8.

Seidler, Z. E., Dawes, A. J., Rice, S. M., Oliffe, J. L., & Dhillon, H. M. (2016). The role of masculinity in men's help-seeking for depression: a systematic review. *Clinical Psychology Review, 49*, 106-118.

Seidler, Z. E., Rice, S. M., Kealy, D., Oliffe, J. L., & Ogrodniczuk, J. S. (2020). Once bitten, twice shy: Dissatisfaction with previous therapy and its implications for future help-seeking among men. *The International Journal of Psychiatry in Medicine, 55*(4), 1-9.

Seidler, Z. E., Rice, S. M., Ogrodniczuk, J. S., Oliffe, J. L., & Dhillon, H. M. (2018). Engaging Men in Psychological Treatment: A Scoping Review. *American Journal of Men's Health, 12*(6), 1882-1900.

Seidler, Z. E., Rice, S. M., Oliffe, J. L., Fogarty, A. S., & Dhillon, H. M. (2017). Men In and Out of Treatment for Depression: Strategies for Improved Engagement. *Australian Psychologist, 53*(5), 405-415.

Sekhon, M, Cartwright, M., & Francis, J. J. (2017). Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework. *BMC Health Services Research, 17*(1), 88-101.

Sekhon, M., Cartwright, M., & Francis, J. J. (2018). Development of a theory-informed questionnaire to assess the acceptability of healthcare interventions: application of pre-validation methods. *UK Society of Behavioural Medicine.* Birmingham.

Seymour-Smith, S., Wetherell, M., & Phoenix, A. (2002). 'My wife ordered me to come!': A discursive analysis of doctors' and nurses' accounts of men's use of general practitioners. *Journal of Health Psychology, 7*(3), 253-267.

Sharp, W., Hargrove, D. S., Johnson, L., & Deal, W. P. (2006). Mental health education: an evaluation of a classroom based strategy to modify help seeking for mental health problems. *Journal of College Student Development, 47*(4), 419-438.

Shechtman, Z., Vogel, D. L., Strass, H. A., & Heath, P. J. (2018). Stigma in help-seeking: the case of adolescents. *British Journal of Guidance & Counselling, 46*(1), 104-119.

Shepherd, C. B., & Rickard, K. M. (2012). Drive for muscularity and help-seeking: The mediational role of gender role conflict, self-stigma, and attitudes. *Psychology of Men & Masculinity, 13*(4), 379-392.

Sheu, H.-B., & Sedkacek, W. H. (2004). An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. *Measurement and Evaluation in Counseling and Development, 37*(3), 130-143.

Sierra Hernandez, C. A., Oliffe, J. L., Joyce, A. S., Söchting, I., & Ogrodniczuk, J. S. (2014). Treatment preferences among men attending outpatient psychiatric services. *Journal of Mental Health, 23*(2), 83-87.

Sileo, K. M., & Kershaw, T. S. (2020). Dimensions of Masculine Norms, Depression, and Mental Health Service Utilization: Results From a Prospective Cohort Study Among Emerging Adult Men in the United States. *Amercian Journal of Men's Health, 14*(1), 1-16.

Simonsen, G., & Blazina, C. (2000). Gender Role Conflict and Psychological Well-Being Among Gay Men. *Journal of Counseling Psychology, 47*(1), 85-59.

Singh, S. P., & Toumainen, H. (2015). Transition from child to adult mental health services: needs, barriers, experiences and new models of care. *World Psychiatry, 14*(3), 358-361.

Siversten, B., Hysing, M., Knapstad, M., Harvey, A. G., Reneflot, A., Lønning, K. J., & O'Connor, R. C. (2019). Suicide attempts and non-suicidal self-harm among university students: prevalence study. *BJPsych Open, 5*(2), 1-8.

Slade, T., Grove, R., & Burgess, P. (2011). Kessler Psychological Distress Scale: normative data from the 2007 Australian National Survey of Mental Health and Wellbeing. *Austalian & New Zealand Journal of Psychiatry, 45*(4), 308-316.

Slade, T., Johnston, A., Teesson, M., Whiteford, H., Burgess, P., Pirkis, J., & Saw, S. (2009). *The Mental Health of Australians 2. Report on the 2007 National Survey of Mental Health and Wellbeing.* Canberra: Department of Health and Aging.

Smith, C. L., & Shochet, I. M. (2011). The impact of mental health literacy on help-seeking intentions: Results of a pilot study with first year psychology students. *International Journal of Mental Health Promotion, 13*(2), 14-20.

Sosu, E. M., & Pheunpha, P. (2019). Trajectory of University Dropout: Investigating the Cumulative Effect of Academic Vulnerability and Proximity to Family Support. *Frontiers in Education, 4*(6), 6-16.

Spandler, H., McKewon, M., Roy, A., & Hurley, M. (2013). Football metaphor and mental well-being: An evaluation of the It's A Goal! programme. *Journal of Mental Health, 22*(6), 544-554.

Spencer-Thomas, S., Hindman, J., & Conrad, J. (2014). *Man therapy: Outreach and impact on men's mental health program 18 months after launch.*

Spendelow, J. S., & Joubert, H. E. (2018). Does Experiential Avoidance Mediate the Relationship Between Gender Role Conflict and Psychological Distress? *American Journal of Men's Health, 12*(4), 688-695.

Spittlehouse, J. K., Boden, J. M., & Horwood, L. J. (2019). Sexual orientation and mental health over the life course in a birth cohort. *Psychological Medicine*, 1-8.

Staiger, T., Waldmann, T., Rüsch, N., & Krumm, S. (2017). Barriers and facilitators of help-seeking among unemployed persons with mental health problems: a qualitative study. *BMC Health Services Research, 17*(1), 39-48.

Steel, Z., Marnane, C., Iranpour, C., Chey, T., Jackson, J. W., Patel, V., & Silove, D. (2014). The global prevalence of common mental disorders: a systematic review and meta-analysis 1980-2013. *International Journal of epidemiology, 43*(2), 476-493.

Steenhuis, I. H., & Bermeer, W. M. (2009). Portion size: review and framework for interventions. *International Journal of Behavioral Nutrition and Physical Activity, 6*(1), 58-68.

Strömberg, R., Backlund, L. G., & Löfvander, M. (2010). A comparison between the Beck's Depression Inventory and the Gotland Male Depression Scale in detecting depression among men visiting a drop-in clinic in primary car. *Nordic Journal of Psychiatry, 64*(4), 258-264.

Sveticic, J., Milner, A., & De Leo, D. (2012). Contacts with mental health services before suicide: a comparison of Indigenous with non-Indigenous Australians. *General Hospital Psychiatry, 34*(2), 185-191.

Swami, V. (2014). Mental health literacy of depression: gender differences and attitudinal antecedents in a representative British sample. *PLoS One, 7*(11), e49779.

Syzdek, M. R., Addis, M. E., Green, J. D., Whorley, M. R., & Berger, J. L. (2014). A pilot trial of gender-based motivational interviewing for help-seeking and internalizing symptoms in men. *Psychology of Men & Masculinity, 15*(1), 90-94.

Syzdek, M. R., Green, J. D., Lindgren, B. R., & Addis, M. E. (2016). Pilot trial of gender-based motivational interviewing for increasing mental health service use in college men. *Psychotherapy, 53*(1), 124-129.

Taggart, F., Stewart-Brown, S., & Parkinson, J. (2015). *Warwick-Edinburgh Mental Well-being Scale (WEMWBS) User Guide - Version 2.* Edinburgh: NHS Health Scotland.

Tang, M. O., Oliffe, J. L., Galdas, P. M., Phinney, A., & Han, C. (2014). College men's depression-related help-seeking: a gender analysis. *Journal of Mental Health, 23*(5), 219-224.

Taplin, M., Yum, J. C., Jegede, O., Fan, R. Y., & Chan, M. S.-c. (2001). Help-seeking strategies Used by High-achieving and Low-achieving Distance Education Students. *Journal of Distance Education, 16*(1), 56-69.

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *5*(1), 63-76.

Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., Robson, R., Thabane, M., Giangreggorio, L., & Goldsmith, C. H. (2010). A tutorial on pilot studies: the what, why and how. *BMC Medical Research Methodology, 10*(1), 1-10.

The Lancet. (2018). Closing the gender pay gap: when and how? *The Lancet*, 1455.

The ManKind Project. (2020). Retrieved from: https://mankindprojectuki.org/mens-group

The National Institute for Health and Care Excellence. (2019). *NICE Pathways*. Retrieved from: https://pathways.nice.org.uk/

Thomas, H. (2003). Quality assessment tool for quantitative studies. In *Effective Public Health Practice Project.* McMaster University, Toronto.

Thompson, A., Hunt, C., & Issakidis, C. (2004). Why wait? Reasons for delay and prompts to seek help for mental health problems in an Australian clinical sample. *Social Psychiatry and Psychiatric Epidemiology, 39*(10), 810-817.

Thorley, C. (2017). *Not by degrees: Improving student mental health in the UK's universities.* Retrieved from: https://www.ippr.org/research/publications/not-by-degrees

Topkaya, N. (2014). Gender, Self-Stigma, and Public Stigma in Predicting Attitudes toward Psychological Help-Seeking. *Educational Sciences: Theory and Practice, 14*(2), 480-487.

Turecki, G., & Brent, D. A. (2016). Suicide and suicidal behaviour. *The Lancet, 387*(10024), 1227–1239.

Twentyman, J., & Frank, M. (2017). Effects of Race and Ethnicity on Mental Health and Help-Seeking amongst Undergraduate University Students. *Journal of Undergraduate Ethnic Minority Psychology, 3*(6), 2332-9300.

UCAS. (2018). *UCAS Impact Report 2018.* Retrieved from: https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-analysis-reports/ucas-undergraduate-end-cycle-reports

UCAS. (2019). *UCAS End of Cycle Report 2019.* Cheltenham: UCAS.

UCAS. (2021). 2021 Cycle Application Figures – January Equal Consideration Deadline. Retrieved from: https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-releases/applicant-releases-2021/2021-cycle-applicant-figures-january-deadline

UK Men's Sheds Association. (n.d). Retrieved from: https://menssheds.org.uk/about/

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice, 6*(5), 100-110.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences, 15*(3), 398-405.

Van der Vaart, R., Witting, M., Riper, H., Kooistra, L., Bohlmeijer, E T., & Van Gemert-Pijnen, L. J. (2014). Blending online therapy into regular face-to-face therapy for depression: content, ratio and preconditions according to patients and therapists using a Delphi study. *BMC Psychiatry, 14*(1), 355-365.

Van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies. *Social Research UPDATE*, 35.

Verissimo, A. D., & Grella, C. E. (2018). Influence of gender and race/ethnicity on perceived barriers to help-seeking for alcohol and drug problems. *Journal of Substance Abuse Treatment, 75*, 54-61.

Vogel, D. L., Bitman, R. L., Hammer, J. H., & Wade, N. G. (2013). Is Stigma Internalized? The longitudinal impact of public stigma on self-stigma. *Journal of Counseling Psychology, 60*(2), 311-317.

Vogel, D. L., Epting, F., & Wester, S. R. (2003). Counselors' perceptions of female and male clients. *Journal of Counseling & Development, 81*(2), 131-141.

Vogel, D. L., Heimerdinger-Edwards, S. R., Hammer, J. H., & Hubbard, A. (2011). "Boys don't cry": Examination of the links between endorsement of masculine norms, self-stigma and help-seeking attitudes. *Journal of Counseling Psychology, 58*(3), 368-382.

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the Self-Stigma Associated With Seeking Psychological Help. *Journal of Counseling Psychology, 53*(3), 325-337.

Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology, 54*(1), 40-50.

Walesmann, K.M., Gee, G.C., & Gentile, D. (2014). Sick of our loans: Student borrowing and the mental health of young adults in the United States. *Social Science & Medicine, 124*, 85-93.

Walker, E. A., Katon, W. J., Russo, J., Korff, M. V., Lin, E., Simon, G., Bush, T., Ludman, E., & Unützer, J. (2000). Predictors of outcomes in a primary care depression trial. *Journal of general internal medicine, 15*(12), 859-867.

Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessley, R. C. (2005). Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. Archives of general psychiatry. *Archives of General Psychiatry, 62*(6), 629-640.

Wang, Y., Hunt, K., Nazareth, I., Freemantle, N., & Petersen, I. (2013). Do men consult less than women? An analysis of routinely collected UK general practice data. *BMJ open, 3*(8), e003320.

Watkins, D. C., Allen, J. O., Goodwill, J. R., & Noel, B. (2017). Strengths and Weaknesses of the Young Black Men, Masculinities, and Mental Health (YBMen) Facebook Project. *American Journal of Orthopsychiatry, 87*(4), 392-401.

Watkins, D. C., Hunt, J. B., & Eisenberg, D. (2011). Increased demand for mental health services on college campuses: Perspectives from administrators. *Qualitative Social Work, 11*(3), 319-337.

Wei, Y., Hayden, J. A., Kutcher, S., Zygmunt, A., & McGrath, P. (2013). The effectiveness of school mental health literacy prorgams to address knowledge, attitudes and help seeking among youth. *Early Intervention in Psychiatry, 7*(2), 109-121.

Weinberger, A. H., McKee, S. A., & Mazure, C. M. (2002). Inclusion of women and gender-specific analyses in randomized clinical trials of treatments for depression. *Journal of women's health, 19*(9), 1727-1732.

Wendt, D., & Shafer, K. (2016). Gender and attitudes about Mental Health Help Seeking: Results from National Data. *Health & Social Work, 41*(1), 20-28.

Wester, S. R. (2008). Male Gender Role Conflict and Multiculturalism: Implications for Counseling Psychology. *The Counseling Psychologist, 36*(2), 294-324.

Whato, R., & Swift, J. K. (2016). Labels, gender-role conflict, stigma, and attitudes toward seeking psychological help in men. *American Journal of Men's Health, 10*(3), 181-191.

White, R. (2002). Social and political aspects of men's health. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine, 6*(3), 267-285.

Wicki, M., Kuntsche, E., & Gmel, G. (2010). Drinking at European universities? A review of students' alcohol use. *Addictive Behaviors, 35*(11), 913-824.

Wilhelm, K. A. (2014). Gender and Mental Health. *Australian & New Zealand Journal of Psychiatry, 48*(7), 603-605.

Wilkins, D. (2010). *Untold Problems: A review of the essential issues in the mental health of men and boys.* London: Men's Health Forum.

Willging, C. E., Salvador, M., & Kano, M. (2006). Pragmatic Help Seeking: How Sexual and Gender Minority Groups Access Mental Health Care in a Rural State. *Psychiatric Services, 57*(6), 871-874.

Wilson, C. J., Deane, F. P., Ciarrochi, J. V., & Rickwood, D. (2005). Measuring help seeking intentions: properties of the general help seeking questionnaire. *Canadian Journal of Counselling, 39*(1), 15-28.

Wilson, N. J., & Cordier, R. (2013). A narrative review of Men's Sheds literature: reducing social isolation and promoting men's health and well-being. *Health and Social care in the community, 21*(5), 451-463.

Wimer, D. J., & Levant, R. F. (2011). The relation of masculinity and help-seeking style with the academic help-seeking behavior of college men. *The Journal of Men's Studies, 19*(3), 256-274.

Wong, Y. J., Ho, M. R., Wang, S. Y., & Miller, I. S. (2017). Meta-analyses of the relationship between conformity to masculine norms and mental health-related outcomes. *Journal of counseling psychology, 64*(1), 80-93.

Woodall, A., Morgan, C., Sloan, C., & Howard, L. (2010). Barriers to participation in mental health research: are there specific gender, ethnicity and age related barriers? *BMC Psychiatry, 10*(1), 103-112.

World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines.* Geneva: World Health Organization.

World Health Organization. (2002). *Gender and Mental Health.* Geneva: World Health Organization.

World Health Organization. (2017a). *Global Health Observatory (GHO) data*. Retrieved from: https://www.who.int/gho/mental_health/suicide_rates_male_female/en/

World Health Organization. (2005). *Promoting Mental Health: concepts, emerging evidence and practice.* Genevea: World Health Organization.

World Health Organization. (2013). *Mental Health Action Plan 2013-2020.* Geneva: World Health Organization.

World Health Organization. (2017b). *Depression and Other Common Mental Disorders: Global Health Estimates.* Geneva: World Health Organization.

World Health Organization. (2018). *World Health Organization Suicide Fact Sheet.* Retrieved from: https://www.who.int/news-room/fact-sheets/detail/suicide

Wu, I. H., Bathje, G. J., Kalibatseva, Z., Sung, D., Leong, F. T., & Collins-Eaglin, J. (2017). Stigma, mental health, and counseling service use: A person-centred approach to mental health stigma profiles. *Psychological services, 14*(4), 490-501.

Xu, Z., Huang, F., Kösters, M., Staiger, T., Becker, T., Thornicroft, G., & Rüsch, N. (2018). Effectiveness of interventions to promote help-seeking for mental health problems: systematic review and meta-analysis. *Psychological Medicine, 48*(16), 2658-2667.

Yamaguchi, S., Mino, Y., & Uddin, S. (2011). Strategies and future attempts to reduce stigmatization and increase awareness of mental health problems among young people: a narrative review of educational interventions. *Psychiatry and Clinical Neurosciences, 65*(5), 405-415.

Yardley, L., Morrison, L., Bradbury, K., & Muller, I. (2015). The person-based approach to intervention development: application to digital health-related behavior change interventions. *Journal of Medical Internet Research, 17*(1), e30.

Yousaf, O., & Popat, A. (2015). The bolstering effect of conceptual priming on psychological help-seeking attitudes in men. *Journal of Mental Health, 24*(6), 347-350.

Yousaf, O., Grunfeld, E. A., & Hunter, M. S. (2015). A systematic review of the factors associated with delays in medical and psychological help-seeking among men. *Health psychology review, 9*(2), 264-276.

Yousaf, O., Popat, A., & Hunter, M. S. (2015). An investigation of masculinity attitudes, gender and attitudes toward psychological help-seeking. *Psychology of Men & Masculinity, 16*(2), 234-237.

Appendices

Appendix 2. 257

Appendix 2.1: Systematic Review (Chapter 2) peer-reviewed post-print publication.......... 257

Appendix 2.2: Full search strategy utilised for MEDLINE via Ovid. 275

Appendix 2.3: Summary of uptake and dropout figures of the interventions. 277

Appendix 3. 278

Appendix 3.1: Focus group (Chapter 3) peer-reviewed post-print publication. 278

Appendix 3.2: Ethical approval and study documents for qualitative Study 292

Appendix 3.3: Focus group topic guide (including supportive questions) 305

Appendix 3.4: Sample transcript from focus groups. 306

Appendix 4. 307

Appendix 4.1: Intervention development/framework (Chapter 4) peer-reviewed post-print publication. 307

Appendix 4.2: Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) checklist. 332

Appendix 4.3: Summary of BCTs and processes identified in male help-seeking interventions. Adapted from Sagar-Ouriaghli et al., (2019). 337

Appendix 4.4: Theoretical Framework of Acceptability Questionnaire (TFAQ) 338

Appendix 5. 340

Appendix 5.1: Conformity to Masculine Norms Inventory (CMNI-46) 340

Appendix 5.2: Self-Stigma of Seeking-Help Scale (SSOSH) 343

Appendix 5.3: Attitudes Towards Seeking Professional Psychological Help Scale (ATSPPH-SF) 345

Appendix 5.4: Actual Help-Seeking Questionnaire (AHSQ) 347

Appendix 5.5: Warwick-Edinburgh Mental Well-Being Scale (WEMWBS). 348

Appendix 5.6: Ethical approval for pilot interventions 349

Appendix 5.7: The TIDieR (Template for Intervention Development and Replication) Checklist. 352

Appendix 5.8: The CONSORT Checklist for reporting a pilot or feasibility trial. 354

Appendix 5.9: Summary of voting poll sent to male students to identify appropriate names for intervention 1. 356

Appendix 5.10: Participant information sheets. 358

Appendix 5.11: Participant consent forms 369

Appendix 5.12: Participant demographic questionnaire. 374

Appendix 5.13: Intervention posters. 376

Appendix 5.14: Intervention PowerPoint slides for Men-Tality (Intervention 1). 379
Appendix 5.15: Intervention PowerPoint slides for Improving Your Psychological Strength (Intervention 2).. 396
Appendix 5.16: Mental Health Adapted Information Flyers for Man Cave (Intervention 3). 416

Appendix 2.

Appendix 2.1: Systematic Review (Chapter 2) peer-reviewed post-print publication.

Review

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Improving Mental Health Service Utilization Among Men: A Systematic Review and Synthesis of Behavior Change Techniques Within Interventions Targeting Help-Seeking

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Abstract

Compared to women, men are less likely to seek help for mental health difficulties. Despite considerable interest, a paucity in evidence-based solutions remains to solve this problem.

The current review sought to synthesize the specific techniques within male-specific interventions that may contribute to an improvement in psychological help-seeking (attitudes, intentions, or behaviors). A systematic review identified 6,598 potential articles from three databases (MEDLINE, EMBASE, and PsycINFO). Nine studies were eligible. A meta-analysis was problematic due to disparate interventions, outcomes, and populations. The decision to use an innovative approach that adopted the Behavior Change Technique (BCT) taxonomy to synthesize each intervention's key features likely to be responsible for improving help-seeking was made. Of the nine studies, four were engagement strategies (i.e., brochures/documentaries), two randomized controlled trials (RCTs), two pilot RCTs, and one retrospective review. Regarding quality assessment, three were scored as "strong," five as "moderate," and one as "weak." Key processes that improved help-seeking attitudes, intentions, or behaviors for men included using role models to convey information, psychoeducational material to improve mental health knowledge, assistance with recognizing and managing symptoms, active problem-solving tasks, motivating behavior change, signposting services, and, finally, content that built on positive male traits (e.g., responsibility and strength). This is the first review to use this novel approach of using BCTs to summarize and identify specific techniques that may contribute to an improvement in male help-seeking interventions, whether engagement with treatment or the intervention itself. Overall, this review summarizes previous male help-seeking interventions, informing future research/clinical developments.

Keywords

help-seeking, interventions, behavior change techniques, service utilization, mental health, men's health, masculinity

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Globally, males are 1.8 times more likely to take their own lives compared to women (Chang, Yip, & Chen, 2019; World Health Organization, 2017). This disproportionality higher suicide risk is often associated with men being less likely to seek help for mental health difficulties. Men tend to hold more negative attitudes toward the use of mental health services compared to women (Addis & Mahalik, 2003; Mackenzie, Gekoski, & Knox, 2006; Möller-Leimkühler, 2002; Yousaf, Popat, & Hunter,

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2015). Being male is negatively associated with one's willingness to seek mental health support (Gonzalez, Alegría, Prihoda, Copeland, & Zeber, 2011) and is a significant predictor of help-seeking attitudes (Nam et al., 2010). These attitudes are reflected in low service use, which is consistently observed across Western countries. When controlling for prevalence rates, women in the United States are 1.6 times more likely to receive any form of mental health treatment compared to men across a 12-month period (Wang et al., 2005). Similarly, Australian women are 14% more likely to access mental health services compared to men (Australian Bureau of Statistics, 2007; Harris et al., 2015). Finally, the United Kingdom's Improving Access to Psychological Therapies (IAPT) service that provides evidence-based psychological treatments for depression and anxiety receives 36% male referrals (NHS Digital, 2016). Women in the United Kingdom are also 1.58 times more likely to receive any form of treatment (either medication or psychological therapy) even when controlling for prevalence rates (McManus, Bebbington, Jenkins, & Brugha, 2016).

Although men complete more suicides globally, in Western countries the male-to-female ratio is notably higher, whereby men are 3.5 times more likely to commit suicide compared to their female counterparts (Chang et al., 2019; World Health Organization, 2002). It is important to note that not all men who commit suicide have a mental health issue due to a variety of psychological, social, and physical risk factors (Turecki & Brent, 2016). However, men who do experience suicidal ideation are less likely to use mental health services (Hom, Stanley, & Jonier, 2015), reducing opportunities for prevention and intervention.

Numerous reviews have attempted to identify the pertinent factors explaining why men are more reluctant to seek help for psychological distress (Gulliver, Griffiths, & Christensen, 2010; Möller-Leimkühler, 2002; Seidler, Dawes, Rice, Oliffe, & Dhillon, 2016). Men are thought to be deterred from engaging in mental health services due to socialization into traditional masculine gender roles. Traits associated with traditional masculinity include stereotypes of stoicism, invulnerability, and self-reliance, which are frequently discussed as they do not fit comfortably with psychological help-seeking (Tang, Oliffe, Galdas, Phinney, & Han, 2014; Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011). For instance, negative emotions are perceived as a sign of weakness, discouraging men from reaching out to friends (Pirkis, Spittal, Keogh, Mousaferiadis, & Currier, 2017). This negatively impacts men's overall help-seeking behaviors and their choice of treatment type (Seidler et al., 2016). Failure to adhere to these masculine stereotypes can result in the internalization of discriminative views held by the wider public (Corrigan, Rafacz, & Rüsch, 2011; Rüsch, Angermeyer, & Corrigan, 2005). These self-stigmatizing beliefs further discourage men from seeking help (Addis & Mahalik, 2003; Levant, Kamaradova, & Prasko, 2014; Pederson & Vogel, 2007).

Another explanation for poor service use relates to differences in coping strategies. Men cope with mental health difficulties differently compared to women, demonstrating an increased tendency to self-medicate with alcohol and drugs to alleviate emotional distress (Kilpatrick et al., 2000; Möller-Leimkühler, 2002; Oliver, Pearson, Coe, & Gunnell, 2005; Rutz & Rihmer, 2009). This is supported by higher prevalence rates of substance use disorders in men (Nolen-Hoeksema, 2004; Wilhelm, 2014). Similarly, mental health literacy (i.e., one's knowledge of prevention, symptom recognition, and available treatments including self-help strategies) influences help-seeking (Jorm, 2012). Poor mental health literacy is reported to be associated with lower use of mental health services (Bonabi et al., 2016; Thompson, Hunt, & Issakidis, 2004). Men are regarded as having poorer mental health literacy compared to women as they are worse at identifying mental health disorders (Cotton, Wright, Harris, Jorm, & McGorry, 2006; Swami, 2014).

Another obstacle men experience is the lack of appropriate diagnostic instruments and clinician biases. Men express symptoms of depression that do not always conform to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., *DSM-5*; Addis, 2008; American Psychiatric Association, 2013). For example, they may express more externalizing behaviors such as alcohol consumption, irritability, and aggressive behaviors while underreporting other symptoms (Angst et al., 2002; Rice et al., 2015). These factors may mask men's difficulties, leading to inaccurate diagnoses and inappropriate treatment (Cochran & Rabinowitz, 2003; Kerr & Kerr, 2001). In response to these symptomatic gender differences, it has been suggested that men would benefit from lower clinical thresholds (Angst et al., 2002) or the use of other measures that may be more sensitive to the symptoms that they express (Cochran & Rabinowitz, 2003; Strömberg, Backlund, & Löfvander, 2010). Furthermore, clinicians may suffer from their own biases with the expectation that men should fulfill particular masculine stereotypes (Mahalik, Good, Tager, Levant, & Mackowiak, 2012). For example, when men do not conform to these traditional masculine stereotypes by expressing themselves emotionally or by taking responsibility for their health, they may be regarded as deviant and/or feminine (Seymour-Smith, Wetherell, & Phoenix, 2002; Vogel, Epting, & Wester, 2003). These biases influence the quality and type of care provided and leave men less likely to receive a diagnosis despite presenting with similar or identical symptoms to women (Doherty & Kartalova-O'Doherty, 2010).

Focusing on masculinity has been argued to be overly focused on problems associated with masculinity, so clinicians neglect adaptive traits. A more recent framework, "positive masculinity" (Englar-Carlson & Kiselica, 2013; Kiselica & Englar-Carlson, 2010) has suggested that masculine qualities can be valued. For example, self-reliance and responsibility can be helpful when experiencing emotional difficulties (Englar-Carlson & Kiselica, 2013; Fogarty et al., 2015). Indeed, positive masculinity and practitioner training around male gender socialization may assist with reducing practitioner biases when working with men (Mahalik et al., 2012).

It is important to note that the degree to which these characteristics occur vary between men as they are not a homogeneous group. Not all men will conform to traditional masculine norms and there are varying degrees of mental health literacy and symptom expression. In addition, other factors such as a person's culture (Guo, Nguyen, Weiss, Ngo, & Lau, 2015; Lane & Addis, 2005), sexual orientation (Vogel et al., 2011), and severity and type of presenting symptoms (Edwards, Tinning, Brown, Boardman, & Weinman, 2007) also influence one's willingness to seek mental health help.

The philosophies underlying interventions to improve men's help-seeking have varied. Indeed, targeting one's conformity to traditional masculine stereotypes may elicit behavior change that extends to psychological help-seeking in men (Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010; Blazina & Marks, 2001). This approach may be perceived as aligning with feminist initiates, thus representing an antagonistic position against masculinity and male values (Hearn, 2015). Similarly, men's health campaigns addressing topics such as male victims of domestic violence and male suicide statistics reinforce the notion that men are a victimized group. This makes them susceptible to being used to justify certain men's rights movements seeking to regain hegemonic masculine ideals that have been previously threatened (Salter, 2016). Although many acknowledge that men and women's health initiatives are not a binary choice (Baker, 2018), these strategies may face some resistance from the wider public. This can therefore be a complex process made inherently more difficult by the current social and political climate.

Approaches that leverage traditional masculine norms have the potential to improve service uptake; however, they also pose the risk of reinforcing masculine stereotypes (Fleming, Lee, & Dworkin, 2014; Robinson & Robertson, 2010). Campaigns such as *Man Up Monday* seek to encourage tests for sexually transmitted infections (Anderson, Eastman-Mueller, Henderson, & Even, 2015) but also reinforce the notion that to be a "real man" one must sleep with multiple partners and engage in violent or risky sexual behaviors (Fleming et al., 2014). Such campaigns have been criticized for reinforcing negative masculine stereotypes while undercutting alternative, positive campaigns that seek to encourage respectful and communicative sexual relationships (Fleming et al., 2014). These approaches could be argued to contribute to an increase in violence and poorer well-being among men (Baugher & Gazmararian, 2015; Courtenay, 2000).

Given the disparity in mental health service use between men and women, it is important that strategies designed to improve help-seeking among men are developed further. Limited work has been carried out to address these problems, with only a handful of public awareness campaigns and interventions designed to improve men's psychological help-seeking. These include the Real Men. Real Depression campaign focusing on educating the public about depression in men (National Institute of Mental Health, n.d), a male-sensitive brochure to address help-seeking in depressed men (Hammer & Vogel, 2010), an intervention aiming to reduce self-stigma associated with mental health problems (MacInnes & Lewis, 2008), the HeadsUpGuys website that provides information and management tips for depression to encourage men to seek help (Ogrondniczuk, Oliffe, & Beharry, 2018), and Man Therapy, a program designed to teach men about mental health and self-evaluation tools that encourage them to engage in treatment (Spencer-Thomas, Hindman, & Conrad, 2014).

Such initiatives, particularly campaigns, are often not rigorously tested to see if they do significantly improve psychological help-seeking (attitudes, intentions, or behaviors) compared to controls or preexisting strategies that are not gender specific. Moreover, they appear to be constructed in isolation with limited collaboration between researchers who share the same goal. When developing a complex intervention, it is recommended that a theoretical understanding of the likely processes eliciting behavior change be explored (Craig et al., 2008). However, many initiatives do not explore these processes in detail, making it difficult to develop more effective interventions that improve help-seeking.

This review aims to collate and synthesize previous interventions that have been designed to improve psychological help-seeking in men. Additionally, this review seeks to identify key components across these interventions that are likely to contribute to improvements in help-seeking attitudes, intentions, and/or behaviors. These key components can then be used as a theoretical framework within which to develop future mental health help-seeking approaches for men. This review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff, Altman, & Prisma Group, 2009) and was preregistered on PROSPERO (https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=82270).

Method

Search Strategy

Published interventions measuring help-seeking behaviors were identified from the electronic databases of MEDLINE, EMBASE, and PsycINFO. A comprehensive review was conducted on March 1, 2019, without any restrictions on publication year, language, or method. The search strategy was first formulated for Ovid (MEDLINE) before being adapted for other databases. Subject headings of terms related to "help-seeking" OR "barrier" AND terms related to "mental health", "intervention" AND "male sex" were used (see Supplementary Appendix 1). Furthermore, publications identified from manual reference checks were also included to ensure a comprehensive search strategy.

Population

As highlighted previously, men's help-seeking behaviors differ significantly from those of women, thus requiring different techniques and strategies to engage them. To ensure that the current review's findings would be applicable to men specifically, only interventions containing a 100% male sample or studies with a male subanalysis were included. Both community and clinical populations were eligible. Community populations referred to interventions that did not record or screen out by mental health status of their recruited sample. For interventions including a clinical population, mental health diagnosis was confirmed by the International Classification of Diseases (ICD; World Health Organization, 1992) or *DSM-5* (American Psychiatric Association, 2013), or which met clinical cutoffs on validated scales used to measure mental health severity and/or symptoms. Criminal and prison populations were excluded, as barriers and routes to mental health care will be notably different from nonprison populations, such as court-ordered treatments and treatment eligibility (Begun, Early, & Hodge, 2016). Similarly, participants under the age of 18 years were excluded from the present review, as younger populations have additional facilitators to mental health care such as parental and school support (Dunne, Bishop, Avery, & Darcy, 2017). Younger boys also have access to child and adolescent mental health services, which often have different assessment criteria and available treatments (Singh & Toumainen, 2015), potentially influencing help-seeking.

Interventions

All interventions measuring changes to help-seeking as a primary, secondary, or additional outcome measure were included. Help-seeking behaviors were defined as changes to help-seeking attitudes (i.e., the beliefs held toward seeking professional help when faced with a serious emotional/mental health problem); intentions (i.e., one's willingness/readiness to seek support); or practical help-seeking (i.e., inquiring or presenting to professional psychological services or reaching out for social support from friends or family). For the remainder of this review, changes to help-seeking refer to changes in attitudes, intentions, or behaviors.

Eligible Articles

In accordance with the PRISMA guidelines, the study selection was undertaken in two phases (Moher et al., 2009). After identification and removal of duplicates, all articles were screened via the title and abstract by the first author (ISO). Two authors (ISO and LB) retrieved and screened the full text of those articles selected after phase 1. From the 6,598 articles identified, 9 reports met the inclusion criteria (Figure 1). A Cohen's kappa (κ) statistic was calculated to assess the interrater reliability, whereby ≤ 0 indicates no agreement, 0.01–0.20, slight, 0.21–0.40, fair, 0.41–0.60, moderate, 0.61–0.80, substantial, and 0.81–1.00, almost perfect levels of agreement (Cohen, 1960; McHugh, 2012). A substantial level of agreement was achieved between the two authors (ISO and LB), $\kappa = 0.73$. Subsequently, both authors (ISO and LB) resolved discrepancies by referring to the inclusion/exclusion criteria. Where disagreements remained, a third author was consulted for a deciding opinion (JB). Thus, 100% consensus was obtained.

Quality Assessment

The Effective Public Health Practice Project (EPHPP) checklist was used to assess the quality of each study (Thomas, 2003). Initially, preregistration stated that the Critical Appraisal Skills Programme (Critical Appraisal Skills Programme, n.d.) checklist would be used; however, no qualitative studies were eligible. The EPHPP has been recommended when assessing the quality of public health interventions, particularly for those with varying experimental designs (Deeks et al., 2003; Jackson & Waters, 2005). The EPHPP has also been reported to have better interrater reliability than the Cochrane Collaboration Risk of Bias Tool (Armijo-Olivo, Stiles, Hagen, Biondo, & Cummings, 2012). Six components of the study's methodology (selection bias, study design, confounders, blinding, data collection methods, and withdrawal and dropouts) were scored as either weak, moderate, or strong to reach an overall quality rating, also coded as weak, moderate, or strong (Figure 2). An overall score of strong was assigned when there were no weak ratings, moderate for one weak rating, and weak if there were two or more weak ratings. The quality assessment was conducted by

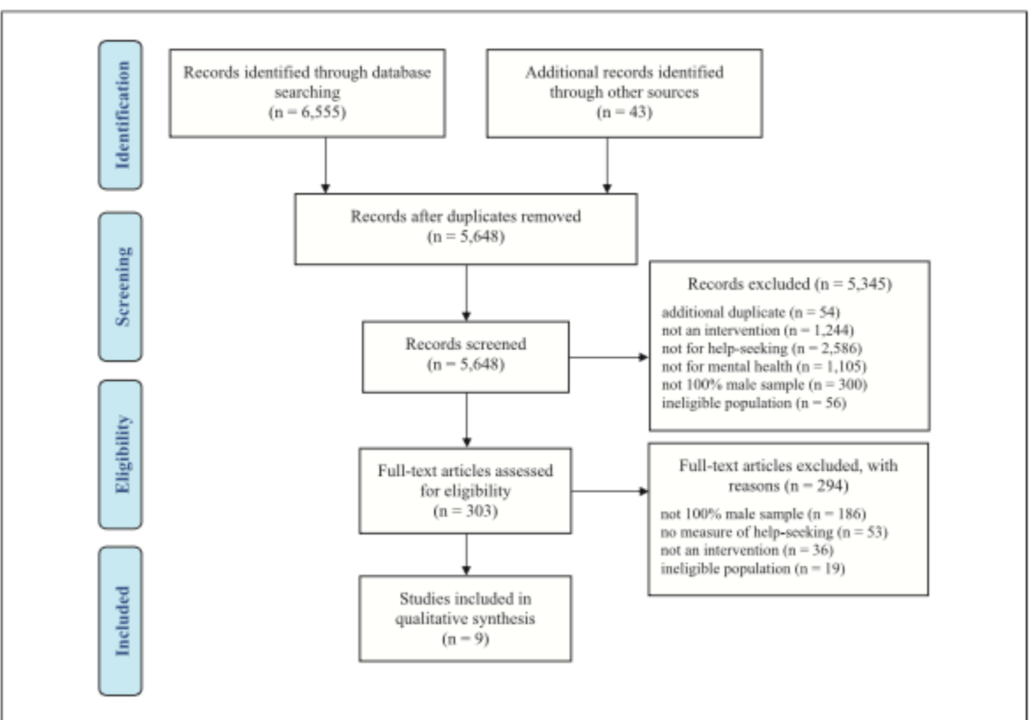
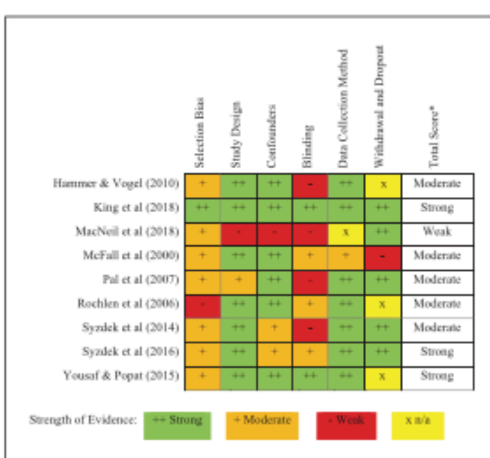


Figure 1. PRISMA flow chart.



	Selection Bias	Study Design	Confounders	Blinding	Data Collection Method	Withdrawal and Dropout	Total Score*
Hammer & Vogel (2010)	+	++	++	-	++	x	Moderate
King et al (2018)	++	++	++	++	++	++	Strong
MacNeil et al (2018)	+	-	-	-	x	++	Weak
McFall et al (2000)	+	++	++	+	+	-	Moderate
Pal et al (2007)	+	+	++	-	++	++	Moderate
Rochlen et al (2006)	-	++	++	+	++	x	Moderate
Syzdek et al (2014)	+	++	+	-	++	++	Moderate
Syzdek et al (2016)	+	++	+	+	++	++	Strong
Yousaf & Popat (2015)	+	++	++	++	++	x	Strong

Strength of Evidence: ++ Strong; + Moderate; - Weak; x n/a

Figure 2. The Effective Public Health Practice Project (EPHPP) checklist criteria for each study. *Total scores were calculated as strong where 0 weak rating, moderate where 1 weak rating, and weak where ≥ 2 weak ratings were scored.

two authors (ISO and LB), scoring a substantial level of agreement, κ = 0.80. Similarly, all disagreements were discussed to reach 100% consensus.

Data Extraction

Data extraction consisted of country of study, number of participants, age of participants, type of population, diagnosis of population, study design, the intervention's characteristics, and outcome measures (Table 1). Additional information regarding uptake and dropout for the interventions was also included (see Supplementary Table S1).

Across the nine studies identified, populations were heterogeneous with differing presenting problems (e.g., depression, problematic drinking, post-traumatic stress disorder [PTSD], eating disorders, and a community sample). The interventions varied considerably. For instance, four promoted service engagement through the use of a brochure (Hammer & Vogel, 2010; McFall, Malte, Fontana, & Rosenheck, 2000; Rochlen, McKelley, & Pituch, 2006) or a documentary (King, Schlichthorst, Spittal, Phelps, & Pirkis, 2018), one evaluated multiple outcomes including readiness to change (Pal, Yadav,

Table 1. Table Summarizing Characteristics of Included Studies.

Author (year)	Country	*N*	Mean age in years (*SD*)	Population	Diagnosis (measure)	Design	Intervention aim	Intervention type and length	Intervention delivered by	Help-seeking outcome measures	Other outcome measures
Hammer and Vogel (2010)	United States	1,397	29.44 (10.19)	Depressed community sample	Depression (CES-D)	RCT	Compare a newly developed male-sensitive brochure to a gender-neutral brochure	Male sensitive brochure vs. RMRD brochure vs. gender neutral brochure	Brochure	ATSPPHS (short version)	Self-stigma of seeking help
King et al. (2018)	Australia	354	38.80 (19.9)	Community	N/A	Double-blind RCT	If the *Man Up* documentary could increase help-seeking intentions	Three-part documentary (1 hr per part) examining the link between masculinity and mental health vs. control	Video documentary	The General Help-Seeking Questionnaire	CMNI, GRCS, social support, well-being, resilience, and ASIQ
MacNeil et al. (2018)	Canada	14	28.21 (8.04)	Clinical	Eating disorder (*DSM-5*)	Retrospective review	To examine male referral rates across TAU and MATT	Male-sensitive assessment and treatment track vs. ATAU	Outpatient eating disorder clinical team	Referral rates to MATT	SWLS, BDI, BAI, EDI-3
McFall et al. (2000)	United States	594	51.05 (3.75)	Clinical	PTSD (compensation receipt for veterans)	RCT	Assess whether an outreach intervention providing information about services would improve service enrolment	Outreach PTSD information brochure + 1-month follow-up call vs. control	Leaflets and the study coordinator	Treatment inquiries. Agreement and/ or attendance to a mental health provider	N/A
Pal et al. (2007)	India	90	29.70 (9.89)	Clinical	Treatment nonattendance and problematic drinking (AUDIT)	RCT	Examine change in alcohol use following a brief intervention compared to simple advice	Two 45-min sessions of brief motivational interviewing vs. control	Medical social service officer	Readiness to Change Questionnaire	WHO Quality of Life and Addiction Severity Index
Rochlen et al. (2006)	United States	209	21.01 (1.56)	Community	N/A	RCT	Compare men's response to the RMRD brochure to a gender-neutral brochure	RMRD brochure vs. adapted RPRD gender-neutral brochure vs. gender-neutral mental health brochure—"Beyond Sadness"	Brochures	ATSPPHS	GRCS, MHAES, and qualitative assessments
Syzdek et al. (2014)	United States	23	37.65 (11.44)	Depressed or anxious community sample	Anxiety and depression (DUKE-AD)	Pilot RCT	What are the effects of GBMI on mental health functioning, stigma toward internalizing disorders and help-seeking	One 2-hr GBMI vs. control	N/A	ATSPPHS and Help-Seeking Behavior Scale	AUDIT, BAI, BDI, PPL, and symptom distress
Syzdek et al. (2016)	United States	35	19.71 (1.42)	Depressed or anxious community sample	Anxiety and depression (DUKE-AD)	Pilot RCT	Assess GBMI effect on psychosocial barriers to help-seeking	One 2-hr GBMI vs. control	Trained male graduates	Help-Seeking Behavior Scale	BAI and the treatment evaluation inventory
Yousaf and Popat (2015)	United Kingdom	69	35.30 (12.08)	Community	N/A	Double-blind RCT	Test whether conceptual priming could increase men's attitudes toward seeking psychological support	25-min test—unscramble 18 sentences with priming words toward help-seeking	Scrambled sentence test	Inventory of Attitudes Toward Seeking Mental Health Services	N/A

Note. ASIQ = Adult Suicide Ideation Questionnaire; ATAU = Assessment and Treatment as Usual; ATSPPHS = Attitudes Toward Seeking Professional Psychological Help Scale; AUDIT = Alcohol Use Disorders Identification Test; BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; CES-D = Center for Epidemiological Depression Scale; CMNI = Conformity to Masculine Norms Inventory; *DSM-5* = *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition; DUKE-AD = DUKE Anxiety and Depression subscale; EDI-3 = Eating Disorders Inventory 3rd edition; GBMI = Gender-Based Motivational Interviewing; GRCS = Gender Role Conflict Scale; MATT = Male Assessment and Treatment Track; MHAES = Mental Health Advert Effectiveness Scale; N/A = data not available; PPL = Perceptions of Problems in Living questionnaire; PTSD = post-traumatic stress disorder; RCT = randomized controlled trial; RMRD = Real Men. Real Depression brochure; RPRD = Real People Real Depression brochure; SWLS = Satisfaction With Life Scale; TAU = Treatment As Usual; WHO, World Health Organization.

Mehta, & Mohan, 2007), one assessed the effects of priming men's attitudes toward help-seeking (Yousaf & Popat, 2015), and three evaluated the acceptability and efficacy for improving help-seeking attitudes, intentions, and practical help-seeking (MacNeil, Hudson, & Leung, 2018; Syzdek, Addis, Green, Whorley, & Berger, 2014; Syzdek, Green, Lindgren, & Addis, 2016). As a result, a meta-analysis was deemed inappropriate as results would not be meaningful, particularly as they could not be interpreted in any specific context (Higgins & Green, 2005). An alternate, novel method that identified the BCTs within interventions was used. This helped identify each intervention's key elements that may have contributed to changes in help-seeking attitudes, intentions, and/or behaviors.

Behavior Change Techniques

BCTs refer to the observable and replicable components within an intervention designed to change behavior (Michie et al., 2013), in this case, help-seeking. BCTs represent the smallest identifiable components that in themselves have the potential to change behavior (Michie, Johnston, & Carey, 2016; Michie, West, Sheals, & Godinho, 2018). These components are referred to as the "active ingredients," helping to make greater sense of the often very complex behavior change interventions (Michie et al., 2013). Standardization of BCTs allows for greater replicability, synthesis, and interpretation of an intervention's specific elements that may elicit behavior change (Cane, Richardson, Johnston, Ladha, & Michie, 2015; Michie et al., 2013).

Michie et al. (2013) devised a taxonomy (BCCTv1) containing 93 BCTs to address the lack of consistency and consensus when reporting an intervention (Craig et al., 2008). Examples of BCTs include *framing/reframing* whereby a new perspective on a behavior is suggested to change emotions or cognitions, *re-attribution* defined as suggesting alternative explanations to the perceived cause of the behavior, and *credible source*, which involves the presentation of verbal or visual information by a credible source, such as celebrity figures, mental health professionals, and/or other men with lived experiences of mental health, either in favor of or against the behavior.

For the current review, each intervention's BCTs were independently coded by two authors (ISO and LM) trained in recognizing and coding BCTs (http://www.bct-taxonomy.com/). These were then discussed to reach consensus and are presented in Table 2.

Results

Strength of Evidence

There was a substantial level of agreement between the two authors (ISO and LB) completing the EPHPP quality assessment (Thomas, 2003; $\kappa = 0.80$). Of the nine studies included, three were scored as having "strong" quality (King et al., 2018; Syzdek et al., 2016; Yousaf & Popat, 2015), while five were deemed "moderate" in quality (Hammer & Vogel, 2010; McFall et al., 2000; Pal et al., 2007; Rochlen et al., 2006; Syzdek et al., 2014). One study was scored as having "weak" quality (MacNeil et al., 2018; Figure 2).

Categorization of Interventions

As there were different types of interventions with some aiming to engage men (e.g., brochures/video documentary) and other interventions aiming to change behavior or attitudes, the interventions were divided into three main categories of "engagement strategies," "RCTs/pilot RCTs," and "retrospective reviews."

Engagement strategies comprised of three interventions delivering a brochure (Hammer & Vogel, 2010; McFall et al., 2000; Rochlen et al., 2006) and one study delivering a three-part video documentary (King et al., 2018) to improve help-seeking. RCTs/pilot RCTs included two RCTs (Pal et al., 2007; Yousaf & Popat, 2015) and two pilot RCTs (Syzdek et al., 2014, 2016). The last intervention was a retrospective review comparing referral rates before and after the instalment of a male-sensitive assessment and treatment program (MacNeil et al., 2018).

A summary of the specific elements or BCTs used across all the interventions that may have contributed to improvements in male help-seeking are given in Table 3. The engagement strategies (i.e., brochures/documentary, $n = 4$) and retrospective review ($n = 1$) contained eight and four BCTs, respectively. Fourteen BCTs were identified within the RCTs/pilot RCTs ($n = 4$). As six BCTs (3.3, 4.1, 5.3, 5.6, 6.2, and 9.1) were coded across the different intervention categories (i.e., engagement strategies, RCTs/Pilot RCTs, and retrospective review) they were only counted once, resulting in a total of 18 different BCTs across all the interventions identified.

The BCTs identified from the engagement strategies, RCTs/pilot RCTs, and retrospective review were analyzed separately due to different behavior change approaches (Table 3). Various BCTs were grouped into "processes" to help synthesize the 18 distinct techniques implemented across these dissimilar interventions. These processes can be seen as overarching terms that summarize similar BCTs into broader psychological processes, thus helping to bridge the gap between these research findings and wider clinical practice (Figure 3).

BCTs Within the Engagement Strategies

The most commonly used BCTs within the engagement strategies (i.e., brochures/video documentary) used a

Table 2. Table Summarizing the Identified Behavior Change Techniques (BCTs) and Outcomes of Eligible Interventions.

Author	Identified BCTs	Help-seeking attitudes, intentions, and behaviors (p, d)	Symptoms (p, d)
	Engagement strategies (brochures/documentary)		
Hammer and Vogel (2010)	5.3. Information about social and environmental consequences 5.6. Information about emotional consequences 6.2. Social comparison 9.1. Credible source	Improved attitudes to help-seeking ($p < .05$*, d = n/a)	Not measured
King et al. (2018)	5.6. Information about emotional consequences 6.1. Demonstration of the behavior 6.2. Social comparison 9.1. Credible source 16.3. Vicarious consequences	Improved help-seeking intentions and intentions to seek help from male and female friends ($p < .05$*, $d < .05$)	No changes in suicidal ideation ($p > .05$)
McFall et al. (2000)	3.1. Social support (unspecified) 4.1. Instruction on how to perform a behavior 9.1. Credible source	Improved service enquiry, attendance, and follow-up appointments ($p < .05$*, $d > .05$)	Not measured
Rochlen et al. (2006)[a]	4.1. Instruction on how to perform a behavior 5.6. Information about emotional consequences 6.2. Social comparison 9.1. Credible source	Male-sensitive and gender-neutral brochures both improved help-seeking attitudes ($p < .05$*, d = n/a)	Not measured
	Randomized controlled trials (RCTs)		
Pal et al. (2007)	1.2. Problem solving 3.3. Social support (emotional) 5.3. Information about social and environmental consequences 8.2. Behavior substitution 11.2. Reduce negative emotions 15.1. Verbal persuasion about capability	Improved readiness to change (i.e., intentions) from baseline to 1-month follow-up ($p < .05$*, d = n/a)	Reduced alcohol addiction severity, reduced alcohol use in past 30 days, and improved psychological and physical well-being ($p < .05$* for all)
Yousaf and Popat (2015)	None identified	Higher attitudes towards seeking mental health services for the primed group vs. control ($p < .05$*, $d > .5$)	Not measured
Syzdek et al. (2014)	2.2. Feedback on behavior 2.7. Feedback on outcome(s) of behavior 3.3. Social support (emotional) 4.1. Instruction on how to perform a behavior	No changes in help-seeking attitudes or help-seeking intentions ($p > .05$, $d < .5$)	Reduction in anxiety ($p > .05$, $d < .5$), depression ($p > .05$, $d < .5$), and problematic drinking ($p > .05$, $d > .5$)
Syzdek et al. (2016)	1.4. Action planning 2.2. Feedback on behavior 2.7. Feedback on outcome(s) of behavior 3.3. Social support (emotional) 4.3. Re-attribution 5.6. Information about emotional consequences 9.1. Credible source 13.2. Framing/reframing	Increased behavioral help-seeking from parents, ($p < .05$*, $d > .5$), professionals, ($p > .05$, $d > .5$), partners, ($p > .05$, $d > .5$), friends, ($p > .05$, $d > .5$), and counseling services ($p > .05$, $d > .5$)	No change in depression ($p > .05$, $d < .5$) or anxiety ($p > .05$, $d < .5$)
	Retrospective review		
MacNeil et al. (2018)	3.3. Social support (emotional) 5.3. Information about social and environmental consequences 5.6. Information about emotional consequences 6.2. Social comparison	Received more male referrals after the instalment of intervention (MATT) ($p < .05$*, $d < .05$)	Not measured

Note. [a]One study reported their effect size in partial eta-squared and it was not appropriate to convert to Cohen's D. d = Cohen's D.
* = $p < .05$.

Table 3. Examples and Frequency of BCTs Used Within the Engagement Strategies, RCTs/Pilot RCTs, and Retrospective Review.

BCT	BCT example(s)	BCT frequency
Engagement strategies (brochures/documentary)		
3.1 Social support (unspecified)	Telephone survey that provided an opportunity to ask questions about services, schedule an appointment, and address perceived barriers. (McFall et al., 2000)	1
4.1 Instruction on how to perform a behavior	Option to receive information about services and how to schedule an intake appointment/description of treatment options (McFall et al., 2000; Rochlen et al., 2006)	2
5.3 Information about social and environmental consequences	Description of mental health symptoms through the use of male-sensitive language (Hammer & Vogel, 2010)	1
5.6 Information about emotional consequences	Brochure containing facts specific to men and depression (Hammer & Vogel, 2010; Rochlen et al., 2006) and a documentary delivering psychoeducational material about mental disorders (King et al., 2018)	3
6.1 Demonstration of the behavior	Video featuring men modeling positive health behaviors such as emotional expression and seeking help (King et al., 2018)	1
6.2 Social comparison	Testimonials and photographs of men who have experienced depression (Hammer & Vogel, 2010; Rochlen et al., 2006) and a show host talking to other men who have reached out for help (King et al., 2018)	3
9.1 Credible source	Letter from the program director inviting men to seek care (McFall et al., 2000), testimonials of men who have experienced depression (Hammer & Vogel, 2010; Rochlen et al., 2006), and information being delivered by a familiar radio and television host (King et al., 2018)	4
16.3 Vicarious consequences	Other men talking about how reaching out for help changed their mental health trajectory for the better (King et al., 2018)	1
RCTs and pilot RCTs		
1.2 Problem solving	Prompting discussion of drinking alternatives, high-risk situations, and coping without alcohol (Pal et al., 2007)	1
1.4 Action planning	Developing an action plan on how to improve mental health, which may include seeking help (Syzdek et al., 2016)	1
2.2 Feedback on behavior	A feedback report outlining personal scores on symptom measures (Syzdek et al., 2014, 2016)	2
2.7 Feedback on outcome(s) of behavior	Feedback on symptom levels and untreated mental health (Syzdek et al., 2014, 2016)	2
3.3 Social support (emotional)	Adopting a motivational interviewing framework or a gender-based motivational interviewing framework (Pal et al., 2007; Syzdek et al., 2014, 2016)	3
4.1 Instruction on how to perform a behavior	Discussing different actions that could be taken to address mental health problems such as formal help, informal help, and coping skills (Syzdek et al., 2014)	1
4.3 Re-attribution	Elicited how participants untreated mental health may be affecting their value-driven behaviors (Syzdek et al., 2016)	1
5.3 Information about social and environmental consequences	Information regarding the harmful consequences of drinking. Linking alcohol consumption to potential consequences (Pal et al., 2007)	1
5.6 Information about emotional consequences	Providing psychoeducational material about mental disorders (Syzdek et al., 2016)	1
8.2 Behavior substitution	Exploration of alternatives to drinking alcohol (Pal et al., 2007)	1
9.1 Credible source	Listing famous men with internalizing disorders (Syzdek et al., 2016)	1
11.2 Reduce negative emotions	Reducing stress related to personal responsibility (Pal et al., 2007)	1
13.2 Framing/reframing	Reframing help-seeking to be consistent with participants' values and masculine norms (Syzdek et al., 2016)	1
15.1 Verbal persuasion about capability	Emphasis on participants responsibility to change, facilitating self-efficacy and optimism (Pal et al., 2007)	1
Retrospective review		
3.3 Social support (emotional)	Delivering cognitive behavioral therapy (MacNeil et al., 2018)	1
5.3 Information about social and environmental consequences	Providing psychoeducation and the biological model of mental health illnesses (MacNeil et al., 2018)	1
5.6 Information about emotional consequences	Discussing the negative impact mental health has on daily living, relationships, and sport (MacNeil et al., 2018)	1
6.2 Social comparison	Highlighting that the men are not alone with their mental health struggles and that there are others experiencing the same (MacNeil et al., 2018)	1

Note. BCT = behavior change technique; RCT = randomized controlled trial.

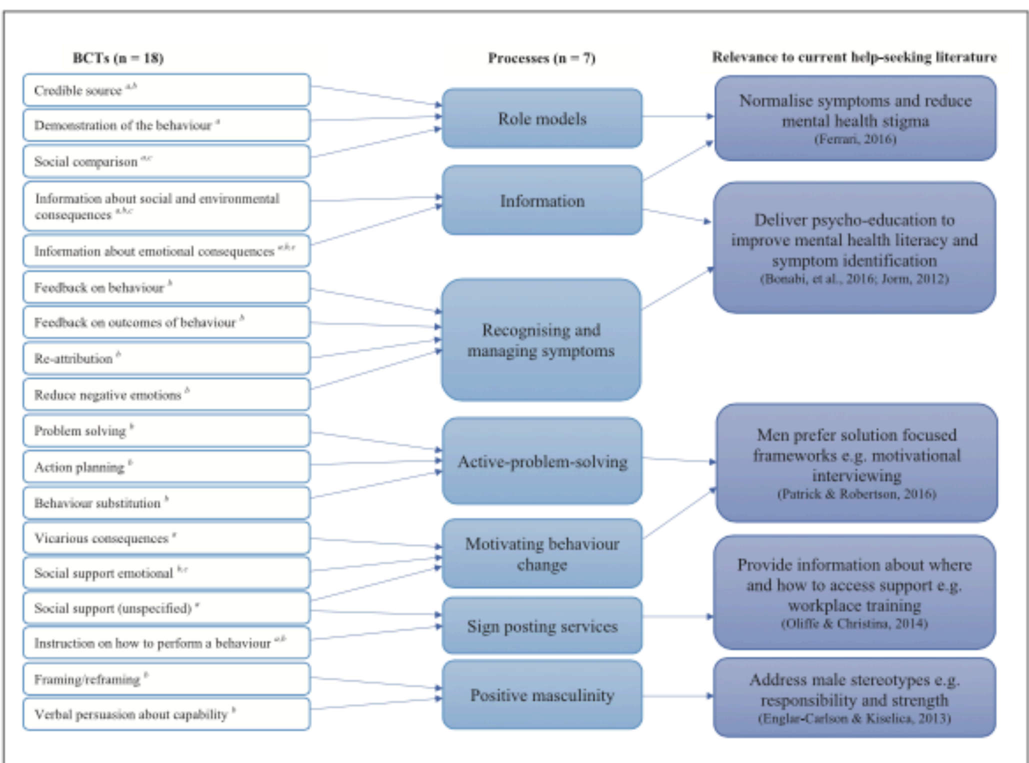


Figure 3. Synthesis of behavior change techniques (BCTs) into processes and their relevance to the current literature. [a]BCT identified within engagement strategies. [b]BCT identified within randomized controlled trials (RCTs)/pilot RCTs. [c]BCT identified within retrospective review.

"credible source" and provided "information about the consequences" (either emotional, social, or environmental) of poor mental health. Testimonials and photographs of men with depression (i.e., credible source) were used to explain a medical model of depression and the associated symptoms (i.e., information). Similarly, a familiar radio/television host was used to deliver mental health information (King et al., 2018). Video footage of men talking about their personal problems, help-seeking, and emotional expression was also used to model positive health behaviors and demonstrate how to seek help (King et al., 2018). These highlighted the "social comparison" BCT as it provided someone who one could relate to (Hammer & Vogel, 2010; King et al., 2018; Rochlen et al., 2006). Similarly, Rochlen et al. (2006) used testimonials and photographs of men in their male-sensitive brochure who had experienced depression. This may have contributed to an improvement in help-seeking attitudes among men, despite not showing larger improvements compared to a gender-neutral brochure (Rochlen et al., 2006). Finally, McFall et al.'s (2000) intervention implemented a "credible source" (i.e., a letter from the PTSD program director encouraging veterans to seek care), contributing to an improvement in practical help-seeking. In sum, all four engagement strategies utilized a role model (i.e., credible source BCT), which may have contributed to an improvement in help-seeking.

In addition to the processes of providing information and using role models, the BCTs of "instruction on how to perform a behavior" and "unspecified social support" were used. Here, men received a telephone call to discuss the brochure before explaining how to schedule an appointment with a mental health service (McFall et al., 2000).

Brochures appeared to be an effective strategy to improve men's help-seeking behaviors. The processes of using role models and delivering information about the long-term outcomes of mental health disorders,

symptoms, and potential services appeared to help elicit this behavior change.

BCTs Within RCTs and Retrospective Review

The RCTs and pilot RCTs also made use of role models (i.e., credible source BCT). Famous men with depression or anxiety were listed to challenge misconceptions of mental health (Syzdek et al., 2016). Again, these methods provided real-life examples of other men experiencing the same or similar difficulties eliciting a sense of social comparison (MacNeil et al., 2018). The interventions that provided information about the emotional, social, and environmental consequences of mental illness appeared to improve help-seeking, whether behaviorally or attitudinally. The interventions included psychoeducational materials about mental disorders (Syzdek et al., 2016), addressed the consequences of alcohol consumption (Pal et al., 2007), and/or explored how eating disorders impact daily living, relationships, and sport (MacNeil et al., 2018).

Alongside providing information and using role models, several other processes were identified. A process helping men to recognize and manage their symptoms was also identified. This contained the BCTs of "feedback on behavior," "feedback on outcomes of behavior(s)," "re-attribution," and "reduce negative emotions." Syzdek and colleagues gave feedback on participants' current difficulties identified from a computerized assessment, before exploring whether their untreated mental health was affecting their value-driven behaviors (Syzdek et al., 2014, 2016). This enabled men to re-attribute their current symptoms to their behaviors. Moreover, the intervention by Pal et al. (2007) helped reduce stress associated with problematic drinking in an Indian context.

Second, a process incorporating active problem-solving exercises was identified. This contained the BCTs of "problem solving," "behavior substitution," and "action planning." These involved planning how to improve one's mental health through seeking professional or nonprofessional help (Syzdek et al., 2016), discussing situational drinking cues, and exploring alternative drinking activities for hazardous drinkers (Pal et al., 2007), respectively.

"Emotional social support," "instruction on how to perform a behavior," and "vicarious consequences" were other BCTs that were identified. These contributed to two processes of motivating behavior change and signposting services.

The motivating behavior change process comprised of the "vicarious consequences" and "emotional social support" BCTs as the BCCTv1 dictates that cognitive behavioral therapy (CBT) and motivational interviewing (MI) frameworks should be coded as emotional social support (Michie et al., 2013). This BCT was observed in two studies using CBT and MI (MacNeil et al., 2018; Pal et al., 2007) and two pilot RCTs adapting MI to be gender sensitive (Syzdek et al., 2014, 2016). Also, the BCT of "vicarious consequences" was used within one engagement strategy, whereby men with lived experience discussed how seeking mental health help improved their overall trajectory (King et al., 2018). As a result, it appears that the BCTs of "emotional social support" and "vicarious consequences" motivated men to change their behaviors related to their mental health.

For the signposting services process, men were provided with a brochure listing their university's counseling services and referral information for community mental health providers (i.e., "instruction on how to perform a behavior" BCT; Syzdek et al., 2016). Syzdek and colleagues also discussed potential actions that could be taken to address men's current mental health problems including formal help, informal help, and coping skills (Syzdek et al., 2014).

Finally, the process of positive masculinity included the BCTs of "framing/reframing" and "verbal persuasion about capability," noted across two interventions. Here, help-seeking was reframed to be consistent with current masculine norms (i.e., a sign of strength; Syzdek et al., 2016) and emphasis was placed on one's personal responsibility to change (Pal et al., 2007).

In summary, various BCTs were used within the interventions. This enabled the identification and synthesis of different processes that contribute to positive help-seeking behaviors. The use of role models and information was important for the engagement strategies (i.e., brochures/documentary). This was further supplemented by instructions on how to seek help and social support. These processes were also apparent in the RCTs and the retrospective review. Additional processes included active problem solving, recognizing and managing symptoms, signposting services, motivating behavior change, and building on positive masculine traits (e.g., responsibility and strength; Figure 3). It is suspected that these processes contributed to the improvements in help-seeking.

Discussion

As mentioned previously, distinct BCTs were grouped into "processes" to enable these research findings to be more relevant in a clinical context. Seven key processes were synthesized from the 18 identified BCTs. These included using role models to convey information, psychoeducational material to improve mental health knowledge, assistance with recognizing and managing symptoms, active problem-solving tasks, motivating

behavior change, signposting services, and incorporating content that builds on positive male traits (e.g., responsibility and strength).

To understand these processes in greater detail, the current male help-seeking literature was used to help explain why these processes may have contributed to an improvement in psychological help-seeking by men from the studies identified within this review.

Interpretation of BCTs With Regard to the Literature

Despite the heterogeneity across interventions, the 18 identified BCTs had a fairly consistent overlap with key constructs that have already been identified within the help-seeking literature. The process of delivering information about the emotional, social, and environmental consequences of help-seeking and/or mental health diagnoses can be seen as a facet of mental health literacy. Indeed, poor mental health literacy is a barrier to help-seeking (Bonabi et al., 2016) and having knowledge of mental health disorders assists in their recognition, management, and prevention (Jorm, 2012).

Using role models and supporting men to recognize and manage their symptoms were also of importance. This was helpful as role models often normalized the problems, offering reassurance that the difficulties were the result of everyday stressors. This made the problems more acceptable, enabling men to acknowledge their symptoms, and may have reduced mental health stigma (Ferrari, 2016). This can also help model the behavior of seeking help when experiencing psychological distress. There is a danger that if not carefully used, this could also increase self-stigmatizing beliefs about mental health. Once men identify with having a mental health problem, they may criticize themselves for not being able to cope or fear that they will be judged for having a mental health condition (Primack, Addis, Syzdek, & Miller, 2010). These stigmatizing beliefs may deter men from seeking help. Nevertheless, improving mental health literacy and using role models supported men to identify their own symptoms before discussing them in a safe setting. This helped to preserve their autonomy and clarify whether their symptoms required professional support. Considering this, some men may prefer a person-centered approach as they may feel discouraged from engaging in treatment that seeks to label a mental health diagnosis in a clinical framework (River, 2018). Although this may not improve treatment outcomes, it may improve service uptake. However, this has not been formally assessed.

Processes using active problem-solving exercises and motivating behavior change also seemed important across the interventions in this review. Men were provided with specific information about how to improve their mental health and use a variety of management strategies. Interventions that implement an action-orientated or solution-focused framework may be promising as men are less inclined to engage in traditional talking therapies (Patrick & Robertson, 2016). This was also demonstrated from three interventions adopting an MI framework (Pal et al., 2007; Syzdek et al., 2014, 2016). Similarly, drawing men's attention to the potential benefits of treatment and how seeking help can improve long-term outcomes may also improve their motivation to seek help (King et al., 2018). The process of signposting must not be overlooked. This process informed men about where and how to access professional support, indicating that men may need more guidance on this. Workplace training and the development of bridging services could help connect and motivate men to engage with existing mental health services (Oliffe & Christina, 2014).

An equally important process that built on positive masculine traits emerged from two interventions (Pal et al., 2007; Syzdek et al., 2016). Targeting adaptive masculine stereotypes, such as responsibility, and reframing help-seeking to align with male values (e.g., a sign of strength) may have contributed to an improvement in help-seeking behaviors. This process fits in with Englar-Carlson and Kiselica's work on "positive masculinity" (2013), which acknowledges the virtues of masculinity, as opposed to remedying weaknesses (Kiselica & Englar-Carlson, 2010). This motivated men to take responsibility in looking after themselves and emphasized that seeking help for mental health difficulties does not indicate weakness, nor is it detrimental to one's masculinity.

Implications for Future Research

To the authors' knowledge, this is the first review to identify key features within an intervention that may contribute to an improvement in help-seeking for men. A post hoc decision to use the BCCTv1 to analyze and synthesize these interventions using BCTs was made because of the idiosyncratic nature of this research field, but it has proved very successful.

Other public health interventions or fields that lack consensus or have limited data may find this approach useful when synthesizing diverse interventions. Moreover, identifying promising BCTs is a good way forward when trying to understand or design interventions targeting a behavior. Although the full BCCTv1 contains 93 BCTs (Michie et al., 2013), the current review only identified 18 different BCTs. Thus, future research is needed to understand these promising 18 BCTs in more detail and to prevent overlooking other, potentially effective techniques.

To promote more coherent evidence, it is advised that a standardized reporting method is adopted when

reporting newly developed help-seeking interventions for men. For example, the Template for Intervention Description and Replication (TIDieR) checklist (Hoffman et al., 2014), the Transparent Reporting of Evaluations with Nonrandomized Designs (TREND) statement (Des Jarlais, Lyles, Crepaz, & Trend Group, 2004), and the use of BCCTv1 will improve the clarity and consistency in this field. Alternatively, the development of a new male-specific framework for reporting help-seeking interventions would be helpful. Such a framework should place emphasis on the initial uptake to an intervention, the intervention's main components (i.e., BCTs), and the strategies used to recruit men (such as marketing techniques, language, and phrases chosen) as these have been highlighted as key factors when designing male interventions (Pollard, 2016).

Ideally, future work would seek to evaluate the role specific BCTs have in changing help-seeking behaviors. Eventually, the evidence base would point toward specific techniques that are more effective than others. This enables better tailoring of interventions that address men's needs. This could also transpire into further precision tailoring for various subgroups of men, as help-seeking differs across ethnicities (Parent, Hammer, Bradstreet, Schwartz, & Jobe, 2018), education levels (Hammer, Vogel, & Heimerdinger-Edwards, 2013), and conformity to masculine norms (Wong, Ho, Wang, & Miller, 2017). Similarly, if it is possible to identify redundant or ineffective techniques within interventions, more cost-effective solutions can be developed. As more male-focused interventions addressing psychological help-seeking are designed, work can be done to dismantle and identify the effective techniques within them.

Implications for Clinical Practice

All four engagement strategies utilizing brochures and documentaries demonstrated significant improvements in help-seeking. Brochures and documentaries may therefore be a feasible and acceptable strategy to enable behavior change in men. This suggests men may not need direct face-to-face contact and are receptive to less invasive and personal strategies. This was further demonstrated through a conceptual priming task that improved help-seeking attitudes (Yousaf & Popat, 2015).

Mental health literacy can be a strong facilitator for seeking mental health help (Bonabi et al., 2016). When given a vignette, men are less likely to identify other men as having a mental health difficulty (Swami, 2014). Moreover, poor identification of depressive symptoms and inadequate suggestions to treatment (e.g., do nothing and leave them alone) are associated with being male (Kaneko & Motohashi, 2007). This demonstrates that, generally, men have inaccurate perceptions of their health and are poorer at recognizing symptoms.

Psychoeducational materials may help men to understand their current difficulties and the possible long-term outcomes of mental health conditions. This may enable men to distinguish their symptoms from everyday stressors, eliciting a greater perceived need for help. Although psychoeducational materials may contribute to favorable help-seeking attitudes, they need to be carefully delivered (Gonzalez, Tinsley, & Kreuder, 2002). Men who do identify as having a mental health difficulty are at risk of stigmatizing themselves for not being "strong enough" to cope (Primack et al., 2010), reducing their likeliness of seeking support. To overcome this, such information should be delivered in a supportive manner to help men accept their difficulties without feeling a sense of shame or loss of autonomy (Johnson, Oliffe, Kelly, Galdas, & Ogrodniczuk, 2012). This should be combined with offering reassurance about where they can access professional support and treatment information and signposting appropriate services. Once in treatment, interventions that steer away from a diagnostic framework may be more palatable to men (River, 2018). They should aim to provide men with skills and greater self-control as opposed to treating what is wrong with them. This has been demonstrated through interventions marketed as "improve your sleep" or a "stress workshop," gaining high levels of male engagement (Archer et al., 2009; Primack et al., 2010). Also, using male role models such as celebrities and others with mental health difficulties may particularly appeal to men, helping to reduce mental health stigma and improve service uptake.

Finally, active problem-solving or tangible solution-focused approaches have been reported to be effective for changing other behaviors, such as increasing physical activity and dieting (Hunt et al., 2014). Indeed, such approaches might be more appealing to men.

These are not the entirety of processes that will improve male help-seeking. Similarly, working outside a diagnostic framework, providing men with skills that offer greater self-control and adopting solution-focused approaches are not definitive solutions, as what may be helpful for some men may not be for others. Nonetheless, these techniques demonstrate some potential for improving help-seeking in men and may continue to be effective.

Strengths and Limitations

This review has established how to synthesize complex behavioral interventions across different types of interventions. The steps taken to identify the active ingredients responsible for behavior change have been demonstrated. A strength of this review included the use

of a validated taxonomy used in other areas with reasonable interrater reliability (Michie et al., 2013). All interventions were coded through consensus by two authors (ISO and LM). The current review has pointed out the specific techniques that should be considered when developing male help-seeking interventions in the future. This review has also implemented a systematic approach that utilized two reviewers throughout, resolved discrepancies to reach consensus, and adopted a comprehensive search strategy.

There are however some limitations. Although the BCTTv1 is a widely used approach identifying techniques that elicit behavior change, it is not possible to guarantee 100% accuracy of the coded BCTs, as they do not have perfect interrater reliability. This is further confounded as it is likely that an intervention's true content is underreported (Michie, Fixsen, Grimshaw, & Eccles, 2009). The recorded BCTs were only identified from the description provided in the published articles. It would therefore be helpful if future interventions reported their content more fully, ideally using BCTs or a similar system.

The BCT taxonomy also presents other limitations. For instance, the BCTTv1 states that "emotional social support" extends to MI and CBT (Michie et al., 2013). This is a limitation for the interpretation of the current findings as MI was implemented within three studies in this review (Pal et al., 2007; Syzdek et al., 2014, 2016). Indeed, MI includes aspects of emotional support, but in addition, behavior change elicited from MI is thought to arise through combating ambivalence (Miller & Rollnick, 2013). Ambivalence refers to the experience of motivations for and against a behavior. Thus, a MI framework seeks to elicit the positive reasons for changing a behavior (Miller & Rose, 2015). In this context, emotional support may not necessarily have contributed to improvements in help-seeking per se, but men may need to work through their motivations both for and against seeking psychological support in order to improve their help-seeking attitudes, intentions, and/or behaviors. The BCT taxonomy does not allow us to determine whether emotional support or working through ambivalence contributes to changes in help-seeking. A suggestion to overcome this limitation would be to use another taxonomy that seeks to identify specific MI techniques that contribute to behavior change (Hardcastle, Fortier, Blake, & Hagger, 2017). Indeed, this may enable the distinction between social support and combating ambivalence.

Although help-seeking is consistently reported to be worse in males (Mackenzie et al., 2006), the identified techniques in this review should be interpreted cautiously. Men are not a homogeneous group. Alongside sex, other factors such as symptom severity, diagnosis (Edwards et al., 2007), culture (Guo et al., 2015; Lane & Addis, 2005), and sexual orientation (Vogel et al., 2011) all intersect with help-seeking behaviors. Consequently, certain BCTs may be more or less effective for different subgroups of men.

Finally, from over 6,000 articles identified from the initial search strategy, only 9 studies fulfilled the inclusion criteria. This highlights the dearth in literature surrounding studies that seek to evaluate changes in mental health help-seeking in males. Furthermore, only three studies utilized a measure of practical help-seeking (MacNeil et al, 2018; McFall et al., 2000; Syzdek et al., 2016), which also highlights the lack of research using practical help-seeking as an outcome measure.

Conclusion

Historically, men are more hesitant about seeking help for mental health difficulties compared to their female counterparts. Often, this is associated with the disproportionately higher suicide rates in men compared to women (Chang, Yip, & Chen, 2019; World Health Organization, 2017). Nevertheless, a paucity of male-specific interventions designed to improve psychological help-seeking remains.

The current review includes all the available interventions. Furthermore, the specific features within these diverse interventions have been summarized, aiming to provide some clarity within this diverse field. This review has demonstrated the feasibility and usefulness of synthesizing complex behavior change interventions with this method.

Interventions designed to improve psychological help-seeking in men share similarities. Interventions that appear to improve male help-seeking incorporate role models, psychoeducational materials, symptom recognition and management skills, active problem-solving tasks, motivating behavior change, signposting materials, and content that builds on positive masculine traits (e.g., responsibility and strength).

In sum, this review helps provide clarity when trying to understand help-seeking interventions for men. Furthermore, promising strategies to consider when developing future interventions have been discussed, informing both research and clinical practice.

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Supplemental Material

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References

Addis, M. E. (2008). Gender and depression in men. *Clinical Psychology: Science and Practice*, *15*(3), 153–168.

Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity and the contexts of help-seeking. *American Psychologist*, *58*(1), 5–14.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Anderson, E. A., Eastman-Mueller, P. H., Henderson, S., & Even, S. (2015). Man Up Monday: An integrated public health approach to increase sexually transmitted infection awareness and testing among male students at a Midwest University. *Journal of American College Health*, *64*(2), 147–151.

Angst, J., Gamma, A., Gastpar, M., Lépine, J. P., Mendlewicz, J., & Tylee, A. (2002). Gender differences in depression. *European Archives of Psychiatry and Clinical Neuroscience*, *252*(5), 201–209.

Archer, M., Brown, J. S., Idusohan, H., Coventry, S., Manoharan, A., & Espie, C. A. (2009). The development and evaluation of a large-scale self-referral CBT-I intervention for men who have insomnia: An exploratory study. *Behavioural and Cognitive Psychotherapy*, *37*(3), 239–248.

Armijo-Olivo, S., Stiles, C. R., Hagen, N. A., Biondo, P. D., & Cummings, G. G. (2012). Assessment of study quality for systematic reviews: A comparison of the Cochrane Collaboration Risk of Bias Tool and the Effective Public Health Practice Project Quality Assessment Tool: Methodological research. *Journal of Evaluation in Clinical Practice*, *18*(1), 12–18.

Australian Bureau of Statistics. (2007). *National survey of mental health and wellbeing: Summary of results*. Canberra: Australian Bureau of Statistics.

Baker, P. (2018). Men's health: Time for a new approach. *Physical Therapy Reviews*, *23*(2), 144–150.

Barker, G., Ricardo, C., Nascimento, M., Olukoya, A., & Santos, C. (2010). Questioning gender norms with men to improve health outcomes: Evidence of impact. *Global Public Health*, *5*(5), 539–553.

Baugher, A. R., & Gazmararian, J. A. (2015). Masculine gender role stress and violence: A literature review and future directions. *Aggression and Violence Behavior*, *24*, 107–112.

Begun, A. L., Early, T. J., & Hodge, A. (2016). Mental health and substance abuse service engagement by men and women during community reentry following incarceration. *Administration and Policy in Mental Health and Mental Health Services Research*, *43*(2), 207–218.

Blazina, C., & Marks, L. I. (2001). College men's affective reactions to individual therapy, psychoeducational workshops, and men's support group brochures: The influence of gender-role conflict and power dynamics upon help-seeking attitudes. *Psychotherapy: Theory, Research, Practice, Training*, *38*(3), 297–305.

Bonabi, H., Müller, M., Ajdacic-Gross, V., Eisele, J., Rodgers, S., Seifritz, E., & Rössler, W. (2016). Mental health literacy, attitudes to help-seeking, and perceived need as predictors of mental health service use: A longitudinal study. *The Journal of Nervous and Mental Disease*, *204*(4), 321–324.

Cane, J., Richardson, M., Johnston, M., Ladha, R., & Michie, S. (2015). From lists of behaviour change techniques (BCTs) to structured hierarchies: Comparison of two methods of developing a hierarchy of BCTs. *British Journal of Health Psychology*, *20*(1), 130–150.

Chang, Q., Yip, P. S., & Chen, Y. (2019). Gender inequality and suicide gender rations in the world. *Journal of Affective Disorders*, *243*, 297–304.

Cochran, S. V., & Rabinowitz, F. E. (2003). Gender-sensitive recommendations for assessment and treatment of depression in men. *Professional Psychology: Research and Practice*, *34*(2), 132–140.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, *20*(1), 37–46.

Corrigan, P. W., Rafacz, J., & Rüsch, N. (2011). Examining a progressive model of self-stigma and its impact on people with serious mental illness. *Psychiatry Research*, *189*(3), 339–343.

Cotton, S. M., Wright, A., Harris, M. G., Jorm, A. F., & McGorry, P. D. (2006). Influence of gender on mental health literacy in young Australians. *Australian and New Zealand Journal of Psychiatry*, *40*(9), 790–796.

Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: A theory of gender and health. *Social Science & Medicine*, *50*(10), 1385–1401.

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: The new Medical Research Council guidance. *British Medical Association*, *337*, a1655.

Critical Appraisal Skills Programme. (n.d.). *Making sense of evidence*. Retrieved November 13, 2017, from http://www.casp-uk.net/casp-tools-checklists

Deeks, J. J., Dinnes, J., D'amico, R., Sowden, A. J., Sakarovitch, C., Song, F., … Altman, D. G. (2003). Evaluating non-randomised intervention studies. *Health Technology Assessment*, *7*(27), iii–x.

Des Jarlais, D. C., Lyles, C., Crepaz, N., & Trend Group. (2004). Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: The TREND statement. *American Journal of Public Health*, *94*(3), 361–366.

Doherty, T. D., & Kartalova-O'Doherty, Y. (2010). Gender and self-reported mental health problems: Predictors of help-seeking from a general practitioner. *British Journal of Health Psychology*, *15*(1), 213–228.

Dunne, T., Bishop, L., Avery, S., & Darcy, S. (2017). A review of effective youth engagement strategies of mental health and substance use interventions. *Journal of Adolescent Health*, *60*(5), 487–512.

Edwards, S., Tinning, L., Brown, J. S., Boardman, J., & Weinman, J. (2007). Reluctance to seek help and the perception of anxiety and depression in the United Kingdom: A pilot vignette study. *The Journal of Nervous and Mental Disease*, *195*(3), 258–261.

Englar-Carlson, M., & Kiselica, M. S. (2013). Affirming the strengths in men: A positive masculinity approach to assisting male clients. *Journal of Counseling & Development*, *91*(4), 399–409.

Ferrari, A. (2016). Using celebrities in abnormal psychology as teaching tools to decrease stigma and increase help-seeking. *Teaching of Psychology*, *43*(4), 329–333.

Fleming, P. J., Lee, J. G., & Dworkin, S. L. (2014). "Real Men Don't": Constructions of masculinity and inadvertent harm in public health interventions. *American Journal of Public Health*, *104*(6), 1029–1035.

Fogarty, A. S., Proudfoot, J., Whittle, E. L., Player, M. J., Christensen, H., Hadzi-Pavlovic, D., & Wilhelm, K. (2015). Men's use of positive strategies for preventing and managing depression: A qualitative investigation. *Journal of Affective Disorders*, *188*, 179–187.

Gonzalez, J. M., Alegría, M., Prihoda, T. J., Copeland, L. A., & Zeber, J. E. (2011). How the relationship of attitudes toward mental health treatment and service use differs by age, gender, ethnicity/race and education. *Social Psychiatry and Psychiatric Epidemiology*, *46*(1), 45–57.

Gonzalez, J. M., Tinsley, H. A., & Kreuder, K. R. (2002). Effects of psychoeducational interventions on opinions of mental illness, attitudes toward help-seeking, and expectations about psychotherapy in college students. *Journal of College Student Development*, *43*(1), 51–63.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry*, *10*(1), 113.

Guo, S., Nguyen, H., Weiss, B., Ngo, V. K., & Lau, A. S. (2015). Linkages between mental health needs and help-seeking behavior among adolescents: Moderating role of ethnicity and cultural values. *Journal of Counseling*, *62*(4), 682–693.

Hammer, J. H., & Vogel, D. L. (2010). Men's help-seeking for depression: The efficacy of a male-sensitive brochure about counseling. *The Counseling Psychologist*, *38*(2), 296–313.

Hammer, J. H., Vogel, D. L., & Heimerdinger-Edwards, S. R. (2013). Men's help-seeking: Examination of differences across community size, education, and income. *Psychology of Men & Masculinity*, *14*(1), 65–75.

Hardcastle, S. J., Fortier, M., Blake, N., & Hagger, M. S. (2017). Identifying content-based and relational techniques to change behaviour in motivational interviewing. *Health Psychology Review*, *11*(1), 1–16.

Harris, M. G., Diminic, S., Reavley, N., Baxter, A., Pirkis, J., & Whiteford, H. A. (2015). Males' mental health disadvantage: An estimation of gender-specific changes in service utilisation for mental and substance use disorders in Australia. *Australian & New Zealand Journal of Psychiatry*, *49*(9), 821–832.

Hearn, J. (2015). Men's health and well-being: The case against a separate field. *International Journal of Men's Health*, *14*(3), 301–314.

Higgins, J. P., & Green, S. (2005). *Cochrane handbook for systematic reviews of interventions*. Chichester: John Wiley & Sons Ltd.

Hoffman, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., … Michie, S. (2014). Better reporting of interventions: Template for intervention description and replication (TIDieR) checklist and guide. *British Medical Association*, *348*, g1687.

Hom, M. A., Stanley, I. H., & Jonier, T. E., Jr. (2015). Evaluating factors an interventions that influence help-seeking and mental health service utilization among suicidal individuals: A review of the literature. *Clinical Psychology Review*, *40*, 28–39.

Hunt, K., Wyke, S., Gray, C. M., Anderson, A. S., Brady, A., Bunn, C., … Treweek, S. (2014). A gender-sensitised weight loss and healthy living programme for overweight and obese men delivered by Scottish Premier League football clubs (FFIT): A pragmatic randomised controlled trial. *The Lancet*, *383*(9924), 1211–1221.

Jackson, N., & Waters, E. (2005). Criteria for the systematic review of health promotion and public health interventions. *Health Promotion International*, *20*(4), 367–374.

Johnson, J. L., Oliffe, J. L., Kelly, M. T., Galdas, P., & Ogrodniczuk, J. S. (2012). Men's discourses of help-seeking in the context of depression. *Sociology of Health and Illness*, *34*(3), 345–361.

Jorm, A. F. (2012). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*, *67*(3), 231–243.

Kaneko, Y., & Motohashi, Y. (2007). Male gender and low education with poor mental health literacy: A population-based study. *Journal of Epidemiology*, *17*(4), 114–119.

Kerr, L. K., & Kerr, L. D., Jr. (2001). Screening tools for depression in primary care: The effects of culture, gender and somatic symptoms on the detection of depression. *Western Journal of Medicine*, *175*(5), 349–352.

Kilpatrick, D. G., Acierno, R., Saunders, B., Resnick, H. S., Best, C. L., & Schnurr, P. P. (2000). Risk factors for adolescent substance abuse and dependence: Data from a national sample. *Journal of Consulting and Clinical Psychology*, *68*(1), 19–30.

King, K. E., Schlichthorst, M., Spittal, M. J., Phelps, A., & Pirkis, J. (2018). Can a documentary increase help-seeking intentions in men? A randomised controlled trial. *Journal of Epidemiology & Community Health*, *72*(1), 92–98.

Kiselica, M. S., & Englar-Carlson, M. (2010). Identifying, affirming, and building upon male strengths: The positive psychology/positive masculinity model of psychotherapy with boys and men. *Psychotherapy: Theory, Research, Practice, Training*, *47*(3), 276–287.

Lane, J. M., & Addis, M. E. (2005). Male gender role conflict and patters of help-seeking in Costa Rica and the United States. *Psychology of Men & Masculinity*, *6*(3), 155–168.

Levant, K., Kamaradova, D., & Prasko, J. (2014). Perspectives on perceived stigma and self-stigma in adult male patients with depression. *Neuropsychiatric Disease and Treatment*, *10*, 1399–1405.

Möller-Leimkühler, A. M. (2002). Barriers to help-seeking by men: A review of sociocultural and clinical literature with particular reference to depression. *Journal of Affective Disorders*, *71*(1), 1–9.

MacInnes, D. L., & Lewis, M. (2008). The evaluation of a short group programme to reduce self-stigma in people with serious and enduring mental health problems. *Journal of Psychiatric and Mental Health Nursing*, *15*(1), 59–65.

Mackenzie, C. S., Gekoski, W. L., & Knox, V. J. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging and Mental Health*, *10*(6), 574–582.

MacNeil, B. A., Hudson, C. C., & Leung, P. (2018). It's raining men: Descriptive results for engaging men with eating disorders in a specialized male assessment and treatment track (MATT). *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *23*(6), 817–824.

Mahalik, J. R., Good, G. E., Tager, D., Levant, R. F., & Mackowiak, C. (2012). Developing a taxonomy of helpful and harmful practices for clinical work with boys and men. *Journal of Counseling Psychology*, *59*(4), 591–603.

McFall, M., Malte, C., Fontana, A., & Rosenheck, R. A. (2000). Effects of an outreach intervention on use of mental health services by veterans with posttraumatic stress disorder. *Psychiatric Services*, *51*(3), 369–374.

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, *22*(3), 276–282.

McManus, S., Bebbington, P., Jenkins, R. & Brugha, T. (Eds.) (2016). *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital.

Michie, S., Fixsen, D., Grimshaw, J. M., & Eccles, M. P. (2009). Specifying and reporting complex behaviour change interventions: The need for a scientific method. *Implementation Science*, *4*(1), 1–6.

Michie, S., Johnston, M., & Carey, R. (2016). Behaviour change techniques. In M. Gellman & J. Turner (Eds.), *Encyclopedia of behavioral medicine* (pp. 1–8). New York, NY: Springer.

Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., … Wood, C. E. (2013). The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: Building an international consensus for the reporting of behavior change interventions. *Annals of Behavioral Medicine*, *46*(1), 81–95.

Michie, S., West, R., Sheals, K., & Godinho, C. A. (2018). Evaluating the effectiveness of behavior change techniques in health-related behavior: A scoping review of methods used. *Translational Behavioral Medicine*, *8*(2), 212–224.

Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: Guildford Press.

Miller, W. R., & Rose, G. S. (2015). Motivational interviewing and decisional balance: Contrasting responses to client ambivalence. *Behavioural and Cognitive Psychotherapy*, *43*(2), 129–141.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, *6*(7), e1000097.

Nam, S. K., Chu, H. J., Lee, M. K., Lee, J. H., Kim, N., & Lee, S. M. (2010). A meta-analysis of gender differences in attitudes toward seeking professional psychological help. *Journal of American College Health*, *59*(2), 110–116.

National Institute of Mental Health. (n.d). *NIMH's 'Real men. Real depression' campaign*. Retrieved October 18, 2017, from https://www.nimh.nih.gov/health/topics/men-and-mental-health/men-and-depression/nimhs-real-men-real-depression-campaign.shtml#part_152890

NHS Digital, N. A. (2016). *Psychological therapies: Annual report on the use of IAPT services - England, 2015–16*. Retrieved from http://webarchive.nationalarchives.gov.uk/20180328133700/http://digital.nhs.uk/catalogue/PUB22110

Nolen-Hoeksema, S. (2004). Gender differences in risk factors and consequences for alcohol use and problems. *Clinical Psychology Review*, *24*(8), 981–1010.

Ogrondniczuk, J., Oliffe, J., & Beharry, J. (2018). HeadsUpGuys: Canadian online resource for men with depression. *Canadian Family Physician*, *64*(2), 93–94.

Oliffe, J. L., & Christina, H. (2014). Beyond workers' compensation: Men's mental health in and out of work. *American Journal of Men's Health*, *81*(1), 45–53.

Oliver, M. I., Pearson, N., Coe, N., & Gunnell, D. (2005). Help-seeking behaviour in men and women with common mental health problems: Cross-sectional study. *The British Journal of Psychiatry*, *186*(4), 297–301.

Pal, H. R., Yadav, D., Mehta, S., & Mohan, I. (2007). A comparison of brief intervention versus simple advice for alcohol use disorders in a North India community-based sample followed for 3 months. *Alcohol & Alcoholism*, *42*(4), 328–332.

Parent, M., Hammer, J. H., Bradstreet, T. C., Schwartz, E. N., & Jobe, T. (2018). Men's mental health help-seeking behaviors: An intersectional analysis. *American Journal of Men's Health*, *12*(1), 64–73.

Patrick, S., & Robertson, S. (2016). Mental health and well-being: Focus on men's health. *British Journal of Nursing*, *25*(21), 1163–1169.

Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology*, *54*(4), 373.

Pirkis, J., Spittal, M. J., Keogh, L., Mousaferiadis, T., & Currier, D. (2017). Masculinity and suicidal thinking. *Social Psychiatry and Psychiatric Epidemiology*, *52*(3), 319–327.

Pollard, J. (2016). Early and effective intervention in male mental health. *Perspectives in Public Health*, *136*(6), 337–338.

Primack, J. M., Addis, M. E., Syzdek, M., & Miller, I. W. (2010). The men's stress workshop: A gender-sensitive treatment for depressed men. *Cognitive and Behavioral Practice*, *17*(1), 77–87.

Rice, S. M., Fallon, B. J., Aucote, H. M., Möller-Leimkühler, A., Treeby, M. S., & Amminger, G. P. (2015). Longitudinal

sex differences of externalising and internalising depression symptoms trajectories: Implications for assessment of depression in men from an online study. *International Journal of Social Psychiatry*, *61*(3), 236–240.

River, J. (2018). Diverse and dynamic interactions: A model of suicidal men's help-seeking as it relates to health services. *American Journal of Men's Health*, *12*(1), 150–159.

Robinson, M., & Robertson, S. (2010). The application of social marketing to promote men's health: A brief critique. *International Journal of Men's Health*, *9*(1), 50–61.

Rochlen, A. B., McKelley, R. A., & Pituch, K. A. (2006). A preliminary examination of the "Real Men. Real Depression" campaign. *Psychology of Men & Masculinity*, *7*(1), 1.

Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry*, *20*(8), 529–539.

Rutz, W., & Rihmer, Z. (2009). Suicide in men: Suicide prevention for the male person. In D. Wasserman & C. Wasserman (Eds.), *Oxford textbook of suicidology and suicide prevention: A global Perspective* (pp. 249–255). New York, NY: Oxford University Press.

Salter, M. (2016). Men's rights or men's needs? Anti-feminism in Australian men's health promotion. *Canadian Journal of Women and the Law*, *28*(1), 69–90.

Seidler, Z. E., Dawes, A. J., Rice, S. M., Oliffe, J. L., & Dhillon, H. M. (2016). The role of masculinity in men's help-seeking for depression: A systematic review. *Clinical Psychology Review*, *49*, 106–118.

Seymour-Smith, S., Wetherell, M., & Phoenix, A. (2002). 'My wife ordered me to come!': A discursive analysis of doctors' and nurses' accounts of men's use of general practitioners. *Journal of Health Psychology*, *7*(3), 253–267.

Singh, S. P., & Toumainen, H. (2015). Transition from child to adult mental health services: Needs, barriers, experiences and new models of care. *World Psychiatry*, *14*(3), 358–361.

Spencer-Thomas, S., Hindman, J., & Conrad, J. (2014). *Man therapy: Outreach and impact on men's mental health program 18 months after launch*.

Strömberg, R., Backlund, L. G., & Löfvander, M. (2010). A comparison between the Beck's Depression Inventory and the Gotland Male Depression Scale in detecting depression among men visiting a drop-in clinic in primary car. *Nordic Journal of Psychiatry*, *64*(4), 258–264.

Swami, V. (2014). Mental health literacy of depression: Gender differences and attitudinal antecedents in a representative British sample. *PLoS One*, *7*(11), e49779.

Syzdek, M. R., Addis, M. E., Green, J. D., Whorley, M. R., & Berger, J. L. (2014). A pilot trial of gender-based motivational interviewing for help-seeking and internalizing symptoms in men. *Psychology of Men & Masculinity*, *15*(1), 90–94.

Syzdek, M. R., Green, J. D., Lindgren, B. R., & Addis, M. E. (2016). Pilot trial of gender-based motivational interviewing for increasing mental health service use in college men. *Psychotherapy*, *53*(1), 124–129.

Tang, M. O., Oliffe, J. L., Galdas, P. M., Phinney, A., & Han, C. S. (2014). College men's depression-related help-seeking: A gender analysis. *Journal of Mental Health*, *23*(5), 219–224.

Thomas, H. (2003). Quality assessment tool for quantitative studies. In *Effective public health practice project*. Toronto: McMaster University.

Thompson, A., Hunt, C., & Issakidis, C. (2004). Why wait? Reasons for delay and prompts to seek help for mental health problems in an Australian clinical sample. *Social Psychiatry and Psychiatric Epidemiology*, *39*(10), 810–817.

Turecki, G., & Brent, D. A. (2016). Suicide and suicidal behaviour. *The Lancet*, *387*(10024), 1227–1239.

Vogel, D. L., Epting, F., & Wester, S. R. (2003). Counselors' perceptions of female and male clients. *Journal of Counseling & Development*, *81*(2), 131–141.

Vogel, D. L., Heimerdinger-Edwards, S. R., Hammer, J. H., & Hubbard, A. (2011). "Boys don't cry": Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology*, *58*(3), 368.

Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessley, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey Replication. Archives of general psychiatry. *Archives of General Psychiatry*, *62*(6), 629–640.

Wilhelm, K. A. (2014). Gender and mental health. *Australian & New Zealand Journal of Psychiatry*, *48*(7), 603–605.

Wong, Y. J., Ho, M. R., Wang, S. Y., & Miller, I. S. (2017). Meta-analyses of the relationship between conformity to masculine norms and mental health-related outcomes. *Journal of Counseling Psychology*, *64*(1), 80–93.

World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization.

World Health Organization. (2002). *Gender and mental health*. Geneva: World Health Organization.

World Health Organization. (2017). *Global Health Observatory (GHO) data*. World Health Organization. Retrieved from https://www.who.int/gho/mental_health/suicide_rates_male_female/en/

Yousaf, O., & Popat, A. (2015). The bolstering effect of conceptual priming on psychological help-seeking attitudes in men. *Journal of Mental Health*, *24*(6), 347–350.

Yousaf, O., Popat, A., & Hunter, M. S. (2015). An investigation of masculinity attitudes, gender and attitudes toward psychological help-seeking. *Psychology of Men & Masculinity*, *16*(2), 234–237.

Appendix 2.2: Full search strategy utilised for MEDLINE via Ovid.

1. exp Help-Seeking Behavior/
2. exp Social Stigma/
3. exp Masculinity/
4. "help seek* behavio?r".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
5. "service utilisation".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
6. "service utilization".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
7. "Stigma*".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
8. "Masculin*".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
9. "gender role*".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
10. (help adj3 seek*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
11. (seek* adj2 treatment).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
12. (barrier* adj7 help seeking).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
13. (barrier* adj7 treatment).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
14. "service use".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
15. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14
16. exp Mental Health/
17. exp Mental Disorders/
18. exp Depression/
19. exp Depressive Disorder/
20. exp Substance-Related Disorders/
21. exp Opioid-Related Disorders/
22. exp Mood Disorders/

23. (mental adj disorder?).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
24. (mental adj health).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
25. 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
26. exp Randomized Controlled Trials as Topic/
27. "Randomi?ed controlled trial".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
28. "RCT".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
29. "Programme".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
30. "Program".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
31. "Brochure".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
32. "Workshop?".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
33. "Intervention?".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
34. exp Clinical Trial/
35. Pilot.m_titl.
36. Pilot.ab.
37. 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36
38. exp Men/
39. Male.m_titl.
40. "Men".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
41. Gender.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
42. exp male/ not exp female/
43. 38 or 39 or 40 or 41 or 42
44. 15 and 25 and 37 and 43

Appendix 2.3: Summary of uptake and dropout figures of the interventions.

Author	**Approached/Expressed Interest (N)**	**Eligible (%)**	**Recruited to Intervention (%)**	**Allocated to intervention (%)**	**Dropped out of Intervention (%)**	**Lost to Follow up (%)**
Hammer & Vogel (2010)	4,967	1,397 (28%)	1,397 (100%)	n/a	0	0
McFall et al (2000)	n/a	594 (n/a)	594 (100%)	302 (51%)	5 (2%)	7 (2%)
Pal et al (2007	495	163 (33%)	90 (55%)	45 (50%)	0 (0%)	3 (7%)
Rochlen et al (2006)	n/a	209 (n/a)	209 (100%)	n/a	n/a	n/a
Syzdek et al (2014)	61	26 (43%)	23 (88%)	12 (52%)	0 (0%)	0 (0%)
Syzdek et al (2016)	76	72 (95%)	35 (49%)	18 (51%)	0 (0%)	0 (0%)
Yousaf & Popat (2015)	n/a	69 (n/a)	69 (100%)	34 (49%)	0 (0%)	0 (0%)

n/a = Data not available

Appendix 3.

Appendix 3.1: Focus group (Chapter 3) peer-reviewed post-print publication.

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RESEARCH ARTICLE Open Access

Engaging male students with mental health support: a qualitative focus group study

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Abstract

Background: Males are less likely to seek help for mental health difficulties compared to females. Despite considerable interest, a paucity of evidence-based solutions exists to address this. Concerns about students' mental health has led to the United Kingdom's Department of Education to make this a priority. Studies have shown that male students hold more negative attitudes towards the use of psychological services compared to female students and are less likely to seek help. A major concern is that male students make up 69% of university suicides, which is often associated with lower rates of help-seeking. This focus group study therefore sought to identify potential approaches that would be relevant to improving mental health help-seeking in male students.

Methods: Three focus groups comprising of 24 male students at a London University were conducted. Participants were asked questions exploring: the barriers to seeking help, what would encourage help-seeking, how an appropriate intervention should be designed, and how to publicise this intervention to male students. Thematic analysis was conducted to evaluate participants responses.

Results: Five distinct themes were identified. These were: 1) protecting male vulnerability, 2) providing a masculine narrative of help-seeking, 3) differences over intervention format, 4) difficulty knowing when and how to seek help, and 5) strategies to sensitively engage male students.

Conclusions: These themes represent important considerations that can be used, together with the existing literature about male help-seeking, to develop more male friendly interventions that are suitable for male students. This could help improve help-seeking attitudes and the uptake of mental health interventions for male students experiencing emotional distress.

Keywords: Help-seeking, Men, Interventions, Students, Mental health

Background

The United Kingdom (UK) is increasing its efforts to tackle issues surrounding student mental health. The majority of students fall into the age bracket of 18–25 years, coinciding with the peak onset period for various mental health disorders such as schizophrenia, and anxiety and depression [1, 2]. The Department of Education is developing guidelines to ensure universities improve the mental health support offered to students [3, 4]. Such initiatives can be attributed to the rise in students reporting mental health conditions. From 2007 to 2017 five times as many students disclosed a mental health condition, reflecting a 12% increase across a 10-year period [5]. Problems such as anxiety and depression are common in university students [6]. Additional concerns of suicidal thoughts and behaviours, problematic drinking and substance misuse also occur frequently in this population [7–9]. Alongside the increase in students reporting common mental health problems, it has been

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noted that symptoms have become more severe [10]. This has increased the demand on student mental health services, which continues to rise annually [10, 11]. These factors, coupled with the stressors of university, can have a detrimental impact on academic performance [12] and place students at a greater risk of dropping out [13].

An additional problem is that students are often still reluctant to seek help for mental health difficulties [14]. The stigma associated with seeking help has been shown to reduce student's willingness to talk about their mental health concerns [15]. Confidentiality, trust, poor symptom awareness, self-reliance, inadequate service knowledge and difficulty expressing emotions have also been highlighted [16, 17]. Further inspection of these barriers shows that they differ by gender. Indeed, female students hold more favourable attitudes towards help-seeking compared to males [18]. Traditional masculine gender roles of stoicism, invulnerability and self-reliance can reduce men's willingness to seek support [19, 20]. In one study, male students preferred to deny weakness in order to uphold a stoic position and limit self-disclosure to remain autonomous; interestingly, they were more likely to engage in mental health support when help-seeking was characterised as a sign of strength [21].

Despite these findings, there remains a dearth of evidence-based solutions that aim to improve male student's help-seeking. Indeed, this is a key target area for universities and mental health services, particularly since 93 (69%) of the 134 students committing suicide in 2015, were male [5]. However, in the right circumstances, men are willing to talk about their emotional and physical experiences, including depression [22–24] and qualitative work has helped provide a better understanding of poor utilisation of mental health services [25].

The current study sought to conduct a series of focus groups with male university students. The aim of this research was to highlight key features that might be incorporated into mental health initiatives to help encourage male students to seek help for mental health difficulties.

Method

Design

Focus groups were chosen to explore the narratives of male university students as they are an effective strategy for collecting health data and a promising method to research mental health in men [26]. This approach can enhance the discussion of personal issues by proving a supportive group environment, resulting in richer findings that might not be obtained from individual interviews [27, 28]. Focus groups can help capture collective group attitudes, norms and overall narratives and foster positive group dynamics and interactions [27]. Discussion of mental health services with men should be encouraged [29], particularly as group discussion may also provide interpersonal support and validation for men experiencing psychological distress [30]. Purposive sampling was adopted to recruit participants to the focus groups as there was deliberate choice of participants based on their gender (i.e. male) and level of education (i.e. students) [31, 32]. Similarly, heterogenous purposive sampling was utilised in the current investigation to select a broad spectrum of participants regarding their ethnicity, previously help-seeking behaviours, and degree faulty to resemble the student cohort as closely as possible [31]. Thematic analysis was chosen to examine the narratives by breaking down speech into smaller units of content [33], as it is a method that seeks to identify, analyse and report patterns (referred to as themes) within the data [34].

Patient & Public Involvement (PPI)

To develop a relevant topic guide, this research was initially reviewed by an advisory team with experience of mental health problems who have been specially trained to advise on research proposals and documentation through the Young Person's Mental Health Advisory Group (YPMHAG) which is a free, confidential service in England provided by the National Institute for Health Research Maudsley Biomedical Research Centre via King's College London (KCL) (https://ypmhag.org/) [35]. One author (ISO) presented the current investigation to the YPMHAG before seeking feedback. The YPMHAG consisted of 9 young adults (3 male) with a mean age of 22 years. Seven were either current or former university students.

The YPMHAG recommended that the investigation emphasise that the focus groups were not a form of group therapy, and that participants were not required to discuss personal experiences and any responses would remain anonymous. The finalised focus group questions explored the barriers to help-seeking, how to encourage mental health help-seeking, how mental health initiatives should be designed and how to publicise them to male students. A comprehensive topic guide is in supplementary material 1.

Procedure

Ethical approval was granted by the universities local Research Ethics Office. The focus groups were advertised via a routine fortnightly e-mail used to recruit students to research studies that was sent to all students at the university. Posters were distributed across the university campus and posted within social media pages and various societies. Both the e-mail and posters contained a brief summary of the project and provided additional contact details if students were interested in participating. No prior relationships were established with potential participants before the study

commenced. After contacting the research team, participants were sent an e-copy of the information sheet outlining the study in more detail including the aims of the research study and that it would be part of a PhD project. After reading this and agreeing to take part, participants were enrolled into the study. (Fig. 1). Upon arrival at the focus groups, situated in a university room located above the student's union, participants were given a hard copy of the information sheet, provided with an opportunity to ask any further questions and completed a consent form to take part. Focus groups were conducted until data saturation, the point at which no new themes or concepts relating to the research question are interpreted from the data, was achieved [36–40]. Employing a thematic analysis approach, the research cannot determine exactly how many focus groups will be required in advance of analysis [40]. Transcripts of each focus group were reviewed after each session before conducting the next to determine if new concepts relating to the research question were identified within the data. Data saturation was reached after the third focus group whereby no new codes were developed. This is consistent with previous work as data saturation seeking to identify core themes within the data can be achieved with small sample sizes [37], with 84% of all possible codes being developed by the second focus group [37]. Additionally, 96% of high-prevalence codes can be identified by the third focus group [37]. Previous qualitative work investigating health-seeking behaviours of African American men found that two to three focus groups were effective for identifying 80% of all themes, and that three focus groups are enough to identify all of the most prevalent themes within the data set [40]. Three focus groups were facilitated by the lead researcher (ISO, PhD student, male), with the assistance of a medical student currently enrolled at the university (VT, male). A topic guide (supplementary material 1) was used to steer the conversation, but otherwise the facilitator allowed general discussion among the participants. During the focus groups, the second researcher took notes on the focus groups as well as the names of participants who had spoken and in which order to aid transcription. Other than the researchers and participants, no others were present.

Data analysis

All focus groups audio discussions were recorded and encrypted on a Phillips Dictaphone Pocket Memo and transcribed verbatim by one author (ISO).

The six-step guide for Thematic Analysis recommended by Braun & Clarke [34] was used to analyse the data. The six steps are: 1) familiarisation with the data, 2) generate initial codes, 3) search for themes, 4) review themes, 5) define and name the themes, and lastly 6) produce the report. Coding was an iterative process conducted by two members of the research study team (ISO and VT) in an independent-parallel fashion before agreeing on finalised codes. Once all the data had been initially coded, it was categorised into broader groups encompassing relevant codes, which were abstract ideas expressed within the transcript and were agreed upon before identifying themes. Themes encapsulated a common phenomenon that emerges from reoccurring codes

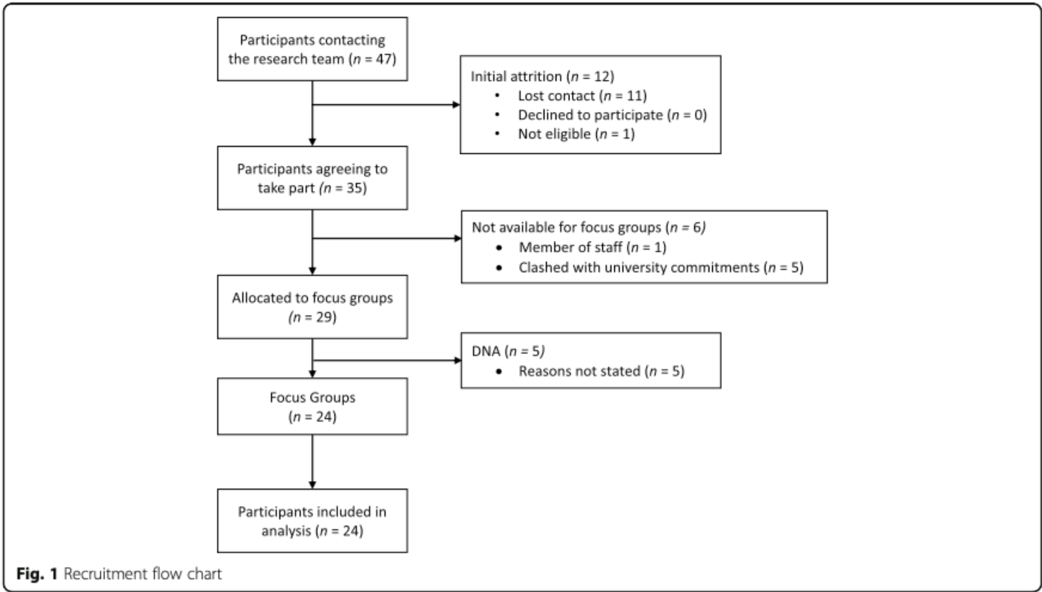

Fig. 1 Recruitment flow chart

within the data and represented the most prominent ideas and experiences of the participants [41].

Results

Participants

Twenty-four male students attended the focus groups (Fig. 1) and were compensated for their time with a £20 Amazon voucher. Participants' demographic information is outlined in Table 1. The mean duration of the three focus groups was 72.47 min.

Five distinct themes were identified. These were: 1) protecting male vulnerability, 2) providing a masculine narrative of help-seeking, 3) differences over intervention format, 4) difficulty knowing when and how to seek help and 5) strategies to sensitively engage male students. These results and their underlying sub-themes are summarised in Fig. 2.

Table 1 Participants' demographic information

Demographics	***N*** (%)
Total number of participants (% male)	24 (100%)
Age (Years)	
Mean (SD)	21.89 (3.39)
Range	18–31
Ethnicity	
Chinese	7 (29%)
Any other white background	5 (21%)
White British	4 (17%)
Pakistani	3 (13%)
Black African/Caribbean	2 (8%)
Any other Asian background	2 (8%)
Arab	1 (4%)
Degree Faculty	
Institute of Psychiatry, Psychology & Neuroscience	5 (21%)
Natural & Mathematical Sciences	4 (17%)
Life Sciences & Medicine	4 (17%)
Business School	3 (13%)
Arts & Humanities	3 (13%)
Social Science & Public Policy	2 (8%)
Other/NA	2 (8%)
Dental Institute	1 (4%)
Level of Study	
Undergraduate	16 (67%)
Postgraduate (Master's or PhD)	7 (29%)
Other	1 (4%)
Has previously sought help for mental health	
Yes	12 (50%)
No	10 (42%)
Prefer not to say	2 (8%)

Theme 1: protecting male vulnerability

A prominent theme was that speaking about mental health was very difficult. The majority of participants were reluctant to confide in others and talk about their difficulties due to fears associated with opening up.

"why would you want to open a can of worms? there is no point to that… not immediately anyway" – Participant 5, Group 3.

"most people just don't know, most people just, they're so afraid of what they don't know they just like don't want to know [talking about mental health]" – Participant 5, Group 1.

To combat this, participants described environments that were safe and less threatening. They preferred settings that were more sensitive to male needs, enabling better management of the fear and vulnerability associated with opening up/seeking help. Many of the participants stressed the need for a safe space, trust and confidentiality.

"they have to trust you because men aren't like women, we don't open up very easily we don't" – Participant 5, Group 1.

"people need more information about confidentiality because a lot of people are afraid that if they say anything about their mental health problems, other people will find out and they may have problems with that" – Participant 9, Group 2.

Others emphasised that talking about mental health with professionals can be a deterrent. Many had a preference for speaking to someone they knew such as a close friend or someone they have been briefly introduced to. Indeed, according to participants, this may help facilitate a trusting environment.

"for me, it would be better if I will be surrounded by people who at least I know for like 10-15 minutes rather than a complete stranger – [if you say] 'let's talk about depression, or let's talk about anxiety'. [I'll say] not really, I don't want to talk about it, I don't know you guys why should I open up" – Participant 1, Group 1.

Similarly, the importance of social support for psychological well-being and how this can encourage help-seeking was stressed.

Protecting Male Vulnerability	Masculine Narrative of Help-Seeking
• The importance of trust and confidentiality • Facilitate social support • Provide a male only space	• Patriarchy invalidates men's concerns • Seeking help is not masculine • Frame help-seeking to be more masculine • Normalise help-seeking • Use male role models

Differences Over Intervention Format	Difficulty Knowing When & How to Seek Help
• Preference for something informal and fun • Preference for a formal intervention • Brief interventions are easier to engage with • Frequent sessions are needed for mental health	• Improve mental health symptom knowledge • Explain when symptoms warrant help (severity) • Sign-post mental health services • Clarify treatment structure • Easier and quicker routes to care

Strategies to Sensitively Engage Male Students
• Do not label as a 'mental health' intervention • Provide an incentive for attending • Promote through student-led or university societies • Deliver initiatives during orientation week and exams

Fig. 2 Overview of themes and sub-themes to improve mental health help-seeking for male students

> *"maybe like a time like hanging out with a friend, socialise, but at the same time like seeking help" – Participant 1, Group 1.*

> *"I think in my case a big help of this phase is actually people around me. So, like when I first experienced the issue, I didn't seek help personally, it was the people around me" – Participant 1, Group 3.*

Furthermore, participants stated that a male-only space would also assist with protecting the vulnerability they experience when trying to seek help for mental health. Moreover, this could assist with validating difficulties male students may experience.

> *"there's so much available for literally everything else. Men are like, they're pushed to one side, you don't need the help as much as women, young children, older people, disabled people, but men, we have nothing for ourselves" – Participant 5, Group 1.*

> *"I think emphasising men's mental health is insanely important" – Participant 1 Group 3.*

> *"I think if there were women here, I think it would detract from people like actually being open" – Participant 4, Group 3.*

These discourses emphasise the importance of providing a male only space or setting in which male students feel comfortable to disclose mental health concerns, whilst also providing an environment to facilitate further discussion around help-seeking. This may be enhanced by the assurance of trusting and

confidential settings and facilitating social support with other male students.

Theme 2: provide a masculine narrative of help-seeking

Traditional masculine stereotypes of being strong, responsible, invulnerable and self-sufficient were identified as key barriers to seeking help. Male students preferred to do things by themselves as seeking help contradicted masculine ideals.

> *"responsibility that surrounds the male character is playing a huge role in this as well because if you are male and you have a lot of responsibility and then you know that, 'okay I have a problem, now I have to seek help', then you have to rely on someone else, then my responsibility is sort of, it could be that, I can't do it anymore" – Participant 10, Group 1.*

> *"you might also feel anxious about talking to people and then showing vulnerability, which is also a big part why guys just don't talk about their emotions generally. They don't want to show vulnerability" – Participant 2, Group 3.*

These points emphasise that seeking help reduces one's ability to fulfil masculine ideals, particularly of responsibility and invulnerability. Furthermore, because men are often regarded as privileged in society they are not supposed to be disadvantaged. This in turn, makes it more difficult to open up about not feeling well or experiencing adversity.

> *"the term patriarchy because it just infers that, that it's impossible, or at least very difficult for men to have it bad, or to be disadvantaged in some way" – Participant 4, Group 3.*

Furthermore, the participants suggested that help-seeking appeared to be evaluated as an overall net loss. In this instance, seeking help would result in a loss to one's masculine identity without necessarily any immediate benefit.

> *"men especially, it's [i.e. mental health] is always going to rank in the lower things you know, you're never going to go, even like with regular health. I'm like 'oh I think it's broken but I'm not going to seek help immediately'" – Participant 5, Group 3.*

> *"you have to make like a big commitment [to therapy], and this commitment is like a short-term loss, it's a short-term loss" – Participant 1, Group 3.*

Concerns about responsibility, vulnerability and patriarchy infers that male students may benefit from a narrative that highlights how help-seeking can be masculine, will not be detrimental to their masculinity and engaging would be an overall net-gain. This was evidenced by some participants stating that help-seeking does not have to be weak and can be a sign of strength whilst working towards better health and personal growth.

> *"if you tend to run away from your problems then you're weak in this sense, not in the eyes of others, but towards yourself" – Participant 5, Group 2.*

> *"people who attend then feel empowered because they're doing something strong not weak. I'm here looking after myself and that's empowering. It makes people who attend feel good and so I think that's a really really good idea" – Participant 7, Group 2.*

One way to encourage help-seeking was to normalise the behaviour by emphasising that it was common. In addition, utilising male role models to talk about their own mental health experiences and help-seeking stories would inspire hope and reduce the perceived negatives associated with help-seeking.

> *"I think just give them some materials or some something to the public that gives the feeling that seeking mental health [help] is not very special or a serious thing, just a normal thing, that it's fine. So, when you just get a mental health problem you will feel easy to seek help" – Participant 3, Group 3.*

> *"if they see another gentleman, high profession, high functioning individual, and they're talking about XYZ, they might think 'you know what, he's done it, why not myself?'. If you could do a personal narrative that'll be amazing" – Participant 5, Group 1.*

Overall, this theme highlights that help-seeking was perceived as a net loss to one's masculine identity and male-students could feel disqualified from seeking support due to male-privilege. Indeed, framing help-seeking to fit masculine norms, as a normal act of self-care was suggested to improve male-students engagement with mental health interventions.

Theme 3: differences over intervention format

Theme 3 highlighted a lack of consensus regarding the format of appropriate interventions for male students. These views were polarised, with participants disagreeing

over the formality and duration of the intervention. Much of the discourse emphasised the need for a fun and informal structure to help promote engagement.

> *"approach this from a different angle because we always do workshops, we always do lectures, we always do something which is like really formal rather than informal" – Participant 1, Group 1.*

> *"something that's fun, even if you are okay, something that you just come to anyway because it's enjoyable, I definitely think that will be better" – Participant 7, Group 2.*

Equally, many participants felt the opposite and stated that they would prefer a formal and serious structure. This disagreement was centred around these participants perceiving mental health as serious and they were concerned that an informal group would not be structured enough to facilitate openness.

> *"some people may be more open to sharing things if it's in a more private setting. It may not be best to do it with a group of friends or anything like that" – Participant 4, Group 1.*

> *"you don't want to alienate people by making it seem so light-hearted, because it's not. Because other issues are absolutely serious" – Participant 5, Group 1.*

The second disagreement was in response to the duration of the intervention. There was a preference, among half the participants, for something brief that lasted 1–2 h and was spread across one or two sessions.

> *"an hour is fine, no-one has more than that to give away really" – Participant 6, Group 1.*

> *"I can maybe come once but not more often, so there should be a tactic to reach people in one workshop" – Participant 2, Group 3.*

Conversely, others felt that multiple sessions that were repeated more frequently were a better format. This was due to a perception of mental health as a more enduring problem, thus requiring repetition of information and longer-term support to encourage help-seeking.

> *"I know, even getting information, even getting information one session is not enough, you need repetition to get mental health across" – Participant 1, Group 3.*

> *"I think one off things don't actually work that much" - Participant 5, Group 2.*

Theme three captures the lack of consensus over the formality and duration of an intervention. This presents some difficulties when designing future mental health initiatives, but none-the-less demonstrates that these are salient factors, which may contribute to engaging male students with mental health support and other well-being practices.

Theme 4: difficulty knowing when and how to seek help

Theme 4 provides an overview of how male students conceptualised mental health and determined appropriate action. Many students acknowledged their limited understanding of common mental health conditions, such as anxiety and depression, and how they present in men. Participants felt common mental health conditions and how they present should be addressed more openly to facilitate greater help-seeking. This should be explained in lay terms, as opposed to using medical terms, such as those from Diagnostic and Statistics Manual of Mental Disorders [42] and the International Classification of Diseases [43].

> *"ask someone what depression means to you, and he'll be like 'err just someone who's really sad'. Which is not necessarily clear, what we mean by it is that there's biological changes, so they don't understand it's a lack of understanding and awareness"- Participant 5, Group 1.*

> *"I think not necessarily describing it as a kind of symptomatic profile, it's often the DSM approach. So, maybe having something a bit more holistic and a bit more solvent" – Participant 3, Group 2.*

Alongside difficulties with understanding mental health symptoms, two other notable areas were mentioned. Firstly, teaching students how to identify symptoms that are severe enough to warrant professional psychological support was highlighted. Many of the participants articulated difficulty in assessing their perceived need for mental health support.

> *"the difficult part was thinking, convincing myself I need help. And that was it, it's just getting over that first barrier and thankfully I did get over it. But the issue is that for me personally, that's the biggest*

barrier for myself - realising I need help" – Participant 5, Group 1.

"we're all at university, there's a lot of other pressures going on, there's a certain amount, everyone just expects you to be stressed, and there's just certain expectations that you should be feeling that way. So, it's difficult to then think to yourself okay, there's a certain amount of this I should be feeling, but I'm now feeling too much" – Participant 6, Group 1.

Other suggestions included: mental health interventions should explain when symptom awareness translates into seeking help, provide a checklist so students can cross-reference their symptoms, or include group discussions around mental health to facilitate self-reflection and greater awareness of symptoms.

"I'd have very generic statements, 'I am not enjoying what I used to enjoy', 'I feel like I'm tired all the time', blaa blaa blaa. If you're to say these out loud to certain individuals and 'how many of these can you relate to?', at this point it might trigger something to check themselves by" – Participant 5, Group 1.

"anyone who talks about their [mental health] issues and so forth publicly, the people in the audience will start to relate and then that will start triggering stuff and people will start talking about it, guaranteed every time" – Participant 5, Group 1.

Secondly, participants suggested information about psychological treatment, namely the process, duration and general service structure would be helpful. Many participants acknowledged that they were unsure about which services were available, how to engage with them, and what kind of support they would receive if they did.

"I think it's a big thing about knowledge you need to know where to actually go, for instance I would normally, if I were to have mental health problems, I would normally think about the Student Union, just go maybe look at the Student Union but at the moment I have no idea where to look" – Participant 2, Group 3.

"we don't actually talk about the process itself [i.e. therapy], how long does it take, what it looks like, when we should expect the first effect, why it's not straight away, people don't know this" – Participant 1, Group 1.

The final point emerging from this theme highlighted logistical and structural barriers to seeking help. This included long waiting lists, lack of available support and slow administration surrounding university and professional mental health services.

"when they've [i.e. a friend] looked for help the NHS has something like a 6-month waiting list, 6 months to see help. It's a joke, it's a joke" – Participant 5, Group 1.

"because of this high turnaround time I reckon that a lot of people might have the same feelings during exam time, during essay time, so a lot of people might want to talk to people and then it's just going to get so convoluted everybody wants to talk and then I reckon services in this case might not be able to help people out" – Participant 2, Group 3.

This theme summarises the help-seeking barriers identified by participants: difficulty identifying/understanding mental health symptoms, problems identifying whether support is actually needed, lack of clarity surrounding available services, how to engage with services, what support they would receive, long waiting lists and other structural barriers to treatment.

Theme 5: strategies to sensitively engage male students

The most widely recommended method suggested during the focus groups to promote mental health in male students was paradoxically not to place emphasis on mental health or well-being. Indeed, this may overlap with a more informal approach advocated by some participants. Here, 'mental health support' was not perceived as beneficial and would result in a greater loss of time and resources if one were to attend. Having a title that does not reference mental health avoids this problem and was seen as less alienating, allowing for wider outreach to those who may not identify as having a mental health difficulty or who have symptoms that are not typically associated with mental health - such as problematic drinking, aggression and somatic symptoms.

"well-being sort of seems to 'ah it feels like I'm going to another session and I'm going to get lectured' and it's just a word I've heard a lot, it's an empty wishy-washy word [i.e. well-being]" – Participant 7, Group 2.

"you know if you're struggling with depression and what not as a man, let's be real are you going to go

to this workshop talking about men's mental health? Probably not" – Participant 1, Group 2.

Similarly, providing an incentive or clear short-term benefit would help tip this cost-benefit analysis more favourably.

"So, I feel like if you have a side benefit to going to a workshop like that, that might be really cool" – Participant 5, Group 3.

"Something similar to this with some snacks, like with some food or something kind of... an incentive to come" – Participant 6, Group 1.

Other recommendations included promoting interventions through student networks or clubs, pre-existing bodies within the university and face-to-face advertising, as opposed to university wide e-mails and posters, as it was considered more engaging resulting in potentially higher levels of attendance.

"Getting societies involved, now I'm thinking about it, is a really really good idea ' cause you catch so many people like that, you catch the people at events, you catch a lot of different groups of people by getting societies involved" – Participant 5, Group 3.

"Yeah well, human contact, like 'hey dude it's actually quite cool come along' and then you are much more inclined to go instead of seeing a poster" – Participant 5, Group 3.

Finally, participants felt delivering mental health initiatives at the beginning of an academic year during orientation or 'freshers' week could elicit higher engagement. During this period, students have more time available to engage with extra-curricular activities and are more motivated to participate.

"for freshers you just say 'okay, now I have time' you want to do stuff, you feel like you've got an obligation to actually do stuff, maybe like 3 weeks afterwards you're like I don't care anymore but at the start you want to do something, you want to be informed, and maybe that's the best place to get to people so when they're still motivated" – Participant 2, Group 3.

In addition to this, delivering mental health initiatives during 'critical' or 'darker' months was also considered to be a good idea. Participants thought running interventions around exams and before the Christmas/winter break would be more appealing and relevant to male students.

"then there should be like in these 'dark months' before exams" – Participant 4, Group 3.

"you introduce sessions maybe before Christmas and then before exams" – Participant 4, Group 3.

This theme captures key strategies which might help attract male students to attend mental health initiatives, and more specifically seek help. Labelling the intervention as something other than mental health, providing a short-term incentive, advertising via pre-existing bodies and delivering initiatives during orientation and before exams were the most widely discussed strategies.

Overall, these five themes provide insight into how male students might think and how to better engage male students with mental health initiatives, possibly resulting in more effective and positive changes to psychological help-seeking.

Discussion

These focus groups identify five themes relating to: protecting male vulnerability, providing a masculine narrative of help-seeking, differences over intervention format, difficulty knowing when and how to seek help and strategies to sensitively engage male students.

Engaging with mental health services was reported as threatening and intimidating for male students, which led to apprehension and reluctance to seek support. This supports previous findings, which suggest men and male students require more trusting relationships, assurance of confidentiality and good rapport when managing mental health difficulties [44–46]. The need for trust, confidentiality and good rapport may be due to components of stigma, characterised as one's attitudes and misconceptions of mental health and those with a mental health condition [47, 48]. Stigmatising beliefs negatively impact help-seeking behaviours and attitudes which can account for the reluctance and apprehension experienced by the participants in this study [49–51]. Indeed, men often have greater stigmatising views of mental health compared to women [49, 52, 53]. By protecting the vulnerability male students experience with seeking help, it is likely to reduce the anticipated or experienced stigma. For example, building trust and emphasising confidentially can help dispel fears of being judged or personal information being shared outside the therapeutic setting. Along the same lines, providing social support within interventions may also reduce the emotional intensity and subsequent 'threat-level' of engaging.

Social support can help encourage one to seek help, as being supported and validated by others helps to reduce one's internalised stigma [54, 55]. Men often prefer group work [30] and have a greater propensity to seek help when there is positive social encouragement to do so [46]. Furthermore, male-only spaces that are gender-sensitive may help to validate men's mental health concerns and guard against negative perceptions of help-seeking [56].

Participants discussed the notion of patriarchy, whereby the current world is seen as privileging, empowering and advantageous for men. In efforts to address this, society minimises male success/inequalities and magnifies female success/inequalities [57]. Subsequently, male students may discredit, invalidate or delegitimise their own concerns surrounding mental health and seeking professional support due to feelings of lack of entitlement, anticipated criticism or disapproval. These feelings may be heightened in the presence of female students, indicating a need for a male only-space.

The second theme related to seeking help which was characterised as dramatic, weak, less responsible, feminine, incompetent and less independent. Such stigmatising perceptions may contribute to greater self-criticism or self-stigma as these contradict traditional masculine stereotypes of strength, responsibility, self-sufficiency and control [58]. Indeed, evidence highlights that men are more likely to internalise stigmatising views held by the general public and that self-stigma mediates the relationship between masculine norms and help-seeking attitudes [15, 19, 50]. In the present study, a cost-benefit analysis emerged weighing up the advantages and disadvantages of seeking help in the context of a potential threat to one's masculinity. Conversely, some students articulated help-seeking to be consistent with traditional masculine stereotypes. Framing help-seeking as a sign of strength, a display of responsibility or an act of self-growth could lead to more positive discourses surrounding mental health help-seeking and reduce the stigma associated with engaging. Indeed, this supports previous findings demonstrating male students who re-define help-seeking as a sign of strength adopt more positive help-seeking behaviours [19, 21].

Men who do seek help may feel inadequate or deviant from prescribed male norms [59]. Findings from these focus groups indicated that by normalising help-seeking and re-framing it to fit better within positive masculine norms, there is potential to improve service engagement, possibly through the reduction in self-stigma [16, 60]. Adjusting therapeutic environments to be male-specific, safe and male-friendly whilst adopting 'male-positive' values can assist with normalising help-seeking and reduce the stigma associated with seeking help [61]. Another way to achieve this is to incorporate male role-models into future work. This approach is often used within male help-seeking interventions [62], where evidence supports the use of celebrities to teach people about mental illness and is an effective strategy for reducing mental health stigma [63].

Although much of the current findings may align with previous literature regarding stigma and masculine norms, male students experience a broad range of barriers where factors such as stigma are not always the biggest obstacle [60]. The third theme reflected key differences amongst the participants. Consistently throughout, half the participants preferred an informal and fun setting for an intervention as this would be more interesting and enticing. Previously, the use of humour and funny mental health campaigns have been shown to increase awareness of mental health and promote greater interest in counselling services [64]. Furthermore, lay language and humour provides relational styles that are more familiar to men [65]. Indeed, this may help to explain why previous, more formal, interventions have struggled to engage men. In contrast, other participants expressed a preference for a formal setting. This was to help validate the significance of men's mental health and allow for mental health concerns to be discussed in a safe and serious setting, similar to that of traditional therapies.

Another difference focused on the duration of the intervention. Some participants suggested shorter interventions may be preferable as they require less commitment. This is corroborated by other discourses identified from these focus groups, where many of the students appear to undergo a cost-benefit analysis when deciding whether to seek help. In this instance, a brief intervention reduces the associated costs of engaging with support. Conversely, those expressing the need for a serious and formal setting were of the view that a prolonged and frequent intervention was required, due to the pervasiveness of mental health difficulties. One way of reconciling these discrepancies would be to blend both approaches, as this may appeal to more male students [61, 66]. Alternatively, a 'one-size-fits-all' approach is unlikely to solve the current issues and a variety of different intervention formats could be assessed to see which is more appropriate for male students. Certainly, the development of brief and informal interventions requires testing, as this approach is not currently provided by traditional mental health services.

The fourth theme captured the difficulties male students have with identifying mental health symptoms and knowing whether and when it is appropriate to seek support. Male students appear to have greater difficulty in identifying mental health symptoms compared to female students [67, 68]. Improving mental health literacy is not a novel finding and has been a key target area for

previous student mental health interventions [69–71]. The rationale underpinning mental health literacy programmes serves to target mental health knowledge by improving one's ability to recognise mental health symptoms, have sufficient knowledge of treatment, and appropriate self-help strategies to facilitate help-seeking [72]. Similarly, mental health literacy interventions and campaigns can assist with improving mental health awareness whilst reducing stigmatising perceptions of mental health [73, 74]. Positive improvements in both these domains can elicit greater help-seeking. The current findings extend this rationale further by highlighting the difficulty male students in particular have with relating symptoms to seeking support. To overcome this, participants recommended providing more concrete means to self-evaluate their symptoms, such as checklists and group discussions. Improving symptom knowledge and providing more specific clinical thresholds can help facilitate earlier detection and intervention of mental health difficulties.

Likewise, many students were unsure about how to access mental health support. Indeed, positive changes to help-seeking have been seen when services are signposted [62]. Furthermore, male students were uncertain about what actually happened during therapy. This confirms previous research, whereby men often fail to understand various treatment options (particularly psychological therapies) and are unaware of the positive elements of help-seeking and how it relates to recovery [75]. It is clear from these findings that male students require information about how treatment works, it's content and duration and what progress may look like. Additional barriers students mentioned when seeking support included the logistical and structural barriers to services. Although dependent on funding, services should seek to make self-referrals less cumbersome and increase the availability of support staff to reduce waiting times for all students.

Finally, the fifth theme highlighted another issue when promoting mental health initiatives, as participants reported labels of 'mental health' or 'well-being' should be avoided as they could discourage attendance. These labels can be alienating and are perceived as being less benign than terms not related to mental health and they are likely to elicit stigmatising beliefs and negative perceptions of mental health. Men often reject services that use 'psychiatric' or 'diagnostic' frameworks that seek to label emotional distress as a mental illness [76]. Avoiding a name that emphasises mental health could also help to engage male students who do not identify as having a formal mental health diagnosis but may be experiencing distress. Providing a secondary incentive was also recommended to help shift perceptions of help-seeking towards being a more positive and worth-while activity.

These focus groups also advised promoting mental health initiatives through pre-existing social networks such as university societies. This is a preferred method of communication for young adult males (18–25 years), as they are more likely to seek in-person mental health services when encouraged by their family or partner, whilst peer support increases in-person mental health service use after adolescence [77].

Lastly, delivering mental health initiatives during university orientation week(s) and preceding exam periods was recommended. Previous research supports this, as lack of time is a frequent barrier students face when engaging with mental health support and thus it may be more acceptable to position mental health initiatives when students have more time resources available or within close proximity such as student unions and halls of residences [78–80]. Alternatively, it was proposed that mental health initiatives should be delivered during exam periods, as they can cause or contribute to higher levels of emotional distress [81]. Although engaging before exams would be more time-costly, mental health support was perceived as having a greater benefit at this time. Mental health initiatives for male students should be positioned when it is most likely to engage them, particularly at the beginning of university (i.e. orientation week/freshers) and during exam periods.

Overall, it is hoped that these findings can be used alongside other recommendations [56, 62, 65] to design more effective mental health interventions for male students to improve both their uptake and engagement.

Strengths & Limitations

Valuable insights have been gained from male students regarding the design and development of mental health initiatives for this population. A strength of this investigation included the use of two independent reviewers throughout thematic coding to reach consensus. Additionally, this investigation consulted the YPMHAG resulting in a more tailored and appropriate topic guide for this study. This may help explain why retention was relatively high (75%), with only 16 students (25%) losing contact after approaching the research team.

Furthermore, the current investigation purposely included participants who have (50%) and have not (42%) previously sought help for mental health. In turn, this enabled a broader overview of experiences male students may face when seeking help.

This study is not without limitations. Although the identified themes were sent to participants for data validation, none of them responded, which makes it difficult to state with certainty that participants felt the finalised themes capture their responses. Additionally, the current investigation was conducted by a novice researcher with each focus group facilitated by male

students. This may have methodological implications, particularly the possibility of influencing the focus group discussions with their own biases. However, the researcher took part in several training courses prior to the study, regarding how to facilitate focus groups and conduct thematic analysis. Additionally, the research was supervised by experienced qualitative researchers throughout all stages of the study, which should have mitigated this risk.

Lastly, thematic analysis was chosen to identify the key patterns and themes that emerge from the data [34]. As part of this process, 'data reduction' occurs to condense and synthesise the most prominent ideas within the data [82]. This could mean more nuanced ideas and recommendations are lost due to not aligning with a broader, reoccurring theme. This may be of importance for different sub-groups of male students, as they may be faced with subtle differences when seeking help for mental health difficulties.

Reflexivity

It is important to acknowledge two key aspects that may have influenced the results presented in this paper. In this study, only male students were recruited and the researchers facilitating the focus groups (ISO and VT) were both male. This may have allowed male students to feel more comfortable when talking about mental health help-seeking. This was particularly apparent when students discussed masculine stereotypes and the notion that having a male only space was of importance. Similarly, both the focus group facilitators were students currently studying at the same institution as the participants. The researchers kept a reflexive diary and felt they had greater contextual understanding of the discourses provided, allowing for greater rapport and freedom for participants to express their thoughts. It is possible that as a result, the current focus groups provide a more detailed and accurate account of male students' experience of help-seeking.

Conclusion

Student mental health and poor male help-seeking is a major concern and providing the right response is currently being debated. The current investigation provides a detailed account of suggestions from current students about how to improve mental health initiatives for male students. It is hoped that the themes of protecting male vulnerability, providing a masculine narrative of help-seeking, differences over intervention format, difficulty knowing when and how to seek help and strategies to sensitively engage male students can be considered and implemented when designing future mental health interventions that seek to improve male students' overall well-being or willingness to seek psychological support.

Supplementary information

Supplementary information accompanies this paper at https://doi.org/10.1186/s12889-020-09269-1.

Additional file 1 Supplementary Material 1. Focus Group Topic Guide (including supportive questions)

Abbreviations

KCL: King's College London; UK: United Kingdom; YPMHAG: Young Person's mental health advisory group

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Authors' contributions

IS-O, JSLB and EG contributed to formulating the research question and writing up the report. IS-O developed the research topic guide, completed the ethics application and presented to the YPMHAG. IS-O and VT recruited participants, facilitated the focus groups, transcribed the focus groups, conducted thematic analysis and coded the data. JSLB and EG provided supervision and assistance for the interpretation of the focus group data. JSLB provided expert guidance on mental health help-seeking and access to care by men. EG provided expert guidance on conducting and analysing focus groups. All authors interpreted the results, read, and approved the manuscript.

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Availability of data and materials

As this is a qualitative design, a data set is not available. The transcripts analysed in this study are not publicly available due to participants not consenting to have this information shared with a third party.

Ethics approval and consent to participate

Ethical approval was granted by the Psychiatry, Nursing and Midwifery Research Ethics Committee from King's College London, reference number LRS-18/19–13460. Informed written consent was sought and obtained from all participants.

Consent for publication

No individual persons' data is included within the manuscript except in the form of anonymised quotes from the focus groups. All participants signed and completed a consent form stating, "the information I have submitted will be anonymised as a part of a PhD thesis, conference presentation and a publishable report".

Competing interests

The current study does not have any competing interests.

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References

1. Kessler RC, Angermeyer M, Anthony JC, De Graff RO, Demyttenaere K, Gasquet I, De Girolamo G, Gluzman S, Gureje OY, Haro JM, Kawakami N, et al. Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's world mental health survey initiative. World Psychiatry. 2007;6:168–76.
2. Jones PB. Adult mental health disorders and their age of onset. Br J Psychiatry. 2013;202:s5–s10.
3. Department of Education. New package of measures announced on student mental health. 2018 https://www.gov.uk/government/news/new-package-of-measures-announced-on-student-mental-health. Accessed 07 August 2018.
4. Brown P. The invisible problem? Improving students' mental health. 2016. https://www.hepi.ac.uk/2016/09/22/3592/. Acessed 11 Nov 2019.
5. Thorley C, Not by degrees: Improving student mental health in the UK's universities. 2017. https://www.ippr.org/research/publications/not-by-degrees. Acessed 07 Aug 2018.
6. Beiter R, Nash R, McCrady M, Rhoades D, Linscomb M, Clarahan M, Sammut S. The prevalence and correlates of depression, anxiety and stress in a sample of college students. J Affect Disord. 2015;173:90–6.
7. Mortier P, Cuijpers P, Kiekens G, Auerbach RP, Demyttenaere K, Green JG, Kessler RC, Nock MK, Bruffaerts R. The prevelance of suicidal thoughts and behaviours among college students: a meta-analysis. Psychol Med. 2018;48:554–65.
8. Dennahardt AA, Murphy JG. Prevention and treatment of college student drug use: a review of the literature. Addict Behav. 2010;38:2607–18.
9. Wicki M, Kuntsche E, Gmel G. Drinking at European universities? A review of students' alcohol use. Addict Behav. 2010;35:913–24.
10. Watkins DC, Hunt JB, Eisenberg D. Increased demand for mental health services on college campuses: Perspectives from administrators. Qual Soc Work. 2012;11:319–37.
11. Broglia E, Millings A, Barkham M. Challenges to addressing student mental health in embedded counselling services: a survey of UK higher and further education institutions. Br J Guid Counc. 2018;46:441–55.
12. Eisenberg D, Golberstein E, Hunt JB. Mental health and academic success in college. B E J Econom Anal Policy. 2009;9(1):1–37.
13. Hjorth CF, Bilgrav L, Frandsen LS, Overgaard C, Torp-Pedersen C, Nielsen B, Bøggild H. Mental health and school dropout across educational levels and genders: a 4.8-year follow-up study. BMC Public Health. 2016;16:976.
14. Eisenberg D, Golberstein E, Gollust SE. Help-seeking and access to mental health Care in a Univeristy Student Population. Med Care. 2007;45:594–601.
15. Eisenberg D, Downs MF, Holberstein E, Zivin K. Stigma and help seeking for mental health among college students. Med Care Res Rev. 2009;66:522–41.
16. Gulliver A, Griffiths KM, Christensen H. Percieved barriers and facilitators to mental health help-seeking in young people: a systematic review. BMC Psychiatry. 2010;10:–113.
17. Nam SK, Choi SI, Lee JH, Kim AR, Lee SM. Psychological factors in college student' attitudes toward seeking professional psychological help: a meta-analysis. Prof Psychol Res Pr. 2013;44:–37.
18. Sheu HB, Sedkacek WH. An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. Meas Eval Couns Dev. 2004;37:130–43.
19. Vogel DL, Heimerdinger-Edwards SR, Hammer JH, Hubbard A. "Boys don't cry": examination of the links between endorsement of masculine norms, self-stigma and help-seeking attitudes. J Couns Psychol. 2011;58:368–82.
20. Addis ME, Mahalik JR. Men, masculinity and the contexts of help seeking. Am Psychol. 2003;58:5–14.
21. Tang MO, Oliffe JL, Galdas PM, Phinney A, Han C. College men's depression-related help-seeking: a gender analysis. J Ment Health. 2014;23:219–24.
22. Davies J, McCrae BP, Frank J, Dochnahl A, Pickering T, Harrison B, Zakrzewski M, Wilson K. Identifying male college students' percieved health needs, barriers to seeking help, and recommendations to help men adopt healthier lifestyles. J Am Coll Heal. 2000;48:259–67.
23. Emslie C, Ridge D, Ziebland S, Hunt K. Men's accounts of depression: reconstructing or resisting hegemonic mascuilnity? Soc Sci Med. 2006;62:2246–57.
24. Chuick CD, Greenfield JM, Greenberg ST, Shepard SJ, Cochran SV, Haley JT. A qualitative investigation of depression in men. Psychol Men Masc. 2009;10:302–13.
25. Harper D, Thompson AR. Qualitative research methods in mental health and psychotherapy: a guide for students and practitioners. Chichester: John Wiley & Sons; 2011.
26. Rochlen AB, Hoyer WD. Marketing mental health to men: theoretical and practical considerations. J Clin Psychol. 2005;61:675–84.
27. Gill P, Stewart K, Treasure E, Chadwick B. Methods of data collection in qualitative research: interviews and focus groups. Br Dent J. 2008;204:291–5.
28. McLafferty I. Focus group interviews as a data collecting strategy. J Adv Nurs. 2004;48:187–94.
29. Pollard J. Early and effective intervention in male mental health. Perspect Public Health. 2016;136:337–8.
30. Cochran SV, Rabinowitz FE. Gender-sensitive recommendations for assessment and treatment of depression in men. Prof Psychol Res Pr. 2003;34:132–40.
31. Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. Americal J Theor Appl Stat. 2016;5:1–4.
32. Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N, Hoagwood K. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Adm Policy Ment Health. 2015;42:533–44.
33. Vaismoradi M, Turunen H, Bondas T. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. Nurs Health Sci. 2013;15:398–405.
34. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3:77–101.
35. National Institute of Health Research. Patient and public involvement in health and social care research: A handbook for researchers. 2014.
36. Francis JJ, Johnston M, Robertson C, Glidewell L, Entwistle V, Eccles MP, Grimshaw JM. What is an adequate sample size? Operationalising data saturation for theory-based interview studies. Psychol Health. 2009;25:1229–45.
37. Hennink MM, Kaiser BN, Weber MB. What influences saturation? Estimating sample sizes in focus group research. Qual Health Res. 2019;29:1483–96.
38. Hancock ME, Amankwaa L, Revell MA, Mueller D. Focus group data saturation: a new approach to data analysis. Qual Rep. 2016;21:2124–30.
39. Guest G, Namey E, McKenna K. How many focus groups are enough? Building an evidence base for nonprobability samples sizes. Field Methods. 2017;29:3–22.
40. Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. Qual Res Sport Exerc Health. 2019:1–6.
41. Vaismoradi M, Jones J, Turunen H, Snelgrove S. Theme development in qualitative content analysis and thematic analysis. J Nurs Edu Pract 2016;6:100–10.
42. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington: American Psychiatric Publishing; 2013.
43. World Health Organisation. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. Geneva: World Health Organisation. p. 1992.
44. Seidler ZE, Rice SM, Ogrodniczuk JZ, Oliffe JL, Dhillon HM. Engaging men in psychological treatment: a scoping review. Am J Mens Health. 2018;12:1882–900.
45. Gulliver A, Griffiths KM, Christensen H. Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. BMC Psychiatry. 2012;12:157.
46. Rickwood, Deane FP, Wilson CJ, Ciarrochi JV. Young people's help-seeking for mental health problems. Austalian J Adv Ment Health. 2005;4:218–51.
47. Corrigan PW, Watson AC. The paradox of self-stigma and mental illness. Clin Psychol. 2002;9:35–53.
48. Corrigan PW, Rafacz J, Rüsch N. Examining a progressive model of self-stigma and its impact on people with serious mental illness. Psychiatry Res. 2011;189:339–43.
49. Vogel DL, Bitman RL, Hammer JH, Wade NG. Is stigma internalized? The longitudinal impact of public stigma on self-stigma. J Couns Psychol. 2013;60:311–7.
50. Vogel DL, Wade NG, Hackler AH. Percieved public stigma and the willingness to seek counseling: the mediating roles of self-stigma and attitudes toward counseling. J Couns Psychol. 2007;54:40–50.

51. Nearchou FA, Bird N, Costello A, Duggan S, Gilroy J, Long R, McHugh L, Hennessy E. Personal and percieved public mental-health stigma as predictors of help-seeking intentions in adolescents. J Adolesc. 2018;66: 83–90.
52. Pedersen ER, Paves AP. Comparing percieved public stigma and personal stigma of mental health treatment seeking in a young adult sample. Psychiatry Res. 2014;219:143–50.
53. Topkaya N. Gender, self-stigma, and public stigma in predicting attitudes toward Pyschological help-seeking. Educ Sci Theory Pract. 2014;14:480–7.
54. Birtel MD, Wood L, Kempa NJ. Stigma and social support in substance abuse: implications for mental health and well-being. Psychiatry Res. 2017;252:1–8.
55. Lindsey MA, Joe S, Nebbitt V, et al. J Black Psychol. 2010;36:458–82.
56. Liddon L, Kingerlee R, Seager M, Barry JA. What are the factors that make a male-friendly therapy? In: Barry JA, Kingerlee R, Seager M, Sullivan L, editors. The Palgrave handbook of male psychology and mental health. Cham: Palgrave Macmillan; 2019. p. 671–94.
57. Seager M, Barry JA. Cognitive distoritions in thinking about gender issues: gamma bias and the gender distortion matrix. In: Barry JA, Kingerlee R, Seager M, Sullivan L, editors. The Palgrave handbook of male psychology and mental health. Cham: Macmillan; 2019. p. 87–104.
58. Seidler ZE, Dawes AJ, Rice SM, Oliffe JL, Dhillon HM. The role of masculinity in men's help-seeking for depression: a systematic review. Clin Psychol Rev. 2016;49:106–18.
59. Latalova K, Kamaradova D, Prasko J. Perspectives on percieved stigma and self-stigma in adult male patients with depression. Neuropsychiatr Dis Treat. 2014;10:1399–405.
60. Clement S, Schauman O, Graham R, Maggioni F, Evans-Lacko S, Bezborodovs N, Morgan C, Rüsch N, Brown JS, Thornicroft G. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. Psychol Med. 2015;45:11–27.
61. Robertson S, Bagnall A, Walker M. Evidence for a gender-based approach to mental health programmes: identifying the key considerations associated with "being male". Project Report. Movember Foundation; 2015.
62. Sagar-Ouriaghli I, Godfrey E, Bridge L, Meade L, Brown JS. Improving mental health service utilization among men: a systematic review and synthesis of behavior change techniques within interventions targeting help-seeking. Am J Mens Health. 2019;13:1–18.
63. Ferrari A. Using celebrities in abnormal psychology as teaching tools to decrease stigma and increase help seeking. Teach Psychol. 2016;43:329–33.
64. Erentzen C, Quinlan JA, Mar RA. Sometimes you need more than a wingman: masculinity, femininity, and the role of humor in men's mental health help-seeking campaigns. J Soc Clin Psychol. 2018;37:128–57.
65. American Psychological Association. APA guidelines for psychological practice with boys and men. 2018. http://www.apa.org/about/policy/psychological-practice-boys-men-guidelines.pdf. Acessed 11 Nov 2019.
66. Kierans C, Robertson S, Mair MD. Formal health services in informal settings: findings from the Preston Men's health project. J Mens Health Gend. 2007;4: 440–7.
67. Reavley NJ, McCann TV, Jorm AF. Mental health literacy in higher education students. Early Int Psychiatry. 2012;6:45–52.
68. Cotton SM, Wright A, Harris MG, Jorm AF, McGorry PD. Influence of gender on mental health literacy in young Australians. Aust N Z J Psychiatry. 2006; 40:790–6.
69. Sharp W, Hargrove DS, Johnson L, Deal WP. Mental health education: an evaluation of a classroom based strategy to modify help seeking for mental health problems. J Coll Stud Dev. 2006;47:419–38.
70. Kutcher S, Wei Y, Coniglio C. Mental health literacy: past, present and future. Can J Psychiatry. 2016;61:154–8.
71. Yamaguchi S, Mino Y, Uddin S. Strategies and future attempts to reduce stigmatization and increase awarenss of mental health problems among young people: a narrative review of educational interventions. Psychiatry Clin Neurosci. 2011;65:405–15.
72. Jorm AF. Mental health literacy: empowering the community to take action for better mental health. Am Psychol. 2012;67:231–43.
73. Evans-Lacko S, London J, Little K, Henderson C, Thornicroft G. Evaluation of a brief anti-stigma campaign in Cambridge: do short-term campaigns work? BMC Pubilc Health. 2010;10:339–45.
74. Rüsch N, Angermeyer MC, Corrigan PW. Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. Eur Psychiat. 2005;20: 529–39.
75. House J, Marasli P, Lister M, Brown JS. Male views on help-seeking for depression: a Q methodology study. Psychol Psychother. 2018;91: 117–40.
76. River J. Diverse and dynamic interactions: a model of suicidal men's help seeking as it relates to health services. Am J Mens Health. 2018;12:150–9.
77. Rickwood DJ, Mazzer KR, Telford NR. Social influences on seeking help from mental health services, in-person and online, during adolescence and young adulthood. BMC Psychiatry. 2015;15:40–9.
78. Ryan G, Marley I, Still M, Lyons Z, Hood S. Use of mental-health services by Australian medical students: a cross-sectional survey. Australas Psychiatry. 2017;25:407–10.
79. Eisenberg D, Speer N, Hunt JB. Attitudes and beliefs about treatment among college students with untreated mental health problems. Psychiatr Serv. 2012;63:711–3.
80. Eisenberg D, Golberstein E, Gollust SE. Help-seeking and access to mental health care in a university student population. Med Care. 2007; 45:594–601.
81. Bedwey D, Gabriel A. Examining perceptions of academic stress and its sources among university students: the perception of academic stress scale. Health Psychol Open. 2015;2:1–9.
82. Alhojailan MI. Thematic analysis: a critical review of its process and evaluation. West East J Soc Sci. 2012;1:39–47.

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Appendix 3.2: Ethical approval and study documents for qualitative Study

Ilyas Sagar-Ouriaghli

Research Ethics
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Telephone 020 7848 4020/4070/4077
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Ilyas Sagar-Ouriaghli

24 September 2018
Dear Ilyas,
LRS-17/18-7443 - Can we encourage male students to seek mental health help?

Thank you for submitting your application for the above project. I am pleased to inform you that your application has now be approved with the provisos indicated at the end of this letter. All changes must be made before data collection commences. The Committee does not need to see evidence of these changes, however supervisors are responsible for ensuring that students implement any requested changes before data collection commences.

Ethical approval has been granted for a period of **three years** from 24 September 2018 You will not be sent a reminder when your approval has lapsed and if you require an extension you should complete a modification request, details of which can be found here:

https://internal.kcl.ac.uk/innovation/research/ethics/applications/modifications.aspx

Please ensure that you follow the guidelines for good research practice as laid out in UKRIO's Code of Practice for research:
https://internal.kcl.ac.uk/innovation/research/ethics/contact.aspx

Any unforeseen ethical problems arising during the course of the project should be reported to the panel Chair, via the Research Ethics Office. Please note that we may, for the purposes of audit, contact you to ascertain the status of your research.
We wish you every success with your research.
Yours sincerely,

Mr James Patterson

Senior Research Ethics Officer

For and on behalf of:

PNM Research Ethics Panel

Major Issues (will require substantial consideration by the applicant before approval can be granted)
Minor Issues related to application (the reviewer should identify the relevant section number before each comment)

1. Section C2: The Panel assumes that it will be incumbent upon those interested in taking part to contact you.

Minor Issues related to recruitment documents

2. Consent Form: Insert a tick-box statement enabling focus group participants to acknowledge that the absolute confidentiality of their contributions cannot be guaranteed. This is due to the interactive and interdependent nature of focus group participation.

Advice and Comments (do not have to be adhered to, but may help to improve the research)

Participant Information Sheet (Focus Groups).

Participant Information Sheet:

What are men's views of seeking support for mental health and how can we improve it?

Invitation

I would like to invite you to participate in this investigation which forms part of a PhD research project. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please get in touch if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

The purpose of the study is to firstly understand the barriers men may face when seeking support for psychological difficulties, such as stress, low and/or anxious mood. Furthermore, the current study aims to help us design an intervention that may helpful to men in accessing services. Please note that this study does not aim to capture your personal history/current status of your mental health and therefore should only disclose personal information if you feel comfortable to do so. Additionally, please refrain from disclosing any illegal activity (e.g. substance misuse) as this is beyond the scope of the study.

Why have I been invited?

You are being invited to participate in this study because you are currently a student at King's College London (KCL). The current project aims to capture the views and opinions of men in general, and therefore any male student at KCL is invited to take part.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way. Once you have read the information sheet, please contact us if you have any questions that will help you decide whether to take part. If you do decide to take part, we will ask you to sign a consent form and you will be given a copy of this consent form to keep.

What will happen if I take part?

If you choose to take part in the study you will be asked to firstly complete a brief questionnaire capturing some basic descriptive details about yourself before taking part in a group discussion regarding your views and opinions of mental health for men, why you think men are less likely to engage in services and what needs to be developed to help overcome these issues. You will be asked to attend one focus group session lasting approximately 90 minutes. As part of participation, the group discussion will be recorded on an audio device with your consent as this enables us to identify the key themes and opinions that are raised across the course of this study. This project will **not** be asking you about any direct or indirect experiences you have had with mental health, nor will it ask you to disclose any personal information regarding this. As mentioned before, there will be 5 main questions about the barriers to seeking help and ways to overcome these identified barriers. The main 5 questions will be:

1. What reason may explain why men don’t seek help for mental health?
2. What information would help/encourage you to seek mental health help if you had a problem?
3. Is there anything that should not be included or would put you off?
4. If we were to offer something, how would you like it to be?
5. What is a good way to market the ‘intervention’ to men?

Honorarium

You shall receive a £20 Amazon Voucher as a way to say thank-you for giving up your time to take part in this study.

What are the possible risks of taking part?

There are no anticipated risks associated with participation in this study. However, participants may feel upset or uncomfortable talking about particular barriers to mental health. Given that the research will be conducted by experienced researchers, this will be sensitively handled. If anyone is significantly upset during the course of the investigation, they will be supported, and information regarding continued additional support will be provided both before and after the study.

What are the possible benefits of taking part?

There are no direct benefits from taking part in this study but you may find it helpful to think about your own preferences should you have a mental health problem. However, the information collected will help to enhance our understanding of why men are more reluctant to seek help, as well as providing important information on how men would like future services to be designed to overcome these issues.

What if I change my mind about taking part?

You are free withdraw at any point of the study, without having to give a reason. Withdrawing from the study will not affect you in any way. You are able to withdraw your data from the study up until 2 weeks after the initial data collection period, after which withdrawal of your data will no longer be possible due to data being anonymised. If you choose to withdraw from the study your rights to access, change or move your information are limited, as we need to preserve the audio recordings of the entire groups in order for the research to be reliable and accurate. If you withdraw from the study, the information captured on the audio recording will remain, however will not be used for analytical purposes. To safeguard your rights, we will use the minimum personally-identifiable information possible.

Data handling and confidentiality

Your data will be processed in accordance with the General Data Protection Regulation 2016 (GDPR). Subsequently, audio recordings of the group discussions will be stored within a locked filing cabinet contained within an office with restricted office access. All information will be kept confidential and only shared within the research study team, exceptions may apply if any information is disclosed regarding illegal activity or risk of harm to yourself or others. The group discussions shall be written up in a transcript, whereby all identifiable information such as your name (a pseudo-name will be given) will be removed. Data will be kept up to 3 years after collection, and only shared within the research team and will only be shared with a third party if you have consented to do so.

Data protection statement

The data controller for this project will be King's College London (KCL). The University will process your personal data for the purpose of the research outlined above. The legal basis for processing your personal data for research purposes under GDPR is a 'task in the public interest'. You can provide your consent for the use of your personal data in this study by completing the consent form that has been provided to you.

You have the right to access information held about you. Your right of access can be exercised in accordance with the General Data Protection Regulation (GDPR). You also have other rights including rights of correction, erasure, objection, and data portability. Questions, comments and requests about your personal data can also be sent to the King's College London Data Protection Officer Mr Albert Chan info-compliance@kcl.ac.uk. If you wish to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk.

How is the project being funded?

This study is being funded by the National Institute of Health Research Maudsley Biomedical Research Centre. Further information can be seen here;
https://www.nihr.ac.uk/about-us/how-we-are-managed/our-structure/infrastructure/biomedical-research-centres.html

What will happen to the results of the study?

The results of the study will be summarised in a PhD thesis as well as prepared for publication that will aim to summarise the opinions and views men have for improving male help-seeking. Reports will not include data that is identifiable. Published findings will be available online and through various electronic journal databases, which are readily accessible for KCL students.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Ilyas Sagar-Ouriaghli
Email: ilyas.sagar-ouriaghli@kcl.ac.uk
Research Mobile/Whattsap: 07502183157

NIHR Maudsley Biomedical Research Centre PhD Student
Department of Psychology
King's College London
Addiction Sciences Building – 4th Floor, 4.04
1-4 Windsor Walk, Denmark Hill, London
SE5 8BB

What if I have further questions, or if something goes wrong?

If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact King's College London using the details below for further advice and information:

Dr June Brown
Senior Lecturer in Clinical Psychology
Lead for Student Mental Health Research, KCL Student Services
Psychology Department (PO77)
Institute of Psychiatry, Psychology and Neuroscience
De Crespigny Park
London SE5 8AF

Tel: 020-7848-5004

Thank you for reading this information sheet and for considering taking part in this research.

Participant Consent Form (Focus Groups).

Participant Consent Form:

What are men's views of seeking support for mental health and how can we improve it?

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

	Please initial box
1. I confirm that I understand that by **initialling** each box I am consenting to this element of the study. I understand that it will be assumed that un-initialled boxes mean that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element I may be deemed ineligible for the study.	☐
2. I confirm that I have read and understood the information sheet dated **[Version 1, 26.09.18]** for the above study. I have had the opportunity to consider the information and asked questions which have been answered to my satisfaction.	☐
3. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason, up until 2 weeks after data collection.	☐
4. I consent to the processing of my personal information for the purposes explained to me in the Information Sheet. I understand that such information will be handled in accordance with the terms of the General Data Protection Regulation.	☐
5. I understand that my information may be subject to review by responsible individuals from the College for monitoring and audit purposes.	☐

6. I understand that confidentiality and anonymity will be maintained, and it will not be possible to identify me in any research outputs. ☐

7. I acknowledge that the absolute confidentiality of my contributions cannot be guaranteed due to the interactive nature of a focus group. ☐

8. I consent to my data being shared with third party transcription services which are within the EU, as outlined in the participant information sheet. ☐

9. I agree to be contacted in the future by King's College London researchers who would like to invite me to participate in follow up studies to this project, or in future studies of a similar nature. ☐

10. I agree that the research team may use my data for future research and understand that any such use of identifiable data would be reviewed and approved by a research ethics committee. (In such cases, as with this project, data would not be identifiable in any report). ☐

11. I understand that the information I have submitted will be anonymised as a part of a PhD thesis and a publishable report. ☐

12. I consent to my interview being audio recorded. ☐

13. I agree to maintain the confidentiality of focus group discussions. ☐

______________________	________________	____________________
Name of Participant	**Date**	**Signature**
______________________	________________	____________________
Name of Researcher	**Date**	**Signature**

Participant demographic questionnaire (Focus Groups).

Demographic Questionnaire

What are men's views of seeking support for mental health and how can we improve it?

Thank you for taking part in the current focus groups investigation regarding psychological help-seeking for men. Please fill out the following questions in the spaces provided, write or tick the most appropriate option(s).

1. Age: __________________
2. Which gender to you identify with?:
   - ☐ Male
   - ☐ Female
   - ☐ Other (please specify) __________________
3. How would you describe your ethnicity?:
   - ☐ White British
   - ☐ Any other White background
   - ☐ Black African
   - ☐ Black Caribbean
   - ☐ Mixed White & Black African
   - ☐ Mixed White & Black Caribbean
   - ☐ Any other Black/African/Caribbean background
   - ☐ Indian
   - ☐ Pakistani
   - ☐ Bangladeshi
   - ☐ Chinese
   - ☐ Any other Asian background
   - ☐ Arab
   - ☐ Other (please specify) ___________________________
4. What are you currently studying? ____________________
5. What level of study are you completing?

☐ Foundation
☐ Undergraduate
☐ Postgraduate (master's or PhD)
☐ Other (please specify) ________________

6. Have you sought help from professional services for your mental health before? (e.g. Counselling Services, University well-being services, General Practitioner, A&E)
   ☐ Yes
   ☐ No

7. How did you hear about the current study?
   ☐ Facebook (if so, on which page?) ____________________
   ☐ King's Circular (This is the weekly e-mail sent to all students)
   ☐ Poster around campus
   ☐ KCL Wellbeing week newsletter
   ☐ From a friend/another student/member of staff
   ☐ Other (please specify) ________________

Focus Group Poster.

£20 AMAZON VOUCHER FOR EVERYONE WHO TAKES PART

ALL MALE KCL STUDENTS CAN TAKE PART

A ONE-OFF 90 MINUTE GROUP DISCUSSION

A PROJECT FUNDED BY THE NIHR

GET IN TOUCH FOR MORE INFO OR TO TAKE PART

RESEARCH OPPORTUNITY:

IMPROVING MEN'S HELP-SEEKING

This is a research project to understand the barriers male students may face when seeking support for stress and low- and/or anxious mood. Additionally, we want to gain your thoughts on how to overcome these barriers and what you would like to see designed. This project will be a 90-minute group discussion about your views. As a way to say thank you, everyone who takes part will receive a **£20 Amazon voucher**.

This project is funded by the National Institute of Health Research (NIHR) and will help to develop an intervention that is delivered to KCL male students in the future.

Contact Details

Email: ilyas.sagar-ouriaghli@kcl.ac.uk
Mobile/WhatsApp: 07502183157

Men's Help-Seeking Poster Version 1 26.09.18
Ethical Clearance Reference Number: LRS-17/18/7443

Supportive services document (Focus Groups).

Supportive Services

KING'S COUNSELLING SERVICE

What? Counselling offers a safe, confidential and supportive space to help you explore your problems and to allow you to share and gain insight into your feelings, thoughts and behaviour. Anything that is worrying you and disrupting your normal work, study or personal life can be discussed in counselling.

When & Where? You can contact the main Counselling Service at the Strand Campus 9am – 5pm every week day throughout the year apart from when the College is closed.

- Phone: 020 7848 7017
- Email: counselling@kcl.ac.uk
- In person: speak to an administrator in Student Services enquiries.
- Address: -1 Macadam Building
- https://www.kcl.ac.uk/campuslife/services/counselling/index.aspx

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TAKE TIME OUT

What? King's Wellbeing's annual Take Time Out campaign will offer wellbeing-promoting activities and tips for positive lifestyle change for exam success and beyond.

When & Where? Take Time Out will be at the following campuses at the times and locations below and there will be other events in weeks before:

Week One

Monday 30th April to Friday 4th May at **Guy's Quad**

Wednesday 2nd May & Thursday 3rd May at **IoPPN, Denmark Hill campus**

Week Two

Tuesday 8th May to Friday 11th May at **Maughan Library**

Wednesday 9th May & Thursday 10th May at **FWB, Waterloo campus**

https://www.kcl.ac.uk/campuslife/services/health-new/wellbeing/taketimeout/taketimeout.aspx

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NIGHT LINE

What? Nightline is a listening support and information helpline run by students for students; it offers non-judgmental, confidential listening support whatever the caller's situation.

When & Where? The helpline is open every night during term time (between 6pm and 8am).

- Phone: 0207 631 0101
- Email: listening@nightline.org.uk
- Skype chat: nightline.chat
- Skype phone: londonnightline
- Text: 07717 989 900
- http://nightline.org.uk/

BIG WHITE WALL

What? Big White Wall is a safe and anonymous space online for you to share what's troubling you. You can choose an anonymous username, so you may seek support confidentially.

When & Where? You can access support online, 24 hours a day, 7 days a week.

- https://www.kcl.ac.uk/campuslife/services/counselling/Online-resources/Big-White-Wall.aspx

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SAMARITANS

What? Samaritans offer a safe place for you to talk any time you like, in your own way – about whatever's getting to you – you don't have to be suicidal.

When & Where? Usual hours open to receive callers at the door: 9:00am–9:00pm every day, no appointment necessary. You can also contact Samaritans online, via email, or on the phone.

- Phone (UK Freecall): 116 123
- Phone (Central London Branch): 020 7734 2800

- Email: jo@samaritans.org (UK and ROI)
- In person: 46 Marshall Street London W1F 9BF
- https://www.samaritans.org/branches/central-london-samaritans

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A&E CRISIS CARE

What? If you are feeling very unsafe, you can go to the nearest Accident & Emergency Department. The following hospitals are in London and have 24-hour casualty services.

When & Where?

1. ST. THOMAS'
    - Address: Westminster Bridge Road, London, SE1 7EH
    - Phone: 020 7188 7188
    - https://www.guysandstthomas.nhs.uk/our-services/emergency-care/accident-and-emergency.aspx
2. KING'S COLLEGE HOSPITAL
    - Address: Denmark Hill, Brixton, London SE5 9RS
    - Phone:020 3299 9000
    - https://www.kch.nhs.uk/patientsvisitors/patients/emergency-patients
3. ROYAL FREE HAMPSTEAD
    - Address: Pond St, Hampstead, London NW3 2QG
    - Phone: 020 7794 0500
    - https://www.royalfree.nhs.uk/services/services-a-z/emergency-department/

Appendix 3.3: Focus group topic guide (including supportive questions)

Q1) Why don’t student’s seek help for mental health?

Q2) Why don’t male students seek help for mental health?

2a) What would your thoughts/feelings be about opening/asking for help?

2b) If you were finding it hard would you know where to go/who to ask for help?

2c) How able are you at working out how you’re feeling?

2d) Are there any social/cultural pressures that would discourage you?

Q3) What would encourage you to seek mental health help if you had a problem?

3a) Would celebrities or other men with difficulties change your perception?

3b) Would you like to receive information about diagnosis and treatment?

3c) Would you like to know how to recognise specific symptoms?

3d) Would you prefer to complete tasks and learn new skills (as opposed to talking)?

3c) Would you like to receive information about where to access support?

3d) Would it help if help-seeking was explained/reframed as a sign of strength?

Q4) Is there anything that should not be included/would put you off?

Q5) If we were to offer something, how would you like it to be?

5a) The possibility of male only spaces/ men only groups.

5b) Would you prefer a brochure or a group workshop?

5c) If a workshop, how many sessions, how long for?

5d) Would you prefer to take part in problem solving activities?

Q6) What is a good way to market the intervention to men?

6a) Should we make it clear it’s about mental health or not?

6b) What is the best way to inform people about this intervention?

6c) What should the intervention be called?

6d) Where should this take place?

6e) Does there need to be incentives for coming, if so what?

6f) Should we use social media? If so, which platform, level of engagement?

Q7) Is there anything else you would like to add?

Appendix 3.4: Sample transcript from focus groups.

41:27 P7G2: I think if you either make compulsory sessions or something so attractive that so many people go, that err that might make somebody come. I think if you make people come regularly to these workshops and then they're like 'now I'm here I might as well talk about that supposedly minor thing that it's just you know I've been stressed with work', that might make people realise what they think is a generic, everyone faces this sort of issue thing, to talk about what it is. Maybe, or compulsory sessions. You have to integrate it to people's lives because this is separate. But I do dentistry so if I get an e-mail, or if I get during a lecture at the end I get somebody, or a representative to speak to us I think, you need to get into people's lives. So if I do dentistry or whatever campus you're on you need to get to them, they're not going to come to you. And advertise it that way or just remind people that 'look we're here' or do events there, the events called - I did this because, this is like two stops away so this is close, then I think you'll be able to get people to come more often, and if you can get people to come more often and if you can get them to come more often, they'll open up more about the supposedly small things.

42:25 P5G2: And if you open up more people will come, and some people will see that it's a good thing and they can join in and it kind of reinforces itself.

42:33 Facilitator 1: So it's more about we have a focus on something else, then as a by-product people are talking to each other.

42:40 P7G2: Yes.

42:40 P5G2: Yeah.

42:42 Facilitator 1: Anyone else thing that it should be the other way around? Where we, we could be wrap it up as like a, I don't know a self-growth or a study skills workshop or erm life skills workshop and then within that we give you content on a small part of mental health, how to contact support, where you can access support, how to like and just from that kind of angle?

43:02 P9G2 I think on notes to contents, maybe should include something that sort of telling people what actual counselling or psychotherapy is like, because you know Hollywood isn't doing a good job. Yeah so, I think people should know like what actual counselling and therapy are like. You know it's confidential and they're actually more structured and stuff. And I think that might help them you know, to seek help, because if they just think 'oh I just go there talk to this person and you know he's just going to ask 'and what do you think about that'' boom it's not going to help.

43:42 Facilitator 1: I think that maybe the same with medication as well, I think a lot of, especially guys feel like 'I have an issue let me just fix it immediately, you just kind of want this quick fix. And maybe if there's, it's explained, this is more of a long hall, it takes time and patience, it could be helpful?

44:00 P9G2 And how like it might be more, if it, like effective? Then yeah.

Appendix 4.

Appendix 4.1: Intervention development/framework (Chapter 4) peer-reviewed post-print publication.

International Journal of *Environmental Research and Public Health*

Article

Improving Mental Health Help-Seeking Behaviours for Male Students: A Framework for Developing a Complex Intervention

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Abstract: Men are less likely to seek help for mental health difficulties and this process is often used to help explain the disproportionally higher suicide rates compared to women. Furthermore, university students are often regarded as a vulnerable population group with a lower propensity to seek help. Thus, male students are a very high-risk group that is even more reluctant to seek help for mental health difficulties, placing them at high risk of suicide. Often, student mental health problems are highlighted in the media, but very few evidence-based solutions specifically designed for male students exist. The current paper seeks to provide a comprehensive framework about how to better design mental health interventions that seek to improve male students' willingness to access psychological support. The Medical Research Council's (MRC's) framework for developing a complex intervention was used to develop an intervention relevant to male students. In this paper, previous help-seeking interventions and their evaluation methods are first described, secondly, a theoretical framework outlining the important factors male students face when accessing support, and thirdly, how these factors can be mapped onto a model of behaviour change to inform the development of an evidence-based intervention are discussed. Finally, an example intervention with specific functions and behaviour change techniques is provided to demonstrate how this framework can be implemented and evaluated. It is hoped that this framework can be used to help reduce the disparity between male and female students seeking mental health support.

Keywords: help-seeking; men; interventions; students; mental health; COM-B; MRC complex intervention

1. Introduction

In 2018, 33% of 18-year-olds enrolled into university education in the United Kingdom (UK) [1]. This period coincides with the peak onset age for various mental health conditions, such as schizophrenia, anxiety and depression [2,3]. Anxiety and depression occur frequently in university students and are often caused or exacerbated by concerns relating to academic performance, pressure to succeed and post-graduation plans [4]. This places students at a greater risk of experiencing psychological difficulties with suicidal thoughts and behaviours reported in just under a quarter (22%) of this population group [5]. Although female students are more likely to be diagnosed with depression and anxiety and frequently report suicidal thoughts/behaviours [5–7], 69% of suicides in 2015 were

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completed by male students [8]. For younger men aged between 15–29 years old, suicide is the second leading cause of death [9,10].

Explanations for this phenomenon are often associated with willingness to seek help for mental health difficulties. Young people aged 16–24 overall represent the least likely age group to receive mental health treatment [11]. Additionally, male students are less likely to seek help compared to female students [12]. Female students are significantly more likely to use mental health services than male students (OR = 1.54) [13]. This trend continues into later adulthood, whereby only 9% of men receive treatment for a mental health condition compared to 15% of women [11], with women remaining 1.58 times (95% CI 1.32 to 1.89) more likely to receive mental health treatment compared to men even after controlling for prevalence rates [14]. This helps explain why globally adult men are 2.35 more likely to take their own life compared to women [9], or even up to 3.5 times more likely in high-income countries such as the UK [9,10]. Therefore, reducing help-seeking barriers for male students and engaging them with mental health initiatives can not only improve health outcomes whilst at university but can also have a preventative function and lead to more positive help-seeking behaviours in adulthood.

Although both male and female students face a range of barriers to seeking psychological support [15,16], lower rates of help-seeking observed in men are often attributed to traditional stereotypes of masculinity including, stoicism, self-reliance, and restrictive emotionality [17,18]. For instance, male students may view seeking support and expressing one's emotions as a sign of weakness, whilst it is deemed acceptable for female students to express and articulate themselves emotionally [19]. Moreover, male students prefer to limit emotional disclosure and deny weakness as a way to preserve their autonomy and stoicism [20]. Due to poor help-seeking in male university students and their increased risk of suicide, universities are faced with increasing pressure to implement mental health initiatives, which may mean they are not necessarily evidence based or gender appropriate [21]. Only a handful of evidence-based interventions targeting help-seeking for men have been evaluated [22], with even fewer targeted specifically towards male university students [23,24]. When such strategies are published, the intervention development process is not reported. It is essential for the intervention development process to be reported as this can enhance our theoretical and practical understanding about developing mental health interventions for male students [25]. In response to this, the current paper seeks to develop the first framework for developing and designing mental health interventions for male students that is grounded in evidence-based practice.

2. Medical Research Council (MRC) Framework

To develop an intervention targeting help-seeking behaviours in male students, the MRC's framework for developing a complex intervention was adhered to [26,27]. The MRC framework has four key stages, consisting of development, feasibility and piloting, evaluation, and implementation (Figure 1) [26]. As of 2019, this framework was updated, with additional action points being added for the development stage of the original framework [27]. Although these action points need to be considered when developing an intervention, not all of the actions can be addressed nor are relevant to every problem or context [27]. Furthermore, the updated MRC guidelines for developing a complex intervention advises that an approach to intervention development is decided upon first. This paper will discuss the development of an intervention using a published approach grounded in theory and evidence base by combining published research evidence and existing theories [27]. The MRC framework for developing and evaluating complex interventions will be used with the Behaviour Change Wheel to develop a framework for new interventions that addresses help-seeking in male students. It is anticipated that this framework will create a starting point for future interventions, which can be refined as the current evidence base is enriched. Furthermore, specific detail in accordance with the Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) checklist has been included (Appendix A) to further enrich the quality of evidence that is reported within the current paper [25].

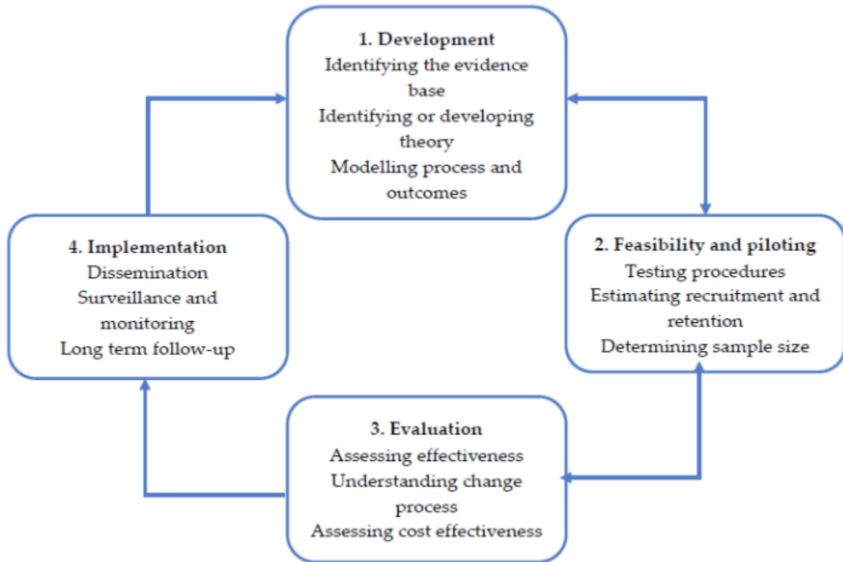

Figure 1. Medical Research Council's (MRC's) four key stages for developing and evaluating an intervention [26].

2.1. MRC Development: Identifying the Evidence Base.

The first stage to consider when developing a complex intervention is to summarise what is already known about similar interventions and the methods that have been used to evaluate them [26,27]. The MRC framework stresses that if a recent systematic review of similar interventions is not available then a high-quality systematic review should be conducted and updated [26]. At the time, there was only one systematic review that summarised six interventions targeting help-seeking for depression, anxiety, and general psychological distress for both males and females across multiple age groups [28]. Of these, three were delivered to university students with a total sample size of 547 (32% male). These interventions included information targeting mental health literacy, content to reduce mental health stigma, service information, and a supportive interview centred around consulting a sports psychologist [29–31]. Despite these interventions targeting help-seeking in students, they were not investigating male students specifically. This information is essential for the development of an appropriate intervention for male students as they hold more negative attitudes than female students and are less likely to engage with mental health services [32].

In response to this, a systematic review investigating help-seeking interventions specifically in males was conducted [22]. This systematic review identified nine interventions targeting mental health help-seeking in men of different age groups, two of which were delivered to male students [23,24]. Despite these interventions leading to positive changes in help-seeking, theoretical frameworks leading to their development had not been outlined. This presents difficulties for replication, as well as challenges in identifying what techniques have been key to positive changes [25,33].

As the systematic review conducted by Sagar-Ouriaghli et al. [22] consisted of nine interventions with heterogenous clinical populations and dissimilar designs, a meta-analysis could not be conducted [34]. To provide a coherent summary, a novel method that identified the Behavioural Change Techniques (BCTs) was used [35]. BCTs characterise the smallest identifiable "active ingredients" embedded within an intervention designed to change the desired behaviour [35]. Thus, the key elements that are likely to contribute to improvements in help-seeking behaviours were extracted

from these nine interventions [22]. Sagar-Ouriaghli et al. [22] identified 18 BCTs (e.g., credible source, feedback on behaviour and problem solving), which were synthesised into seven broader, more clinically relevant, psychological processes that are likely to contribute to changes in help-seeking for men of different age groups (Appendix B). These seven key processes include: the use of role models (e.g., celebrities and other men) to convey information, psycho-educational materials to improve mental health knowledge, assisting men to recognise and manage their symptoms, adopting active problem solving and/or solution focused tasks, motivating behaviour change, sign-posting mental health services, and finally, including content to build on positive masculine traits (e.g., responsibility and strength).

The identification of these seven processes captured from the nine interventions included the two interventions that target help-seeking behaviours in male-students [23,24]. Furthermore, the three interventions targeting help-seeking behaviours in both male and female students identified by Gulliver et al. [28] confirm the seven key processes identified through the BCTs (Appendix B). In sum, the previous systematic reviews by Sagar-Ouriaghli et al. [22] and Gulliver et al. [28] have captured key processes or elements within interventions that are likely to improve mental health help-seeking for male students.

Identifying Evaluation Methods

In addition to identifying previous interventions, The MRC framework emphasises the importance of identifying the methods that have been used to evaluate them [26,27]. Across the 12 interventions outlined above, ten help-seeking measures were utilised. Of these measures, the Attitudes Towards Seeking Professional Psychological Help scale-short form (ATSPPH-SF) [36], was the most commonly used instrument to measure help-seeking, which was used to evaluate four interventions [30,37–39].

The initial ATSPPH-long form (ATSPPH-LF) has been validated in 960 students (49% male) demonstrating good internal consistency ($\alpha = 0.86$) and test–retest reliability (0.82) [40]. The ATSPPH-SF contains ten items taken from the ATSPPH-LF and has demonstrated moderate internal consistency ($\alpha = 0.77$–0.84), good test-retest reliability (0.80) for university students, and correlates well with the original scale ($r = 0.87$) [36,41]. Higher ATSPPH-SF scores (i.e., more favourable attitudes to help-seeking) and recent mental healthcare use share a significant positive relationship, suggesting that the scale may predict whether someone will access future treatment [41]. Overall, the ATSPPH-SF is an appropriate scale to measure help-seeking attitudes in a male-student population.

In conjunction with help-seeking attitudes, it is also important to capture changes to behavioural or actual help-seeking, such as presenting to a service or reaching out to someone for support. From previous work identified, three studies measured behavioural help-seeking with a psychometric instrument using the Help-Seeking Behaviour Scale (HSBS) or the General Help-Seeking Questionnaire (GHSQ) [24,39]. Of these, only the GHSQ has been validated, making it the preferred and more psychometrically robust instrument to use [42]. The GHSQ is a 24-item scale that assesses future help-seeking intentions/attitudes as well as recent and past help-seeking experiences [43]. The GHSQ has been validated in 218 students aged 12–19 years old (51% male), whilst demonstrating good internal consistency ($\alpha = 0.70$–0.85) and test–retest reliability over a three-week period (0.86–0.92) [42]. The last ten items of the GHSQ assess recent help-seeking behaviours in the past 2 weeks and is referred to as the Actual Help-Seeking Questionnaire (AHSQ) [44,45]. Overall, two evaluation methods demonstrating good psychometric properties have been identified. Future mental health help-seeking interventions for male students should seek to measure changes to help-seeking attitudes (ATSPPH-SF) and help-seeking behaviours (AHSQ).

2.2. MRC Development: Identifying or Developing Theory

Following the identification of previous interventions and evaluation methods, the MRC framework stresses the importance of identifying or drawing upon theory to help identify what is important, relevant, and feasible for an intervention [26,27]. To achieve this, the "access to care

model" [46] shall be discussed in the context of barriers male students face when engaging with mental health services.

2.2.1. Access to Care Model

The access to care model of Gask et al. [46] is a theoretical model outlining how people with common mental health problems (i.e., anxiety and depression) engage with services and is best described within the development stage of the MRC's framework for developing a complex intervention. The model draws heavily upon an interpretive synthesis of literature summarising healthcare access by vulnerable groups and identifies six key issues with "candidacy" at its core (Figure 2) [47].

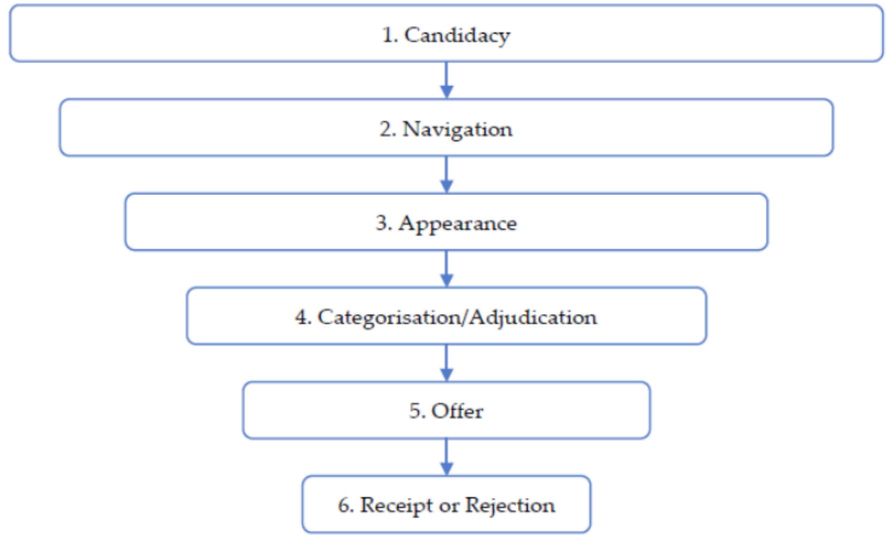

Figure 2. Access to care model.

Candidacy

Candidacy is a dynamic and constantly evolving construct to describe how people's eligibility for medical intervention is negotiated between themselves and health professionals [47]. Candidacy is focused with one's role and personal identity, whereby service engagement will occur if it remains congruent with their identity, or that help-seeking will not threaten their competence to fulfil social roles [46].

In the context of male help-seeking, engaging with mental health services can threaten one's masculinity, impacting both their personal identity and social role(s). Masculine stereotypes are centred around stoicism, emotional control, power, success, and independence [17]. Help-seeking may not align with these stereotypes, as men must control their emotions, be self-sufficient, and endure pain [48]. Seeking help is seen as a loss of control and independence, whilst demonstrating weakness and vulnerability for not being able to cope with emotional distress [48,49]. Indeed, male students who demonstrate higher conformity to masculine norms have greater negative attitudes towards help-seeking [50–53].

Deviation from these masculine stereotypes can be perceived as non-normative and thus elicit self-stigmatising beliefs or negative perceptions from the wider public [54]. Male students are more likely to report higher public and self-stigma of mental health compared to female students and are

thus less likely to use mental health services [55,56]. Although both public- and self-stigma may impact help-seeking, self-stigma is likely to be a stronger predictor than public stigma [55,57,58]. Indeed, self-stigma has been shown to mediate the relationship between conformity to masculine norms and help-seeking amongst male students [52,59,60]. This factor explains why male role models contribute to positive changes in help-seeking as they can assist at an early stage of the help-seeking process with re-aligning mental health help-seeking to be congruent with masculine stereotypes and reduce mental health stigma [22,61,62].

Navigation

If help-seeking is not perceived to threaten one's identity and social role, the individual will then seek to gain entry to a mental health service, referred to as "navigation" [46]. At this stage, the individual needs to rely on their sense of self-efficacy and their mental health literacy to determine their current needs and approach an appropriate service.

Male students may struggle at this stage, particularly for mental health, as they are required to identify services organised around professional psychiatric and psychological models. This can be a particular issue as men have greater difficulty at identifying mental health symptoms compared to women [63–65]. Difficulties in identifying mental health symptoms can be explained by poorer mental health literacy, perceiving symptoms as minor or insignificant, or difficulty in associating atypical symptoms with more conventional definitions [49]. Men may be more irritable, violent, and more inclined to engage in substance abuse, which are often regarded as male depressive symptoms [50,66]. Moreover, tolerating a high degree of distress is considered manly and one must only seek help when the problem is serious [48]. Indeed, by definition, conformity to masculine gender roles raises the threshold for when one can express distress, but can also result in denial, undervaluation and failure to identify symptoms that indicate the need for support [67].

Men also experience higher levels of fear and embarrassment associated with the use of services [49]. This arises from the unfamiliarity of healthcare services, the perception of positioning themselves in a vulnerable situation, and being perceived as weak [49]. Sign-posting services sensitively is therefore an important technique to include in future interventions as male students need more information regarding mental health services and who they can contact [22,49].

Appearance

The next step of "appearance" requires men being able to identify presenting symptoms through adequate mental health literacy and to identify an appropriate service. Presenting to a service is often left to be the responsibility of the patient, whereby they must initiate contact via their General Practitioner (GP) or self-referring to a relevant mental health service such as Improving Access to Psychological Therapies (IAPT). Another method includes "invitations", where the patient responds to an invite from a particular service. Similarly, "grabs" remove the component of candidacy by taking away the patient's control. An example of this includes compulsory mental health screenings done in the workplace or during other physical health appointments.

Despite these avenues, male students may experience fewer opportunities at this stage. Compared to women, men consult medical professionals less often across all age groups [68], with the largest discrepancy occurring in men aged between 21–39 (OR = 0.40). This is often attributed to higher reproductive health appointments seen in women [68]. However, this pattern is still found in men under 21 (i.e., students) (OR = 0.77) and for health check-ups not related to reproductive health (e.g., blood pressure) [68,69]. Consequently, this reduces the opportunity to detect symptoms relating to mental health and facilitate the help-seeking process. To combat this, male friendly services, extended opening hours, and mental health workplace/university programmes may assist with encouraging male students to present to services or provide an increased opportunity for "invitations" and "grabs" [70,71].

Categorisation/Adjudication and Offer

Categorisation/adjudication is the next stage whereby a professional judgement is made that either confirms the patient's illness or confirms their suitability to be offered an appropriate intervention.

Male students may present with atypical symptoms and have difficulties with understanding how these relate to psychological models of poor mental health. This may obscure detection from mental health professionals and diagnostic measures. Moreover, certain symptoms such as aggression and substance abuse may prevent confirmation of distress and brand male students as unsuitable for treatment [72,73]. Additionally, clinicians may hold their own gender biases further inhibiting male students from receiving an offer for mental health treatment [74]. Biases may include, perceiving men as feminine for expressing themselves [75], overlooking men's emotions, and shaming them for expressing vulnerability by over-stressing independence [74].

These factors all reduce the chances of male students receiving an offer of help and exacerbate the gender differences seen in mental health help-seeking. However, if they are deemed appropriate for treatment an offer will be made, moving them into the final stage of the access to care model.

Receipt or Rejection

Receiving an offer for treatment does not guarantee the student will engage as the offer may be rejected. This can be a significant obstacle for men. Only 36% of referrals made to IAPT in 2018 were male, with 36% of 18–35-year old's declining the referral and disengaging from treatment [76]. For all ages below 65 years, men were less likely to enter and complete treatment compared to women [76].

Furthermore, there is evidence highlighting differences in treatment preferences for both men and women [77]. Women tend to prefer psychotherapy and counselling more than men, whereas men have a greater preference for support groups and occupational support [77,78]. Similarly, men demonstrate higher levels of engagement towards gender-sensitive and proactive (i.e., solution focused) therapies [78,79].

As men have a tendency to delay help-seeking until the severity of symptoms become unmanageable [48,80], a stepped care approach that delivers the least intensive treatment first may be ineffective for men [81,82]. Thus, men with severe symptoms may be offered treatment that is not intensive enough for their current symptoms. These factors all have a part to play in the decision male students make when accepting or rejecting a mental health service/treatment offer.

2.2.2. Other Considerations

Alongside the access to care model, other factors may also be important. Aspects of the male archetype can be positive when facing emotional adversity [83]. Ideals of regaining control via information and relying on one's owns resources can be helpful strategies for men with mental health difficulties [84]. Englar-Carlson and Kiselica's [85] positive psychology/positive masculinity model (PPPM) highlights the strengths associated with masculine stereotypes and that men do and will engage with services if male specific issues and approaches are considered [85,86]. Positive masculinity could therefore be used to develop more male student-friendly services [78].

Some strategies for improving engagement have been reviewed [87] and recommendations made by clinicians. These include, clarifying treatment structure, adopting goal-focused or action-oriented approaches, forming collaborative relationships and tailoring language accordingly [87]. Outlining the treatment structure can help to overcome men's ambivalence, fear, or embarrassment towards help-seeking whilst mitigating client mistrust, suspicion, or fear of dependency within the therapeutic relationship [87]. Clinicians who self-disclose, use person-centred approaches, and focus on strengths can also reduce the client–clinician gap. This assists with building strong therapeutic alliances that are more collaborative, allowing for greater trust and honesty later on. Furthermore, goal-focused or action-oriented approaches can help maintain men's motivation and engagement with treatment [87].

Similarly, using lay language such as swearing and the appropriate use of humour can assist with forming a collaborative and equal therapeutic relationship [78,88].

Finally, when examining help-seeking facilitators within a student population, positive past experiences, social support or positive encouragement from others, confidentiality and trust in services, positive relationships with services, good mental health literacy, perceiving the problem as serious, and emotional competence have been identified as key factors that encourage students to seek psychological support [15,43,89,90].

2.3. MRC Development: Modelling Process and Outcomes

The third step in the development stage of developing a complex intervention in accordance with the MRC's framework is modelling process and outcomes [26]. Modelling seeks to conduct preliminary testing of an intervention to understand the context in which the intervention will operate and be implemented [27,91]. As a result, a more practical and appropriate intervention can be designed. To understand the context of a male student mental health help-seeking intervention, a series of focus groups were conducted [92].

2.3.1. Modelling Process and Outcomes: Focus Groups

The focus groups sought to identify key features of the context that can be incorporated into mental health initiatives to help encourage male students to seek help for mental health difficulties [92]. Three focus groups with 24 male students (mean age of 21.89 years) from a UK London University were asked questions exploring the barriers to seeking help, what would encourage help-seeking, how an intervention should be designed, and how to publicise this intervention to male students. The results from the focus group revealed five themes that male students considered important when designing male-friendly interventions that addressed mental health help-seeking [92]. These themes were: (1) protecting male vulnerability, (2) provide a masculine narrative of help-seeking, (3) preferred intervention formats regarding formality and length (where participants differed), (4) difficulty knowing when and how to seek help, and (5) strategies to sensitively engage male students (Figure 3).

These findings support much of the evidence relating to the influence of masculinity on help-seeking, low mental health literacy, and the need for information about services. Additionally, these focus groups captured more nuanced practical findings that have not been mentioned within the wider literature. This included discrepancies over the formality and duration of interventions and appropriate ways of promoting mental health initiatives to male students.

While both the formality and duration of an intervention are important factors to consider when designing interventions, it was clear that male students differed in their preference, with half stating that they would be more likely to engage in a formal intervention. This was due to the serious nature of mental health difficulties and would provide validation of men's mental health difficulties [92]. Equally, however, others stated that an informal intervention would be more acceptable. This may allow for greater use of lay language and humour when working with male students [78,88]. Similarly, an informal setting is more familiar to men when building relationships which can help create greater rapport and trust [93]. Certainly, it would be worthwhile to compare the differences in uptake between formal and informal interventions.

There was also a lack of consensus regarding the duration of an intervention. Some students preferred a brief and short intervention (e.g., two sessions lasting up to 2 h each), whilst others requested something more frequent and long standing [92]. Traditionally, 6–12 weekly therapy sessions are considered the gold standard when treating depression and anxiety [94] but referral rates for men remain relatively low [95]. Furthermore, not having enough time is often a key barrier for students wanting to access mental health care [96,97]. Considering these points, a brief intervention provides a more feasible and practical solution (i.e., less time needed) to facilitate help-seeking in male students that existing services fail to offer, possibly as a bridge into pre-existing services.

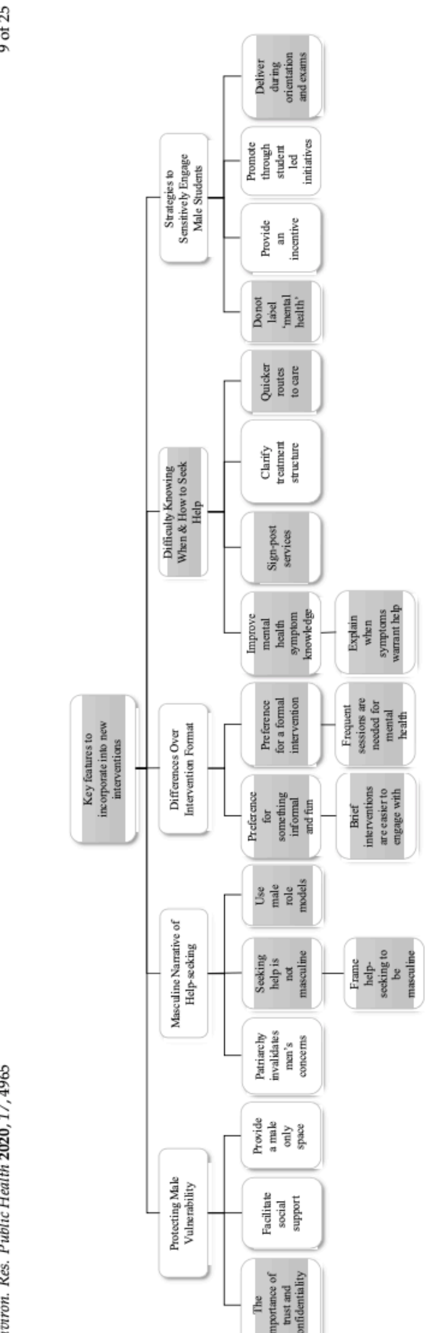

Figure 3. Overview of themes and sub-themes identified from focus groups [92].

When engaging male students with mental health initiatives, focus group participants advised against using mental health labels and the term "well-being" [92]. This relates to the finding that men often reject the use of psychological support if it seeks to label emotional distress as a psychiatric illness within a diagnostic framework [98]. Avoiding the use of mental health labels when promoting an intervention allows for a wider reach of male students who do not identify as having a mental health issue or who are experiencing difficulties that are not typically associated with psychological distress [50]. This further reinforces the use of lay language when working with male students.

Advertising mental health initiatives through pre-existing student bodies was advised by the focus groups [92]. Indeed, male students are more likely to seek in-person mental health support when encouraged by a family member or partner, whilst peer encouragement has a greater influence after adolescence—coinciding with university enrolment [99].

A third approach that may elicit higher levels of engagement would be to provide a more direct and immediate incentive. Here, male students perceive engaging with mental health support to be a "net-loss" regarding their masculine identity, time, and other priorities (e.g., university work) [92]. By providing an immediate incentive, such as monetary incentive, fun social bonding, or academic support may help tip this cost–benefit analysis more favourably [92]. This facilitates better opportunity for "appearance" and "invitations" to mental health initiatives as discussed earlier within the Access to Care Model [46].

A final nuanced point that male students unanimously agreed upon was that mental health initiatives should be delivered during the start of an academic year (also known as freshers) and during exam periods [92]. At the start of university, students have more time available to engage with mental health initiatives. Similarly, during exam times, mental health support may be perceived as having a more direct benefit due to exam-related stress [92].

This paper has summarised previous systematic reviews of help-seeking interventions, theory that influences help-seeking in male students, and qualitative work exploring intervention development. Data from the previous interventions, qualitative work and clinical recommendations results in 17 factors that are seen to be very important in changing behaviours relating to help-seeking in male students (Table 1). Additionally, five tools which may assist with changing or improving some of these factors have been discussed. These include the use of role models, sign-posting services, better availability of services, positive masculinity, and the use of humour and lay language.

Table 1. Summary of 17 factors influencing male students help-seeking for psychological support from various sources.

Factors Influencing Help-Seeking	Factors Targeted in Previous Interventions: Systematic Reviews (MRC 1.1)	Theory Relating to Men's Help-Seeking: Access to Care Model (MRC 1.2)	Modelling Process and Outcomes: Focus Groups (MRC 1.3)
Help-seeking is not masculine	X	X	X
Public-stigma of help-seeking	X	X	X
Self-stigma of help-seeking	X	X	X
Difficulty identifying mental health symptoms	X	X	X
Unsure of treatment structure	X	X	X
Unfamiliarity with mental health services	X	X	X
Social support, support groups and occupational support	X	X	X
Current relationship with service provider (e.g., trust)		X	X
Symptom severity (i.e., delay until symptoms are unmanageable)		X	X
Preference for proactive therapies	X	X	
Availability of services (e.g., extended opening hours, during exams and freshers)		X	X
Ability to expressing emotions/emotional competence		X	
Structure of the intervention (i.e., formality and duration)			X
Past experience of help-seeking and current help-seeking attitudes		X	
Fear and embarrassment of using mental health services (treatment stigma)		X	
Treatment is too time consuming			X
Clinician difficulty in detecting male symptoms		X	
Clinician biases towards men with mental health difficulties		X	

2.3.2. Modelling Process and Outcomes: The COM-B Model of Behaviour

Following the identification of these factors, it is important that they are implemented and operationalised appropriately. To do so, the Capability, Opportunity, and Motivation model of Behaviour (COM-B) was selected as it has predictive validity on the delivery of behaviour change interventions [100,101]. The COM-B model is a behaviour system that draws on the interaction between capability, opportunity, and motivation to generate a behaviour, in this case help-seeking [100]. Capability refers to the individual's psychological and physical capacity to engage in the behaviour and is dependent on their knowledge and skills. Motivation encapsulates all brain processes that energise and direct behaviour, further divided into reflective motivation (i.e., conscious evaluation and planning) and automatic motivation (i.e., emotions or impulses that arise from associative learning and/or innate dispositions). Lastly, opportunity includes factors that lie outside the individual that facilitate the behaviour or prompt it, containing both physical and social factors [100] (Figure 4). All of these six domains are strong predictors of the practical delivery of health care professional practice [101].

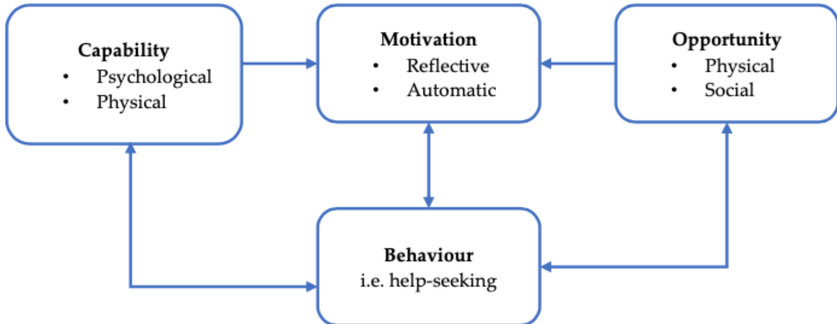

Figure 4. Capability, Opportunity, and Motivation model of Behaviour (COM-B) System.

This behavioural system can then be linked to wider intervention functions and policy categories to help assist with developing appropriate interventions [100,102]. This behaviour change system can be depicted by three layers within the 'Behaviour Change Wheel' (BCW) with sources of behaviour (i.e., COM-B domains) at its core, surrounded by intervention functions and lastly policy categories. Similar to the COM-B model, the layers within this system are not linear and each layer component may interact with one another. By using the COM-B model and BCW, it was possible to map the 17 factors that influence help-seeking (Table 1) according to capability, motivation, and opportunity (Table 2). Mapping these factors to their respective domains was completed by two authors (ISO and SG) in an independent parallel fashion before discussing discrepancies to reach 100% consensus.

Table 2. Mapping of help-seeking factors to a COM-B system of behaviour.

Capability: The Individual's Capacity to Engage in the Behaviour	Opportunity: All Factors Lying Outside the Individual That Make Performance of the Behaviour Possible or Prompt it	Motivation: All Brain Process That Energise the Direct Behaviour
Psychological	**Physical**	**Reflective**
Difficulty identifying mental health symptoms	Availability of services	Help-seeking is not masculine
Ability to express emotions/emotional competence	Structure of the intervention	Self-stigma of help-seeking
Unsure of treatment structure	Preference for proactive therapies (availability)	Past experience of help-seeking
Unfamiliarity with mental health services	Treatment is too time consuming	Current help-seeking attitudes
Symptom severity (increases awareness)		Treatment stigma
		Symptom severity (evaluation of symptoms)
		Treatment is too time consuming (perception)
		Preference for proactive therapies (evaluation)
Physical	**Social**	**Automatic**
	Public stigma of help-seeking	
	Social support	
	Relationship with service provider	
	Clinician difficulty in detecting symptoms	
	Clinician biases	

Mapping help-seeking factors to the COM-B model provides greater guidance and clarity as to how to improve help-seeking in male students via the intervention function as indicated by the BCW [103]. Firstly, intervention functions that address psychological capability should be focused around education, training, or the enablement of male students to improve their knowledge and awareness of mental health symptoms and services [103]. Secondly, physical opportunity highlights the disparity between male-student needs and the design of pre-existing mental health services. Therefore, intervention functions should include training, restriction, environmental restructuring, and better enablement of mental health services to make them more accommodating for male students [103]. This may include adjusting the availability of services through workplace/academic programmes, extended opening hours [70,71], or by re-structuring therapeutic environments that are shorter and more conducive to building trust and good patient–clinician relationships. Thirdly, reflective motivation appears rooted in male students' ambivalence toward seeking help. Intervention functions should include education, persuasion, incentivisation, or coercion to elicit more positive evaluations of using psychological support [103]. Finally, social opportunity highlights a wider, more systemic issue regarding notions of masculinity, public stigma and the clinician's role within therapy. Intervention functions should be rooted in restriction, environmental restricting, modelling, and enablement [103]. Similarly, the training of clinicians may help to reduce clinician bias [74,75]. Furthermore, some of these factors may overlap across multiple domains within the COM-B model. Greater severity of symptoms may increase one's awareness of their mental state (psychological capability) or may provide a better opportunity for evaluation and planning (reflective motivation). Both the factors of treatment being too time consuming and the preference for proactive therapies can be a perception/evaluation of existing treatments (reflective motivation) or a physical barrier that does not accommodate men's needs without offering an alternative choice (physical opportunity). Lastly, not all intervention functions should be implemented, and should be chosen based on their affordability, practicability, effectiveness/cost-effectiveness, acceptability, side-effects/safety, and equity—otherwise known as the APEASE criteria [103].

Once an intervention's functions have been decided upon, the next step requires the identification of the intervention's content regarding specific techniques that can be operationalised and incorporated into an intervention. This is an iterative process that involves identifying a range of specific techniques from the Behavioural Change Techniques Taxonomy (BCTTv1) [35] that could be considered for any particular function [103]. Once all potential BCT's have been identified, the APEASE criteria is used once more to determine which specific techniques or tools are most appropriate. Additionally, BCTs that have been frequently used before in similar interventions may also aid in this decision [22,103].

3. MRC Feasibility and Piloting

Once all intervention functions, policy categories, and BCTs have been selected, it is possible to then draft an intervention that targets the desired behaviour change, in this case help-seeking. In turn, this enables the newly developed intervention to be evaluated and piloted accordingly. For the purpose of this report, an example intervention is provided that draws upon nine factors that influence male-student help-seeking behaviours for mental health (Table 3). Indeed, this example only selects nine of the important factors in order to improve help-seeking attitudes as it is not yet clear which factors have a stronger influence on help-seeking than others. This example has been constructed through the use of the COM-B model, BCW, and specific BCTs to finalise a potential intervention.

Once an intervention has been designed, the acceptability and feasibility of the intervention should be evaluated. In this context, the MRC's framework highlights the importance of evaluating the acceptability, compliance, delivery of the intervention, recruitment, and retention [26]. Here, we emphasise the importance of measuring the recruitment and retention to mental health initiatives whilst also evaluating the acceptability of help-seeking interventions for male students.

Table 3. Example intervention for male students to improve mental health help-seeking, including Behavioural Change Techniques (BCTs).

Factor	COM-B Domain	Intervention Function	BCTs	Intervention Component
Difficulty identifying mental health symptoms	Psychological Capability	Education	2.2. Feedback on behaviour 5.1. Information about health consequences 5.3. Information about social and environmental consequences 5.6. Information about emotional consequences	Incorporate educational content that provides information about common mental health symptoms, their presentation, consequences of not seeking help, and use screening tools to assist students with self-identifying any current symptoms. This educational content can be delivered through a range of methods such as face-to-face classes, presentations, videos or educational leaflets.
Unsure of treatment structure	Psychological Capability	Education	5.1. Information about health consequences 5.6. Information about emotional consequences	Provide information about how service referrals and assessments operate. This may include information pertaining to waiting lists and where the referral takes place. Outline the treatment structure such as the number of sessions, how long appointments last for, and the types of confidentiality across services. Information can be delivered through a range of methods including face-to-face classes, presentations, videos or educational leaflets.
Unfamiliar with mental health services	Psychological Capability	Education	3.1. Social support (unspecified) 3.2. Social support (practical)	Explain and sign-post different mental health services and support options. This includes the names of different services, the types of support they would receive and the geographical location of such support. Information can be delivered through a range of methods including face-to-face classes, presentations, videos or educational leaflets.
Social support	Social Opportunity	Environmental Restructuring	3.1. Social support (unspecified)	Advise students to talk to friends and family about their mental health or provide environments that are conducive to forming social relationships. Advice can be delivered though presentations, posters, videos or educational leaflets.
Preference for proactive therapies	Psychological Capability or Reflective Motivation	Environmental Restructuring	1.2. Problem solving 1.4. Action planning 11.2. Reduce negative emotions	Incorporated self-management strategies such as relaxation, time management, problem solving, and action planning to resolve mental health difficulties. Such strategies can be delivered in face-to-face class sessions or group settings. Referral to (online) self-help materials or video resources may also be suitable.
Help-seeking is not masculine	Reflective motivation	Modelling	6.2. Social comparison 9.1. Credible source 13.2. Framing/Re-framing	Use group settings to discuss how mental health can still be masculine (e.g., a sign of strength). Draw attention to male celebrities and male role models who have sought help and are successful. Alternatively, use posters, videos or leaflets to promote help-seeking as a masculine trait.
Self-stigma of seeking help	Reflective Motivation	Modelling	6.2. Social comparison 13.2. Framing/Re-framing	Reframe help-seeking to be positive and provide examples of others with mental health difficulties and how seeking help improved their well-being. Reframing can be achieved through group discussions, presentations, leaflets, posters or videos.
Treatment-stigma	Reflective Motivation	Persuasion	5.1. Information about health consequences 5.6. Information about emotional consequences	Outline the benefits of treatment and what can be achieved if engaged with. Draw particular attention to one's well-being, reduction of symptoms, and increased functioning. Information can be delivered through a range of methods including face-to-face classes, presentations, videos or educational leaflets.
Structure of the intervention	Physical Opportunity	Environmental Restructuring	NA	Create a male-only space for students to drop-in to as opposed to a formal intervention. Here, this drop-in space could be more attractive to male students and make the intervention less time consuming. Physical spaces that have a central theme (e.g., sports or arts and crafts) are likely to appeal to male students. However, online male spaces (e.g., gaming) may provide a similar opportunity.

When investigating the evaluation methods from previous help-seeking interventions, there is not a consistent measure of acceptability. Across the 12 help-seeking interventions outlined in the development stage of this paper, only the Mental Health Ad Effectiveness Scale (MHAES) and the Treatment Evaluation Inventory Short Form (TEI-SF) have been used in one study each [23,24]. Despite both demonstrating good psychometric properties [37,104], the MHAES was designed to measure the effectiveness of brochures advertising mental health services [23], whilst the TEI-SF evaluates parents' acceptance of interventions for behaviour problem children [104]. Subsequently, these are not suitable when evaluating mental health help-seeking interventions for male students.

To evaluate acceptability, the Theoretical Framework of Acceptability Questionnaire (TFAQ) was identified [105]. The TFAQ is a theory-informed questionnaire containing eight items evaluating the acceptability of healthcare interventions [105]. The eight items of the TFAQ capture eight distinct domains that relate to acceptability. These domains include general acceptability, affective attitude, burden, ethicality, intervention coherence, opportunity costs, perceived effectiveness, and self-efficacy [106]. Moreover, the TFAQ can be used within all four stages of the MRC's framework for developing complex interventions and provides a more comprehensive definition of the term "acceptability", synthesised from 43 review articles, allowing for better operationalisation [106]. As the TFAQ provides a general framework, it is possible to tailor this measure towards help-seeking in male students (Appendix C).

Once an intervention has been developed in accordance with this framework, it is recommended that the outcome measures of help-seeking attitudes and help-seeking behaviours are measured by the ATSPPH-SF and AHSQ, respectively. The final measure used to evaluate the feasibility and acceptability of a newly developed intervention is to use the TFAQ and make adaptive changes where necessary. Furthermore, newly developed interventions should be reported in accordance with the Template for Intervention Description and Replication (TIDieR) checklist to aid with replication and the clarity of the final intervention [22,33].

4. Strengths and Limitations

Here, the current paper provides an overview of the factors to embed within an intervention to improve mental health help-seeking for male students. The strengths of this paper are that it rigorously follows the MRC's framework for developing a complex intervention. This allows for a detailed description of future interventions, enabling better replication, evidence synthesis, and wider implementation for researchers and health care professionals working with male students [26]. Another strength is that this framework makes use of other tools to improve the systematic nature of the recommendations provided. Here, the use of the COM-B model of behaviour change, BCW, BCTTv1 and APEASE criteria has been discussed when designing gender-sensitive interventions for male students with the ultimate goal to enhance their effectiveness and replicability once published [35,100,103]. Similarly, the use of the GUIDED checklist is provided to further enhance the description of this framework and allow readers to understand key aspects when developing mental health interventions for male students [25].

Despite these strengths, this paper is not without limitations. Although the current paper addresses mental health help-seeking for male-students specifically, some of the rationale underpinning key features are drawn from the adult male literature to provide a more comprehensive synthesis. Subsequently, the recommendations may not directly transfer to male-students. Indeed, younger adults are significantly less likely to seek help and hold more negative help-seeking attitudes [107,108], whilst students are also faced with barriers that may differ from non-students and older adult males. In an attempt to provide a comprehensive overview, the current paper is unable to provide more specific recommendations for sub-groups of male students. For instance, sexual minority male students or male students from ethnic minority backgrounds face different barriers and it is likely that they will need more tailored interventions to accommodate their needs and encourage help-seeking [109–114]. Lastly, this framework is yet to be implemented when designing future male-student help-seeking

interventions. Although this paper synthesises evidence-based work specifically for men and male students, it is unclear as to how transferable and applicable this will be to real-world scenarios. Indeed, it would be valuable to see how effective/ineffective this framework is for others developing mental health interventions for male students.

5. Conclusions

Previous work has consistently identified that the onset of mental health difficulties, such as anxiety and depression often coincide with when students begin or start further education at university [2,3]. These mental health difficulties can be made worse from the pressures and expectations at university, contributing to a greater risk of suicide and protracted educational outcomes [4,5]. Typically, students and young people, irrespective of gender, are reluctant to seek help for mental health difficulties due to a range of barriers [11,15,16]. However, male students remain more reluctant to seek help for mental health due to additional barriers, such as traditional stereotypes of masculinity [12,13,17,18]. Due to male students being less likely to use mental health services and being at a higher risk of suicide than female students, universities are faced with an increased pressure to develop and implement effective initiatives for male students [21]. Nonetheless, such initiatives that have been developed often fail to be grounded in evidence-based practice or tailored to the needs of male students. Where such approaches have been implemented, the development process is not outlined. This creates significant difficulty for other healthcare or education providers to replicate, develop, or refine effective mental health initiatives that are tailored towards male students.

The current paper therefore provides an in-depth framework on how to develop and design mental health interventions for male students in accordance with the MRC's framework for developing a complex intervention [26]. Indeed, this paper presents a series of recommendations that are grounded in evidence-based practice. Previous gender-sensitive help-seeking interventions for men and male students and their active ingredients (i.e., BCT's) that are likely to elicit positive help-seeking attitudes or behaviours are first examined. Next, the identification of theory that is specific to male student's help-seeking behaviour is outlined through the use of Gask's access to care model [46]. By using previous published interventions and pre-existing theory further supplemented by qualitative findings from focus groups, 17 key factors that influence male students help-seeking for psychological support have been identified. These 17 factors allow for the operationalisation of key techniques that can be used to target help-seeking in male students. Through the use of the COM-B model of behaviour change, BCW, and BCTTv1, we have developed a framework for developing gender-sensitive interventions for male students that are likely to be effective and grounded in evidence-based practice. This paper also presents an example of an intervention that can be developed through the use of this framework to help inform future healthcare and education providers seeking to produce mental health interventions for male-students. It is hoped that this framework can be used to help reduce the gender disparity in those seeking mental health help can be reduced amongst a student population.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

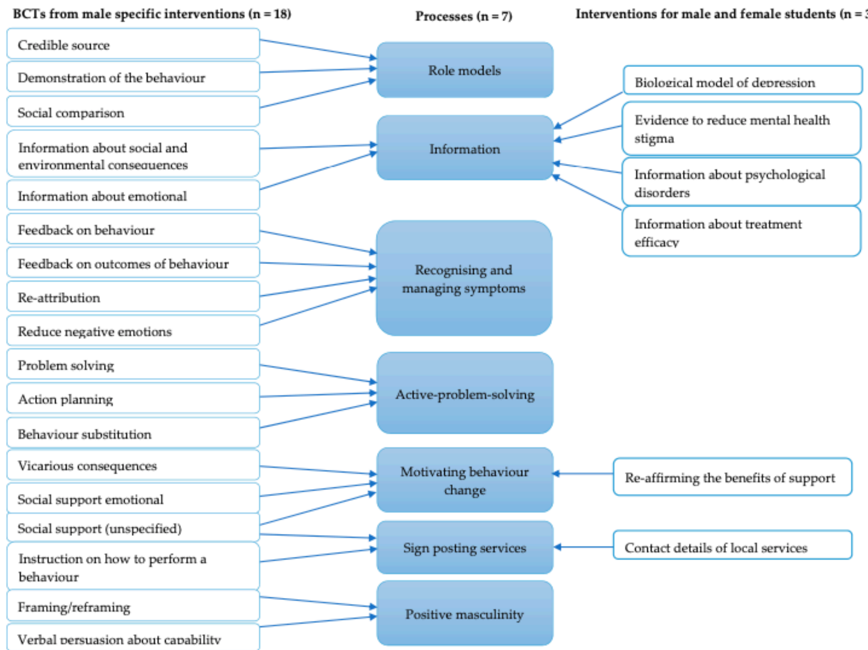
Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) checklist.

Item	Description	Manuscript
1. Report the context for which the intervention was developed.	Understanding the context in which an intervention was developed informs readers about the suitability and transferability of the intervention to the context in which they are considering evaluating, adapting or using the intervention.	"It is essential for the intervention development process to be reported as this can enhance our theoretical and practical understanding about developing mental health interventions for male students [25]". In response to this, the current paper seeks to develop the first framework for developing and designing mental health interventions for male students that is grounded in evidence-based practice.
2. Report the purpose of the intervention development process.	Clearly describing the purpose of the intervention specifies what it sets out to achieve. The purpose may be informed by research priorities, for example those identified in systematic reviews, evidence gaps set out in practice guidance, such as the NICE, or specific prioritisation exercises.	"The MRC framework for developing and evaluating complex interventions will be used with the Behaviour Change Wheel to develop a framework for new interventions that address help-seeking in male students. It is anticipated that this framework will create a starting point for future interventions which can be refined as the current evidence base is enriched. Furthermore, specific detail in accordance to the Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) checklist has been included (Appendix A) to further enrich the quality of evidence that is reported within the current paper [25]."
3. Report the target population for the intervention development process.	The target population is the population that will potentially benefit from the intervention–this may include patients, clinicians and/or members of the public. If the target population is clearly described, then readers will be able to understand the relevance of the intervention to their own research or practice. Health inequalities, gender and ethnicity are features of the target population that may be relevant to the intervention development process.	"In response to this, the current paper seeks to develop the first framework for developing and designing mental health interventions for male students that is grounded in evidence-based practice."
4. Report how any published intervention development approach contributed to the development process.	Many formal intervention development approaches exist and are used to guide the intervention development process. Where a formal intervention development approach is used, it is helpful to describe the process that was follows, including any deviations.	"This paper will discuss the development of an intervention using a published approach grounded in theory and evidence base by combining published research evidence and existing theories [27]. The MRC framework for developing and evaluating complex interventions will be used with the Behaviour Change Wheel to develop a framework for new interventions that address help-seeking in male students."
5. Report how evidence from different sources informed the intervention development process.	Intervention development is often based on published evidence and/or primary data that have been collected to inform the intervention development process. It is useful to describe and reference all forms of evidence and data that have informed the development of the intervention because evidence bases can change rapidly, and to explain the manner in which the evidence and/or data were used.	"This paper will discuss the development of an intervention using a published approach grounded in theory and evidence base by combining published research evidence and existing theories [27]."This paper also incorporates published systematic reviews and qualitative findings from focus groups into the development of the intervention throughout the paper.
6. Report how/if existing published theory informed the intervention development process.	Reporting whether and how theory informed the development process aids the reader 's understanding of the theoretical rationale that underpins the intervention. This can relate to either existing published theory or programme theory.	This is utilised throughout the paper. The paper draws upon published evidence from systematic reviews, qualitative findings from focus groups and theory informed research structured within the 'access to care model'.
7. Report any use of components from an existing intervention in the current intervention development process.	Some interventions are developed with components that have been adopted from existing interventions. Clearly identifying components that have been adopted or adapted and acknowledging their original source helps the reader to understand and distinguish between the novel and adopted components of the new intervention.	"Sagar-Ouriaghli and colleagues [22] identified 18 BCTs (e.g., credible source, feedback on behaviour and problem solving), which were in turn synthesised into broader, more clinically relevant, psychological processes that are likely to contribute to changes in help-seeking for men of different age groups (Appendix B). These seven key processes include: the use of role models (e.g., celebrities and other men) to convey information, psycho-educational materials to improve mental health knowledge, assisting men to recognise and manage their symptoms, adopting active problem solving and/or solution focused tasks, motivating behaviour change, sign-posting mental health services and finally, including content to build on positive masculine traits (e.g., responsibility and strength)."

Item	Description	Manuscript
8. Report any guiding principles, people or factors that were priorities when making decisions during the intervention development process.	Reporting any guiding principles that governed the development of the intervention will help the reader to understand the authors' reasoning behind the decisions that were made. Guiding principles specify the core objectives and features of the desired intervention.	"Lastly, not all intervention functions should be implemented, and should be chosen based on their affordability, practicability, effectiveness/cost-effectiveness, acceptability, side-effects/safety and equity–otherwise known as the APEASE criteria [103]. . . . Once all potential BCT's have been identified, the APEASE criteria is used once more to determine which specific techniques or tools are most appropriate. Additionally, BCT's that have been frequently used before in similar interventions may also aid in this decision [22,103]."
9. Report how stakeholders contributed to the intervention development process.	Potential stakeholders can include patient and community representatives, local and national policy makers, healthcare providers, and those paying for or commissioning healthcare. Each of these groups may influence the intervention development process in different ways.	The intervention development outlines how the theory informed components are also based on focus group findings from the potential service users of a male-student intervention for mental health help-seeking.
10. Report how the intervention changed in content and format from the start of the intervention development process.	Due to the iterative nature of intervention development, the intervention that is defined in the end of the development process can often be quite different from the one that was initially planned. Describing these changes and their rationale enhances understanding and enables understanding other intervention developers to learn from this experience.	This is not applicable to the current paper. Here, the current paper outlines key factors that are likely to be important that can be used as a template/framework for future interventions. In the instance that interventions are developed following this framework, any changes to the intervention/deviation from the proposed framework should be reported here.
11. Report any changes to interventions required or likely to be required for subgroups.	Specifying any changes that the intervention development team perceive are required for the intervention to be delivered or tailored to specific subgroups enables readers to understand the applicability of the intervention to their target population or context.	This is not applicable to the current paper. Here, the current paper seeks to provide a broad overview of the factors which are likely to be effective when designing mental health interventions for male students. Therefore, broad intervention strategies are outlined. If a more specific sub-group of male students is the focus of a newly proposed intervention this should be stated in future work.
12. Report important uncertainties at the end of the intervention development process.	Intervention development is frequently an iterative process. The conclusion of the initial phase of intervention development does not necessarily mean that all uncertainties have been addressed. It is helpful to list remaining uncertainties, such as the intervention intensity, mode of delivery, materials, procedures or type of location that the intervention is most suitable for. This can guide other researchers to potential future areas of research and practitioners about uncertainties relevant to their healthcare context.	"Subsequently, the recommendations may not directly transfer to male-students. Indeed, younger adults are significantly less likely to seek help and hold more negative help-seeking attitudes [107,108], whilst students are also faced with barriers which may differ from non-students and older adult males. In an attempt to provide a comprehensive overview, the current paper is unable to provide more specific recommendations for sub-groups of male students. For instance, sexual minority male students or male students from ethnic minority backgrounds face different barriers and it is likely that they will need more tailored interventions to accommodate their needs and encourage help-seeking [109–112]. Lastly, this framework is yet to be implemented when designing future male-student help-seeking interventions. Although this paper synthesises evidence-based work specifically for men and male students, it is unclear as to how transferable and applicable this will be to real world scenarios. Indeed, it would be valuable to see how effective/ineffective this framework is for others developing mental health interventions for male students."
13. Follow TIDieR guidance when describing the developed intervention.	Interventions have been poorly reported for a number of years. In response to this, internationally recognised guidance has been published to support the high-quality reporting of healthcare interventions and public health interventions. This guidance should therefore be followed when describing a developed intervention.	This is not applicable to the current paper as it does not report a specific intervention, nor does it pilot the described intervention. However, the current paper recommends the use of TIDieR when interventions are designed in accordance to this framework. Furthermore, newly developed interventions should be reported in accordance to the Template for Intervention Description and Replication (TIDieR) checklist to aid with replication and clarity of the final intervention [22,33]."
14. Report the intervention development process in an open access format.	Unless reports of intervention development are available, people considering using an intervention cannot understand the process that undertaken and make a judgement about its appropriateness to their context. It also limits cumulative learning about intervention development mythology and observed consequences at later evaluation, translation and implementation stages. Reporting intervention development in an open access publishing format increases the accessibility and visibility of intervention development research and makes it more likely to be read and used.	The current paper was submitted and published in open access format in the *International Journal of Environmental Research and Public Health* (*IJERPH*).

Appendix B

Summary of BCTs and processes identified in male help-seeking interventions. Adapted from Sagar-Ouriaghli et al. (2019) [22].



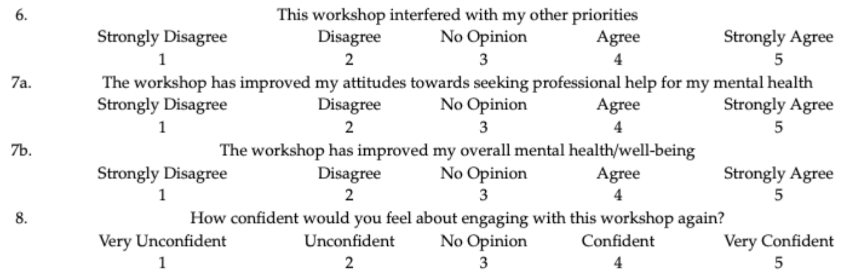
Appendix C

Theoretical Framework of Acceptability Questionnaire (TFAQ)

Instructions: Read each question carefully and indicate your response using the scale below (1-2-3-4-5).

No.	Item				
1.	How acceptable was the workshop?				
	Completely Unacceptable	Unacceptable	No Opinion	Acceptable	Completely Acceptable
	1	2	3	4	5
2.	Did you like or dislike the workshop?				
	Strongly Dislike	Dislike	No Opinion	Like	Strongly Like
	1	2	3	4	5
3.	How much effort did it take you to engage with the workshop?				
	No effort at all	A little effort	No Opinion	A lot of effort	Huge effort
	1	2	3	4	5
4.	The workshop fits with my beliefs about mental health and seeking mental health support				
	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
	1	2	3	4	5

No.	Item				
5.	It is clear to me how engaging in this workshop would help me manage my mental health				
	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
	1	2	3	4	5
	Please tell us more about your views				
6.	This workshop interfered with my other priorities				
	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
	1	2	3	4	5
7a.	The workshop has improved my attitudes towards seeking professional help for my mental health				
	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
	1	2	3	4	5
7b.	The workshop has improved my overall mental health/well-being				
	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
	1	2	3	4	5
8.	How confident would you feel about engaging with this workshop again?				
	Very Unconfident	Unconfident	No Opinion	Confident	Very Confident
	1	2	3	4	5



References

1. UCAS. UCAS Impact Report 2018. Available online: https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-analysis-reports/ucas-undergraduate-end-cycle-reports (accessed on 5 June 2020).
2. Kessler, R.C.; Angermeyer, M.; Anthony, J.C.; De Graff, R.; Demyttenaere, K.; Gasquet, I.; De Girolamo, G.; Gluzman, S.; Gureje, O.; Haro, J.M.; et al. Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry* **2007**, *6*, 168–176. Available online: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2174588/ (accessed on 24 June 2020).
3. Jones, P.B. Adult mental health disorders and their age of onset. *Br. J. Psychiatry* **2013**, *202*, s5–s10. [CrossRef]
4. Beiter, R.; Nash, R.; McCrady, M.; Rhoades, D.; Linscomb, M.; Clarahan, M.; Sammut, S. The prevalence and correlates of depression, anxiety and stress in a sample of college students. *J. Affect. Disord.* **2015**, *173*, 90–96. [CrossRef] [PubMed]
5. Mortier, P.; Cuijpers, P.; Kiekens, G.; Auerbach, R.P.; Demyttenaere, K.; Green, J.G.; Kessler, R.C.; Nock, M.K.; Bruffaerts, R. The prevelance of suicidal thoughts and behaviours among college students: A meta-analysis. *Psychol. Med.* **2018**, *48*, 554–565. [CrossRef] [PubMed]
6. Macaskill, A. The mental health of university students in the United Kingdom. *Br. J. Guid. Couns.* **2013**, *41*, 426–441. [CrossRef]
7. Evans, T.M.; Bira, L.; Gastelum, J.B.; Weiss, L.T.; Vanderford, N.L. Evidence for a mental health crisis in graduate education. *Nat. Biotechnol.* **2018**, *36*, 282–284. [CrossRef] [PubMed]
8. Thorley, C. Not by Degrees: Improving Student Mental Health in the UK's Universities. Available online: https://www.ippr.org/research/publications/not-by-degrees (accessed on 5 June 2020).
9. Chang, Q.; Yip, P.S.; Chen, Y. Gender inequality and suicide gender rations in the world. *J. Affect. Disord.* **2019**, *243*, 297–304. [CrossRef]
10. World Health Organization. World Health Organization Suicide Fact Sheet. Available online: https://www.who.int/news-room/fact-sheets/detail/suicide (accessed on 5 June 2020).

11. Mental Health Foundation. *Fundamental Facts About Mental Health 2016*; Mental Health Foundation: London, UK, 2016. Available online: https://www.mentalhealth.org.uk/publications/fundamental-facts-about-mental-health-2016 (accessed on 24 June 2020).
12. Sheu, H.-B.; Sedkacek, W.H. An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. *Meas. Eval. Couns. Dev.* **2004**, *37*, 130–143. [CrossRef]
13. Eisenberg, D.; Golberstein, E.; Gollust, S.E. Help-Seeking and Access to Mental Health Care in a University Student Population. *Med. Care* **2007**, 594–601. Available online: www.jstor.org/stable/40221479 (accessed on 24 June 2020). [CrossRef]
14. McManus, S.; Bebbington, P.; Jenkins, R.; Brugha, T. *Mental Health and Wellbeing in England: Adult Psychiatric Morbidity Survey 2014*; NHS Digital: Leeds, UK, 2016. Available online: https://digital.nhs.uk/data-and-information/publications/statistical/adult-psychiatric-morbidity-survey/adult-psychiatric-morbidity-survey-survey-of-mental-health-and-wellbeing-england-2014 (accessed on 24 June 2020).
15. Gulliver, A.; Griffiths, K.M.; Christensen, H. Percieved barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry* **2010**, *10*, 113–122. [CrossRef]
16. Nam, K.S.; Choi, S.I.; Lee, J.H.; Kim, A.R.; Lee, S.M. Psychological factors in college student' attitudes toward seeking professional psychological help: A meta-analysis. *Prof. Psychol. Res. Pract.* **2013**, *44*, 37–45. [CrossRef]
17. Addis, M.E.; Mahalik, J.R. Men, Masculinity and the Contexts of Help Seeking. *Am. Psychol.* **2003**, *58*, 5–14. [CrossRef]
18. Davies, J.; McCrae, B.P.; Frank, J.; Dochnahl, A.; Pickering, T.; Harrison, B.; Zakrzewski, M.; Wilson, K. Identifying Male College Students' Perceived Health Needs, Barriers to Seeking Help, and Recommendations to Help Men Adopt Healthier Lifestyles. *J. Am. Coll. Health* **2000**, *48*, 259–267. [CrossRef] [PubMed]
19. Seamark, D.; Gabriel, L. Barriers to support: A qualitative exploration into the help-seeking and avoidance factors of young adults. *Br. J. Guid. Couns.* **2018**, *46*, 120–131. [CrossRef]
20. Tang, M.O.; Oliffe, J.L.; Galdas, P.M.; Phinney, A.; Han, C.S. College men's depression-related help-seeking: A gender analysis. *J. Ment. Health* **2014**, *23*, 219–224. [CrossRef] [PubMed]
21. Barkham, M.; Broglia, E.; Dufour, G.; Fudge, M.; Knowles, L.; Percy, A.; Turner, A.; Williams, C.; SCORE Consortium. Towards an evidence-base for student wellbeing and mental health: Definitions, developmental transitions and data sets. *Couns. Psychother. Res.* **2019**, *19*, 351–357. [CrossRef]
22. Sagar-Ouriaghli, I.; Godfrey, E.; Bridge, L.; Meade, L.; Brown, J.S. Improving Mental Health Service Utilization Among Men: A Systematic Review and Sythesis of Behavior Change Techniques Within Interventions Targeting Help-Seeking. *Am. J. Mens. Health* **2019**, *13*, 1–18. [CrossRef]
23. Rochlen, A.B.; McKelley, R.A.; Pituch, K.A. A preliminary examination of the "Real Men. Real Depression" campaign. *Psychol. Men Masc.* **2006**, *7*, 1–13. [CrossRef]
24. Syzdek, M.R.; Green, J.D.; Lindgren, B.R.; Addis, M.E. Pilot trial of gender-based motivational interviewing for increasing mental health service use in college men. *Psychotherapy* **2016**, *53*, 124–129. [CrossRef]
25. Duncan, E.; O'Cathain, A.; Rousseau, N.; Croot, L.; Sworn, K.; Turner, K.M.; Yardley, L.; Hoddinott, P. Guidance for reporting intervention development studies in health research (GUIDED): An evidence-based consensus study. *BMJ Open* **2020**, *10*, e033516. [CrossRef]
26. Craig, P.; Dieppe, P.; Macintyre, S.; Michie, S.; Nazareth, I.; Petticrew, M. Developing and evaluating complex interventions: The new Medical Research Council guidance. *BMJ* **2008**, *337*, a1655. [CrossRef] [PubMed]
27. O'Cathain, A.; Croot, L.; Duncan, E.; Rousseau, N.; Sworn, K.; Turner, K.M.; Yardley, L.; Hoddinott, P. Guidance on how to develop complex interventions to improve health and healthcare. *BMJ Open* **2019**, *9*, e029954. [CrossRef] [PubMed]
28. Gulliver, A.; Griffiths, K.M.; Christensen, H.; Brewer, J.L. A systematic review of help-seeking interventions for depression, anxiety and general psychological distress. *BMC Psychiatry* **2012**, *12*, 81–93. [CrossRef]
29. Han, D.-Y.; Chen, S.-H.; Hwang, K.-K.; Wei, H.-L. Effects of psychoeducation for depression on help-seeking willingness: Biological attribution versus destigmatization. *Psychiatry Clin. Neurosci.* **2006**, *60*, 662–668. [CrossRef] [PubMed]
30. Sharp, W.; Hargrove, D.S.; Johnson, L.; Deal, W.P. Mental health education: An evaluation of a classroom based strategy to modify help seeking for mental health problems. *J. Coll. Stud. Dev.* **2006**, *47*, 419–438. [CrossRef]

31. Donohue, B.; Dickens, Y.; Lancer, K.; Covassin, T.; Hash, A.; Miller, A.; Genet, J. Improving athletes' perspectives of sport psychology consultation: A controlled evaluation of two intervention methods. *Behav. Modif.* **2004**, *28*, 182–193. [CrossRef]
32. Nam, S.K.; Chu, H.J.; Lee, M.K.; Lee, H.J.; Kim, N.; Lee, S.M. A meta-analysis of gender differences in attitudes toward seeking professional psychological help. *J. Am. Coll. Health* **2010**, *59*, 110–116. [CrossRef]
33. Hoffman, T.C.; Glasziou, P.P.; Boutron, I.; Milne, R.; Perera, R.; Moher, D.; Altman, D.G.; Barbour, V.; Macdonald, H.; Johnston, M.; et al. Better reporting of interventions: Template for intervention description and replication (TIDieR) checklist and guide. *BMJ* **2014**, *348*, g1687. [CrossRef]
34. Higgins, J.P.; Green, S. *Cochrane Handbook for Systematic Reviews of Interventions*; John Wiley & Sons, Ltd.: Chichester, UK, 2005.
35. Michie, S.; Richardson, M.; Johnston, M.; Abraham, C.; Francis, J.; Hardeman, W.; Eccles, M.P.; Cane, J.; Wood, C.E. The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: Building an international consensus for the reporting of behavior change interventions. *Ann. Behav. Med.* **2013**, *46*, 81–95. [CrossRef]
36. Fischer, E.H.; Farina, A. Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *J. Coll. Stud. Dev.* **1995**, *36*, 368–373. Available online: https://psycnet.apa.org/record/1996-10056-001 (accessed on 24 June 2020).
37. Rochlen, A.B.; Blazina, C.; Raghunathan, R. Gender Role Conflict, Attitudes Toward Career Counseling, Career Decision-Making, and Perceptions of Career Counseling Advertising Brochures. *Psychol. Men Masc.* **2002**, *3*, 127–137. [CrossRef]
38. Hammer, J.; Vogel, D. Men's Help seeking for depression: The efficacy of a male-sensitive brochure about counselling. *Couns. Psychol.* **2010**, *38*, 296–313. [CrossRef]
39. Syzdek, M.R.; Addis, M.E.; Green, J.D.; Whorley, M.R.; Berger, J.L. A pilot trial of gender-based motivational interviewing for help-seeking and internalizing symptoms in men. *Psychol. Men Masc.* **2014**, *15*, 90–94. [CrossRef]
40. Fischer, E.H.; Turner, J.L. Orientations to seeking professional help: Development and research utility of an attitude scale. *J. Consult. Clin. Psychol.* **1970**, *35*, 79–90. [CrossRef] [PubMed]
41. Elahi, J.D.; Schweinle, W.; Anderson, S.M. Reliability and validity of the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form. *Psychiatry Res.* **2008**, *159*, 320–329. [CrossRef] [PubMed]
42. Wilson, C.J.; Deane, F.P.; Ciarrochi, J.V.; Rickwood, D. Measuring help seeking intentions: Properties of the general help seeking questionnaire. *Can. J. Couns.* **2005**, *39*, 15–28. Available online: https://ro.uow.edu.au/hbspapers/1527/ (accessed on 24 June 2020).
43. Rickwood, D.; Deane, F.P.; Wilson, C.J.; Ciarrochi, J.V. Young people's help-seeking for mental health problems. *Aust. e-J. Adv. Ment. Health* **2005**, *4*, 218–251. [CrossRef]
44. Rickwood, D.; Thomas, K. Conceptual measurement framework for help-seeking for mental health problems. *Psychol. Res. Behav. Manag.* **2012**, *5*, 173–183. [CrossRef]
45. Rickwood, D.J.; Braithwaite, V.A. Social-psychological factors affecting help-seeking for emotional problems. *Soc. Sci. Med.* **1994**, *39*, 563–572. [CrossRef]
46. Gask, L.; Bower, P.; Lamb, J.; Burroughs, H.; Chew-Graham, C.; Edwards, S.; Hibbert, D.; Kovandzic, M.; Lovell, K.; Rogers, A.; et al. AMP Research Group. Improving access to psychosocial interventions for common mental health problems in the United Kingdom: Narrative review and development of a conceptual model for complex interventions. *BMC Health Serv. Res.* **2012**, *12*, 249–262. [CrossRef]
47. Dixon-Woods, M.; Cavers, D.; Agarwal, S.; Annandale, E.; Arthur, A.; Harvey, J.; Hsu, R.; Katbamna, S.; Olsen, R.; Smith, L.; et al. Conducting a critical interpretive synthesis of the literature on access to healthcare by vulnerable groups. *BMC Med. Res. Methodol.* **2006**, *6*, 35–47. [CrossRef] [PubMed]
48. O'Brein, R.; Hunt, K.; Hart, G. 'It's caveman stuff, but that is to a certain extent how guys still operate': Men's accounts of masculinity and help seeking. *Soc. Sci. Med.* **2005**, *61*, 503–516. [CrossRef]
49. Yousaf, O.; Grunfeld, E.A.; Hunter, M.S. A systematic review of the factors associated with delays in medical and psychological help-seeking among men. *Health Psychol. Rev.* **2015**, *9*, 264–276. [CrossRef] [PubMed]
50. Seidler, Z.E.; Dawes, A.J.; Rice, S.M.; Oliffe, J.L.; Dhillon, M.H. The role of masculinity in men's help-seeking for depression: A systematic review. *Clin. Psychol. Rev.* **2016**, *49*, 106–118. [CrossRef]
51. Ramaeker, J.; Petrie, T.A. "Man up!": Exploring intersections of sport participation, masculinity, psychological distress, and help-seeking attitudes and intentions. *Psychol. Men Masc.* **2019**, *20*, 515–527. [CrossRef]

52. Vogel, D.L.; Heimerdinger-Edwards, S.R.; Hammer, J.H.; Hubbard, A. "Boys Don't Cry": Examination of the Links Between Endorsement of Masculine Norms, Self-Stigma, and Help-Seeking Attitudes for Men From Diverse Backgrounds. *J. Couns. Psychol.* **2011**, *58*, 368–382. [CrossRef]
53. Wimer, D.J.; Levant, R.F. The relation of masculinity and help-seeking style with the academic help-seeking behavior of college men. *J. Mens. Stud.* **2011**, *19*, 256–274. [CrossRef]
54. Primack, J.M.; Addis, M.E.; Syzdek, M.; Miller, I.W. The men's stress workshop: A gender-sensitive treatment for depressed men. *Cogn. Behav. Pract.* **2010**, *17*, 77–87. [CrossRef]
55. Wu, I.H.C.; Bathje, G.J.; Kalibatseva, Z.; Sung, D.; Leong, F.T.; Collins-Eaglin, J. Stigma, mental health, and counseling service use: A person-centred approach to mental health stigma profiles. *Psychol. Serv.* **2017**, *14*, 490–501. [CrossRef] [PubMed]
56. Levant, K.; Kamaradova, D.; Prasko, J. Perspectives on perceived stigma and self-stigma in adult male patients with depression. *Neuropsychiatr. Dis. Treat.* **2014**, *10*, 1399–1405. [CrossRef]
57. Topkaya, N. Gender, Self-Stigma, and Public Stigma in Predicting Attitudes toward Psychological Help-Seeking. *Educ. Sci. Theory Pract.* **2014**, *14*, 480–487. Available online: https://eric.ed.gov/?id=EJ1038737 (accessed on 24 June 2020). [CrossRef]
58. Clement, S.; Schauman, O.; Graham, T.; Maggioni, F.; Evans-Lacko, S.; Bezborodovs, N.; Morgan, C.; Rüsch, N.; Brown, J.S.; Thornicroft, G. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychol. Med.* **2015**, *45*, 11–27. [CrossRef] [PubMed]
59. Levant, R.F.; Stefanov, D.G.; Rankin, T.J.; Halter, M.J.; Mellinger, C.; Williams, C.M. Moderated path analysis of the relationships between masculinity and men's attitudes toward seeking psychological help. *J. Couns. Psychol.* **2013**, *60*, 392–406. [CrossRef] [PubMed]
60. Shepherd, C.B.; Rickard, K.M. Drive for muscularity and help-seeking: The mediational role of gender role conflict, self-stigma, and attitudes. *Psychol. Men Masc.* **2012**, *13*, 379–392. [CrossRef]
61. Ferrari, A. Using celebrities in abnormal psychology as teaching tools to decrease stigma and increase help seeking. *Teach. Psychol.* **2016**, *43*, 329–333. [CrossRef]
62. Mann, C.E.; Himelein, M.J. Putting the person back into psychopathology: An intervention to reduce mental illness stigma in the classroom. *Soc. Psychiatry Psychiatr. Epidemiol.* **2008**, *43*, 545–551. [CrossRef]
63. Swami, V. Mental health literacy of depression: Gender differences and attitudinal antecedents in a representative British sample. *PLoS ONE* **2014**, *7*, e49779. [CrossRef]
64. Cotton, S.M.; Wright, A.; Harris, M.G.; Jorm, A.F.; McGorry, P.D. Influence of gender on mental health literacy in young Australians. *Aust. N. Z. J. Psychiatry* **2006**, *40*, 790–796. [CrossRef]
65. Reavley, N.J.; McCann, T.V.; Jorm, A.F. Mental health literacy in higher education students. *Early Interven. Psychiatry* **2012**, *6*, 45–52. [CrossRef]
66. Martin, L.A.; Neighbors, H.W.; Griffith, D.M. The Experience of Symptoms of Depression in Men vs. Women Analysis of the National Comorbidity Survey Replication. *JAMA Psychiatry* **2013**, *70*, 1100–1106. Available online: https://jamanetwork.com/journals/jamapsychiatry/article-abstract/1733742 (accessed on 24 June 2020). [CrossRef]
67. Möller-Leimkühler, A.M. Barriers to help-seeking by men: A review of sociocultural and clinical literature with particular reference to depression. *J. Affect. Disord.* **2002**, *71*, 1–9. [CrossRef]
68. Wang, Y.; Hunt, K.; Nazareth, I.; Freemantle, N.; Petersen, I. Do men consult less than women? An analysis of routinely collected UK general practice data. *BMJ Open* **2013**, *3*, e003320. [CrossRef] [PubMed]
69. Deeks, A.; Lombard, C.; Michelmore, J.; Teede, H. The effects of gender and age on health related behaviors. *BMC Public Health* **2009**, *9*, 213–221. [CrossRef]
70. Oliffe, J.L.; Han, C.S. Beyond workers' compensation: Men's mental health in and our of work. *Am. J. Mens. Health* **2014**, *8*, 45–53. [CrossRef]
71. Monaem, A.; Woods, M.; Macdonald, J.; Hughes, R.; Orchard, M. Engaging men in the health system: Observations from service providers. *Aust. Health Rev.* **2007**, *31*, 211–216. [CrossRef]
72. Cochran, S.V.; Rabinowitz, F.E. Gender-sensitive recommendations for assessment and treatment of depression in men. *Prof. Psychol. Res. Pract.* **2003**, *34*, 132–140. Available online: https://psycnet.apa.org/buy/2003-02179-002 (accessed on 24 June 2020). [CrossRef]
73. Vogel, D.L.; Epting, F.; Wester, S.R. Counselors' perceptions of female and male clients. *J. Couns. Dev.* **2003**, *81*, 131–141. [CrossRef]

74. Mahalik, J.R.; Good, G.E.; Tager, D.; Levant, R.F.; Mackowiak, C. Developing a taxonomy of helpful and harmful practices for clinical work with boys and men. *J. Couns. Psychol.* **2012**, *59*, 591–603. [CrossRef]
75. Seymour-Smith, S.; Wetherell, M.; Phoenix, A. 'My wife ordered me to come!': A discursive analysis of doctors' and nurses' accounts of men's use of general practitioners. *J. Health Psychol.* **2002**, *7*, 253–267. [CrossRef]
76. Baker, C. *Mental Health Statistics for England: Prevalence, Services and Funding*; House of Commons Library Briefing: London, UK, 2018.
77. Liddon, L.; Kingerlee, R.; Barry, J.A. Gender differences in preferences for psychological treatment, coping strategies, and triggers for help-seeking. *Br. J. Clin. Psychol.* **2018**, *57*, 42–58. [CrossRef]
78. Liddon, L.; Kingerlee, R.; Seager, M.; Barry, J.A. What are the factors that make a male-friendly therapy? In *The Palgrave Handbook of Male Psychology and Mental Health*; Barry, J.A., Kingerlee, R., Seager, M., Sullivan, L., Eds.; Palgrave Macmillan: Cham, Switzerland, 2019; pp. 671–694.
79. Patrick, S.; Robertson, S. Mental health and wellbeing: Focus on men's health. *Br. J. Nurs.* **2016**, *25*, 1163–1169. [CrossRef] [PubMed]
80. Rice, S.M.; Aucote, H.M.; Parker, A.G.; Alvarez-Jimenez, M.; Filia, K.M.; Amminger, G.P. Men's perceived barriers to help seeking for depression: Longitudinal findings relative to symptom onset and duration. *J. Health Psychol.* **2017**, *22*, 529–536. [CrossRef] [PubMed]
81. Reinhardt, S.; Bischof, G.; Grothues, J.; John, U.; Meyer, C.; Rumpf, H.J. Gender differences in the efficacy of brief interventions with a stepped cared approach in general practice patients with alcohol-related disorders. *Alcohol Alcohol.* **2008**, *43*, 334–340. [CrossRef]
82. Walker, E.A.; Katon, W.J.; Russo, J.; Korff, M.V.; Lin, E.; Simon, G.; Bush, T.; Ludman, E.; Unützer, J. Predictors of outcomes in a primary care depression trial. *J. Gen. Intern. Med.* **2000**, *15*, 859–867. [CrossRef]
83. Seager, M.; Barry, J.A. Positive Masculinity: Including Masculinity as a Valued Aspect of Humanity. In *The Palgrave Handbook of Male Psychology and Mental Health*; Barry, J.A., Kingerlee, R., Seager, M., Sullivan, L., Eds.; Palgrave Macmillan: Cham, Switzerland, 2019; pp. 105–122.
84. Krumm, S.; Checchia, C.; Koesters, M.; Kilian, R.; Becker, T. Men's views on depression: A systematic review and metasynthesis of qualitative research. *Psychopathology* **2017**, *50*, 107–124. [CrossRef]
85. Englar-Carlson, M.; Kiselica, M.S. Affirming the strengths in men: A positive masculinity approach to assisting male clients. *J. Couns. Dev.* **2013**, *91*, 399–409. [CrossRef]
86. Kiselica, M.S.; Englar-Carlson, M. Identifying, affirming, and building upon male strengths: The positive psychology/positive masculinity model of psychotherapy with boys and men. *Psychother. Theor. Res. Pract. Train.* **2010**, *47*, 276–287. [CrossRef] [PubMed]
87. Seidler, Z.E.; Rice, S.M.; Ogrodniczuk, J.S.; Oliffe, J.L.; Dhillon, M.H. Engaging Men in Psychological Treatment: A Scoping Review. *Am. J. Mens. Health* **2018**, *12*, 1882–1900. [CrossRef] [PubMed]
88. Erentzen, C.; Quinlan, J.A.; Mar, R.A. Sometimes you need more than a wingman: Masculinity, femininity, and the role of humor in men's mental health help-seeking campaigns. *J. Soc. Clin. Psychol.* **2018**, *37*, 128–157. [CrossRef]
89. Gulliver, A.; Griffiths, K.M.; Christensen, H. Barriers and facilitators to mental health help-seeking for young elite athletes: A qualitative study. *BMC Psychiatry* **2012**, *12*, 157–171. [CrossRef]
90. Disabato, D.J.; Short, J.L.; Lameira, D.M.; Bagley, K.D.; Wong, S.J. Predicting help-seeking behavior: The impact of knowing someone close who has sought help. *J. Am. Coll. Health* **2018**, *66*, 731–738. [CrossRef]
91. Rowlands, G.; Sims, J.; Kerry, S. A lesson learnt: The importance of modelling in randomized controlled trials for complex interventions in primary care. *Fam. Pract.* **2005**, *22*, 132–139. [CrossRef]
92. Sagar-Ouriaghli, I.; Brown, J.S.; Vinay, T.; Godfrey, E. Engaging Male Students with Mental Health Support: A Qualitative Focus Group Study. under review.
93. American Psychological Association, Boys and Men Guidelines Group. APA Guidelines for Psychological Practice with Boys and Men. Available online: http://www.apa.org/about/policy/psychological-practice-boys-men-guidelines.pdf (accessed on 5 June 2020).
94. The National Institute for Health and Care Excellence, NICE Pathways. Available online: https://pathways.nice.org.uk/ (accessed on 5 June 2020).
95. NHS Digitial, Psychological Therapies: Annual Report on the Use of IAPT Services—England 2015-16. Available online: http://webarchive.nationalarchives.gov.uk/20180328133700/http://digital.nhs.uk/catalogue/PUB22110 (accessed on 5 June 2020).

http://dx.doi.org/10.1016/j.jsat.2016.12.013

96. Ryan, G.; Marley, I.; Still, M.; Lyons, Z.; Hood, S. Use of mental-health services by Australian medical students: A cross-sectional survey. *Australas Psychiatry* **2017**, *25*, 407–410. [CrossRef] [PubMed]
97. Eisenberg, D.; Speer, N.; Hunt, J.B. Attitudes and beliefs about treatment among college students with untreated mental health problems. *Psychiatr. Serv.* **2012**, *63*, 711–713. [CrossRef]
98. River, J. Diverse and dynamic interactions: A model of suicidal men's help seeking as it relates to health services. *Am. J. Mens. Health* **2018**, *12*, 150–159. [CrossRef]
99. Rickwood, D.J.; Mazzer, K.R.; Telford, N.R. Social influences on seeking help from mental health services, in-person and online, during adolescence and young adulthood. *BMC Psychiatry* **2015**, *15*, 40–49. [CrossRef]
100. Michie, S.; Van Stralen, M.M.; West, R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implement. Sci.* **2011**, *6*, 42–53. [CrossRef]
101. Keyworth, C.; Epton, T.; Goldthorpe, J.; Calam, R.; Armitage, C.J. Acceptability, reliability, and validity of a brief measure of capabilities, opportunities, and motivations ("COM-B"). *Br. J. Health Psychol.* **2020**. [CrossRef]
102. Barker, F.; Atkins, L.; de Lusignan, S. Applying the COM-B behaviour model and behaviour change wheel to develop an intervention to improve hearing-aid use in adult auditory rehabilitation. *Int. J. Audiol.* **2016**, *55*, S90–S98. [CrossRef]
103. Michie, S.; Atkins, L.; West, R. *The Behaviour Change Wheel: A Guide to Designing Interventions*; Silverback Publishing: Great Britain, UK, 2014.
104. Kelley, M.L.; Heffer, R.W.; Gresham, F.M.; Elliot, S.N. Development of a modified treatment evaluation inventory. *J. Psychopathol. Behav. Assess.* **1989**, *11*, 235–247. [CrossRef]
105. Sekhon, M.; Cartwright, M.; Francis, J.J. Development of a theory-informed questionnaire to assess the acceptability of healthcare interventions: Application of pre-validation methods. In Proceedings of the UK Society of Behavioural Medicine Annual Scientific Meeting, Birmingham, UK, 12 December 2018.
106. Sekhon, M.; Cartwright, M.; Francis, J.J. Acceptability of healthcare interventions: An overview of reviews and development of a theoretical framework. *BMC Health Serv. Res.* **2017**, *17*, 88–101. [CrossRef]
107. Mackenzie, C.S.; Scott, T.; Mather, A.; Sareen, J. Older adults' help-seeking attitudes and treatment beliefs concerning mental health problems. *Am. J. Geriatr. Psychiatry* **2008**, *16*, 1010–1019. [CrossRef]
108. Mackenzie, C.S.; Gekoski, W.L.; Knox, V.J. Age, Gender, and the Underutilization of Mental Health Services: The Influence of Help-seeking Attitudes. *Aging Ment. Health* **2006**, *10*, 574–582. [CrossRef] [PubMed]
109. Parent, M.; Hammer, J.H.; Bradstreet, T.C.; Schwartz, E.N.; Jobe, T. Men's Mental Health Help-Seeking Behaviors: An Intersectional Analysis. *Am. J. Mens. Health* **2018**, *12*, 64–73. [CrossRef] [PubMed]
110. Kam, B.; Mendoza, H.; Masuda, A. Mental Health Help-Seeking Experience and Attitudes in Latina/o American, Asian American, Black American, and White American College Students. *Int. J. Adv. Couns.* **2019**, *41*, 492–508. [CrossRef]
111. de la Cruz, L.F.; Kolvenbach, S.; Vidal-Ribas, P.; Jassi, A.; Llorens, M.; Patel, N.; Weinman, J.; Hatch, S.L.; Bhugra, D.; Mataix-Cols, D. Illness perception, help-seeking attitudes, and knowledge related to obsessive-compulsive disorder across different ethnic groups: A community survey. *Soc. Psychiatry Psychiatr. Epidemiol.* **2016**, *51*, 455–464. [CrossRef]
112. Baams, L.; De Luca, S.M.; Brownson, C. Use of mental health services among college students by sexual orientation. *LGBT Health* **2018**, *5*, 421–430. [CrossRef]
113. Verissimo, A.D.; Grella, C.E. Influence of gender and race/ethnicity on perceived barriers to help-seeking for alcohol and drug problems. *J. Subst. Abuse Treat.* **2018**, *75*, 54–61. [CrossRef]
114. Kim, J.E.; Zane, N. Help-seeking intentions among Asian American and White American Students in Psychological Distress: Application of the Health Belief Model. *Cultur. Divers. Ethnic. Minor. Psychol.* **2016**, *22*, 311–321. [CrossRef]

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Appendix 4.2: Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) checklist.

Item	**Description**	**Manuscript**
1. Report the context for which the intervention was developed.	Understanding the context in which an intervention was developed informs readers about the suitability and transferability of the intervention to the context in which they are considering evaluating, adapting or using the intervention.	"It is essential for the intervention development process to be reported as this can enhance our theoretical and practical understanding about developing mental health interventions for male students (Duncan, et al., 2020). In response to this, the current paper seeks to develop the first framework for developing and designing mental health interventions for male students that is grounded in evidence-based practice.
2. Report the purpose of the intervention development process.	Clearly describing the purpose of the intervention specifies what it sets out to achieve. The purpose may be informed by research priorities, for example those identified in systematic reviews, evidence gaps set out in practice guidance such as the NICE, or specific prioritisation exercises.	"The MRC framework for developing and evaluating complex interventions will be used with the Behaviour Change Wheel to develop a framework for new interventions that address help-seeking in male students. It is anticipated that this framework will create a starting point for future interventions which can be refined as the current evidence base is enriched. Furthermore, specific detail in accordance to the Guidance for Reporting Intervention Development Studies in Health Research (GUIDED) checklist has been included (Appendix 4.1) to further enrich the quality of evidence that is reported within the current paper (Duncan, et al., 2020)."
3. Report the target population for the intervention development process.	The target population is the population that will potentially benefit from the intervention – this may include patients, clinicians and/or members of the public. If the target population is clearly described, then readers will be able to understand the relevance of the intervention to their own research or practice. Health inequalities, gender and ethnicity are features	"In response to this, the current paper seeks to develop the first framework for developing and designing mental health interventions for male students that is grounded in evidence-based practice."

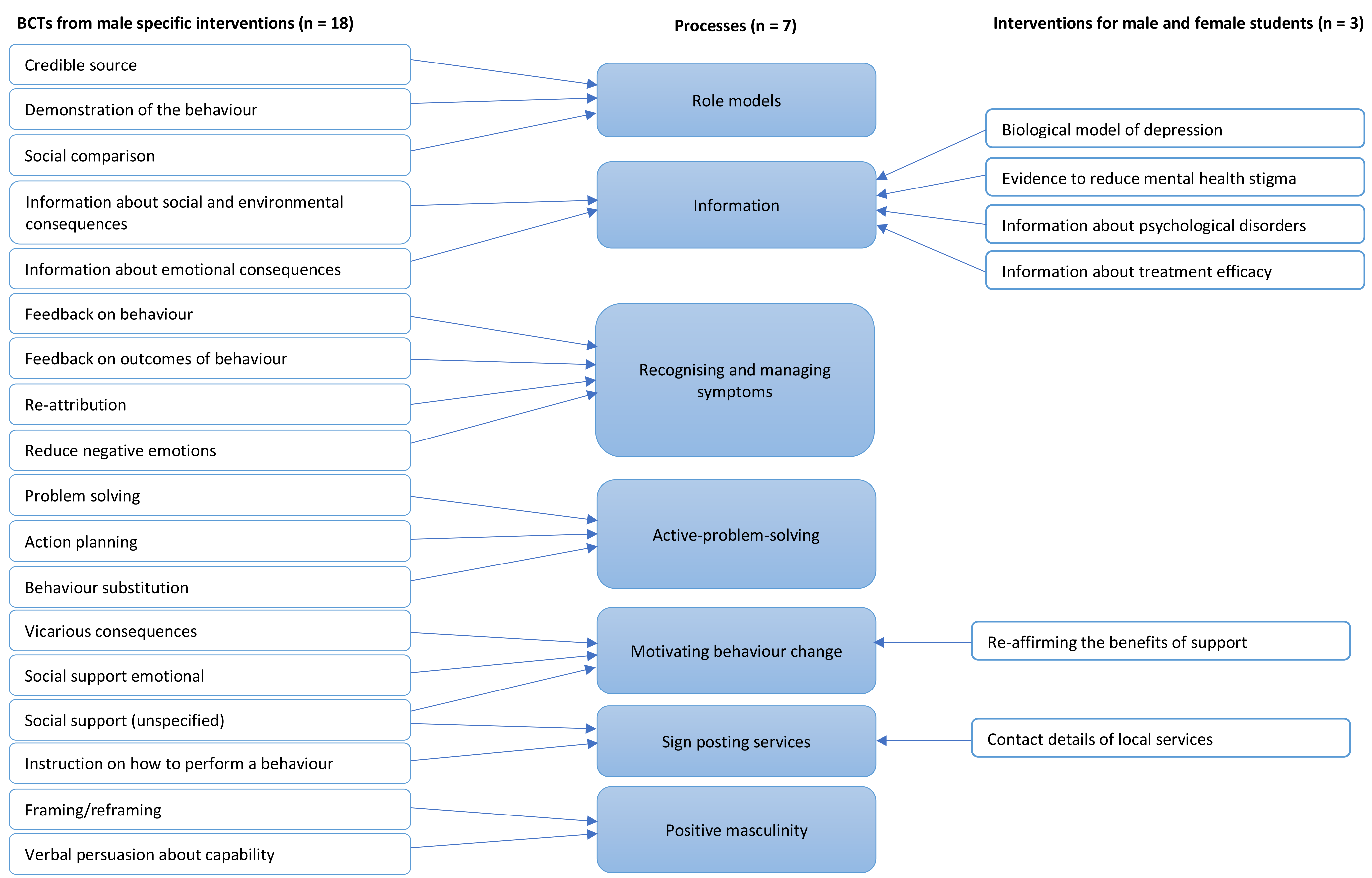
	of the target population that may be relevant to the intervention development process.	
4. Report how any published intervention development approach contributed to the development process.	Many formal intervention development approaches exist and are used to guide the intervention development process. Where a formal intervention development approach is used, it is helpful to describe the process that was follows, including any deviations.	"This paper will discuss the development of an intervention using a published approach grounded in theory and evidence base by combining published research evidence and existing theories (O'Cathain, et al., 2019). The MRC framework for developing and evaluating complex interventions will be used with the Behaviour Change Wheel to develop a framework for new interventions that address help-seeking in male students."
5. Report how evidence from different sources informed the intervention development process.	Intervention development is often based on published evidence and/or primary data that have been collected to inform the intervention development process. It is useful to describe and reference all forms of evidence and data that have informed the development of the intervention because evidence bases can change rapidly, and to explain the manner in which the evidence and/or data were used.	"This paper will discuss the development of an intervention using a published approach grounded in theory and evidence base by combining published research evidence and existing theories (O'Cathain, et al., 2019)." This paper also incorporates published systematic reviews and qualitative findings from focus groups into the development of the intervention throughout the paper.
6. Report how/if existing published theory informed the intervention development process.	Reporting whether and how theory informed the development process aids the reader's understanding of the theoretical rationale that underpins the intervention. This can relate to either existing published theory or programme theory.	This is utilised throughout the paper. The paper draws upon published evidence from systematic reviews, qualitative findings from focus groups and theory informed research structured within the 'access to care model'.
7. Report any use of components from an existing intervention in the current intervention development process.	Some interventions are developed with components that have been adopted from existing interventions. Clearly identifying components that have been adopted or adapted and acknowledging their original source helps the reader to understand and	"Sagar-Ouriaghli and colleagues (Rochlen, McKelley, & Pituch, 2006) identified 18 BCTs (e.g. credible source, feedback on behaviour and problem solving), which were in turn synthesised into broader, more clinically relevant, psychological processes that are likely to contribute to changes in help-seeking for men of different age groups (Appendix 4.2). These seven key

	distinguish between the novel and adopted components of the new intervention.	processes include: the use of role models (e.g. celebrities and other men) to convey information, psycho-educational materials to improve mental health knowledge, assisting men to recognise and manage their symptoms, adopting active problem solving and/or solution focused tasks, motivating behaviour change, sign-posting mental health services and finally, including content to build on positive masculine traits (e.g. responsibility and strength)."
8. Report any guiding principles, people or factors that were priorities when making decisions during the intervention development process.	Reporting any guiding principles that governed the development of the intervention will help the reader to understand the authors' reasoning behind the decisions that were made. Guiding principles specify the core objectives and features of the desired intervention.	"Lastly, not all intervention functions should be implemented, and should be chosen based on their affordability, practicability, effectiveness/cost-effectiveness, acceptability, side-effects/safety and equity – otherwise known as the APEASE criteria (Michie, Atkins, & West, 2014). … Once all potential BCT's have been identified, the APEASE criteria is used once more to determine which specific techniques or tools are most appropriate. Additionally, BCT's that have been frequently used before in similar interventions may also aid in this decision (Sagar-Ouriaghli I. , Godfrey, Bridge, Meade, & Brown, 2019; Michie, Atkins, & West, The Behaviour Change Wheel: A Guide to Designing Interventions, 2014)."
9. Report how stakeholders contributed to the intervention development process.	Potential stakeholders can include patient and community representatives, local and national policy makers, healthcare providers, and those paying for or commissioning healthcare. Each of these groups may influence the intervention development process in different ways.	The intervention development outlines how the theory informed components are also based on focus group findings from the potential service users of a male-student intervention for mental health help-seeking.
10. Report how the intervention changed in content and format from the start of the	Due to the iterative nature of intervention development, the intervention that is defined in the end of the development process can often be quite different from the one that was	This is not applicable to the current paper. Here, the current paper outlines key factors that are likely to be important that can be used as a template/framework for future interventions. In the instance that interventions are developed following this

intervention development process.	initially planned. Describing these changes and their rationale enhances understanding and enables understanding other intervention developers to learn from this experience.	framework, any changes to the intervention/deviation from the proposed framework should be reported here.
11. Report any changes to interventions required or likely to be required for subgroups.	Specifying any changes that the intervention development team perceive are required for the intervention to be delivered or tailored to specific subgroups enables readers to understand the applicability of the intervention to their target population or context.	This is not applicable to the current paper. Here, the current paper seeks to provide a broad overview of the factors which are likely to be effective when designing mental health interventions for male students. Therefore, broad intervention strategies are outlined. If a more specific sub-group of male students is the focus of a newly proposed intervention this should be stated in future work.
12. Report important uncertainties at the end of the intervention development process.	Intervention development is frequently an iterative process. The conclusion of the initial phase of intervention development does not necessarily mean that all uncertainties have been addressed. It is helpful to list remaining uncertainties such as the intervention intensity, mode of delivery, materials, procedures or type of location that the intervention is most suitable for. This can guide other researchers to potential future areas of research and practitioners about uncertainties relevant to their healthcare context.	"Subsequently, the recommendations may not directly transfer to male-students. Indeed, younger adults are significantly less likely to seek help and hold more negative help-seeking attitudes (Mackenzie, Scott, Mather, & Sareen, 2008; Mackenzie, Gekoski, & Knox, Age, Gender, and the Underutilization of Mental Health Services: The Influence of Help-seeking Attitudes, 2006), whilst students are also faced with barriers which may differ from non-students and older adult males. In an attempt to provide a comprehensive overview, the current paper is unable to provide more specific recommendations for sub-groups of male students. For instance, sexual minority male students or male students from ethnic minority backgrounds face different barriers and it is likely that they will need more tailored interventions to accommodate their needs and encourage help-seeking (Parent, Hammer, Bradstreet, Schwartz, & Jobe, 2018; Kam, Mendoza, & Masuda, 2019; de la Cruz, et al., 2016; Baams, De Luca, & Brownson, 2018). Lastly, this framework is yet to be implemented when designing future male-student help-seeking interventions. Although this paper synthesises evidence-based

		work specifically for men and male students, it is unclear as to how transferable and applicable this will be to real world scenarios. Indeed, it would be valuable to see how effective/ineffective this framework is for others developing mental health interventions for male students."
13. Follow TIDieR guidance when describing the developed intervention.	Interventions have been poorly reported for a number of years. In response to this, internationally recognised guidance has been published to support the high-quality reporting of healthcare interventions and public health interventions. This guidance should therefore be followed when describing a developed intervention.	This is not applicable to the current paper as it does not report a specific intervention, nor does it pilot the described intervention. However, the current paper recommends the use of TIDieR when interventions are designed in accordance to this framework. Furthermore, newly developed interventions should be reported in accordance to the Template for Intervention Description and Replication (TIDieR) checklist to aid with replication and clarity of the final intervention (Sagar-Ouriaghli I. , Godfrey, Bridge, Meade, & Brown, 2019; Hoffman, et al., 2014)."
14. Report the intervention development process in an open access format.	Unless reports of intervention development are available, people considering using an intervention cannot understand the process that undertaken and make a judgement about its appropriateness to their context. It also limits cumulative learning about intervention development mythology and observed consequences at later evaluation, translation and implementation stages. Reporting intervention development in an open access publishing format increases the accessibility and visibility of intervention development research and makes it more likely to be read and used.	The current paper was submitted and published in open access format in The International Journal of Environmental Research and Public Health (IJERPH).

Appendix 4.3: Summary of BCTs and processes identified in male help-seeking interventions. Adapted from Sagar-Ouriaghli et al., (2019).



Appendix 4.4: Theoretical Framework of Acceptability Questionnaire (TFAQ)

Instructions:

Read each question carefully and indicate your response using the scale below (1-2-3-4-5).

No.	Item

1. How acceptable was the workshop?

Completely Unacceptable	Unacceptable	No Opinion	Acceptable	Completely Acceptable
1	2	3	4	5

2. Did you like or dislike the workshop?

Strongly Dislike	Dislike	No Opinion	Like	Strongly Like
1	2	3	4	5

3. How much effort did it take you to engage with the workshop?

No effort at all	A little effort	No Opinion	A lot of effort	Huge effort
1	2	3	4	5

4. The workshop fits with my beliefs about mental health and seeking mental health support

Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	2	3	4	5

5. It is clear to me how engaging in this workshop would help me manage my mental health

Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	2	3	4	5

Please tell us more about your views

6. This workshop interfered with my other priorities

Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	2	3	4	5

7a. The workshop has improved my attitudes towards seeking professional help for my mental health

Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	2	3	4	5

7b. The workshop has improved my overall mental health/well-being

Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	2	3	4	5

8. How confident would you feel about engaging with this workshop again?

Very Unconfident	Unconfident	No Opinion	Confident	Very Confident
1	2	3	4	5

Appendix 5.

Appendix 5.1: Conformity to Masculine Norms Inventory (CMNI-46)

CMNI-46

K-number: ________________

Instructions:
Read each statement carefully and indicate your degree of agreement using the scale below (0-1-2-3).

No.	Item	Strongly Disagree	Disagree	Agree	Strongly Agree
1.[W]	In general, I will do anything to win.	0	1	2	3
2.[P]	If I could, I would frequently change sexual partners.	0	1	2	3
3.[SR]	I hate asking for help.	0	1	2	3
4.[V*]	I believe that violence is never justified.	0	1	2	3
5.[HSP*]	Being thought of as gay is not a bad thing.	0	1	2	3
6.[RT*]	In general, I do not like risky situations.	0	1	2	3
7.[W*]	Winning is not my first priority.	0	1	2	3
8.[RT]	I enjoy taking risks.	0	1	2	3
9.[V*]	I am disgusted by any kind of violence.	0	1	2	3
10.[SR*]	I ask for help when I need it.	0	1	2	3
11.[PoW]	My work is the most important part of my life.	0	1	2	3
12.[P*]	I would only have sex if I was in a committed relationship.	0	1	2	3

13.[EC*]	I bring up my feelings when talking to others.	0	1	2	3
14.[HSP]	I would be furious if someone thought I was gay.	0	1	2	3
15.[W*]	I don't mind losing.	0	1	2	3
16.[RT]	I take risks.	0	1	2	3
17.[HSP*]	It would not bother me at all if someone thought I was gay.	0	1	2	3
18.[EC]	I never share my feelings.	0	1	2	3
19.[V]	Sometimes violent action is necessary.	0	1	2	3
20.[POvW]	In general, I control the women in my life.	0	1	2	3
21.[P]	I would feel good if I had many sexual partners.	0	1	2	3
22.[W]	It is important for me to win.	0	1	2	3
23.[PoW*]	I don't like giving all my attention to work.	0	1	2	3
24.[HSP]	It would be awful if people thought I was gay.	0	1	2	3
25.[EC*]	I like to talk about my feelings.	0	1	2	3
26.[SR]	I never ask for help.	0	1	2	3
27.[W*]	More often than not, losing does not bother me.	0	1	2	3
28.[RT]	I frequently put myself in risk situations.	0	1	2	3
29.[POvW]	Women should be subservient to men.	0	1	2	3
30.[V]	I am willing to get into a physical fight if necessary.	0	1	2	3

31.[PoW]	I feel good when work is my first priority.	0	1	2	3
32.[EC]	I tend to keep my feelings to myself.	0	1	2	3
33.[W*]	Winning is not important to me.	0	1	2	3
34.[V*]	Violence is almost never justified.	0	1	2	3
35.[RT]	I am happiest when I'm risking danger.	0	1	2	3
36.[P]	It would be enjoyable to date more than one person at a time.	0	1	2	3
37.[HSP]	I would feel uncomfortable if someone thought it was gay.	0	1	2	3
38.[SR*]	I am not ashamed to ask for help.	0	1	2	3
39.[PoW]	Work comes first.	0	1	2	3
40.[EC*]	I tend to share my feelings.	0	1	2	3
41.[V*]	No matter what the situation, I would never act violently.	0	1	2	3
42.[POvW]	Things tend to be better when men are in charge.	0	1	2	3
43.[SR]	It bothers me when I have to ask for help.	0	1	2	3
44.[PovW]	I love it when men are in charge of women.	0	1	2	3
45.[EC]	I hate it when people ask me to talk about my feelings.	0	1	2	3
46.[HSP]	I try to avoid being perceived as gay.	0	1	2	3

Appendix 5.2: Self-Stigma of Seeking-Help Scale (SSOSH)

SSOSHS

K-number: _________________

Instructions:
People at times find that they face problems that they consider seeking help for. This can bring up reactions about what seeking help would mean. Please use the 5-point scale to rate the degree to which each item describes how you might react in this situation.

No.	Item	Strongly Disagree	Disagree	Agree & disagree Equally	Agree	Strongly Agree
1.	I would feel inadequate if I went to a therapist for psychological help.	1	2	3	4	5
2.*	My self-confidence would NOT be threatened if I sought professional help.	1	2	3	4	5
3.	Seeking psychological help would make me feel less intelligent.	1	2	3	4	5
4.*	My self-esteem would increase if I talked to a therapist.	1	2	3	4	5
5.*	My view of myself would not change just because I made the choice to see a therapist.	1	2	3	4	5
6.	It would make me feel inferior to ask a therapist for help.	1	2	3	4	5
7.*	I would feel okay about myself if I made the choice to seek professional help.	1	2	3	4	5
8.	If I went to a therapist, I would be less satisfied with myself.	1	2	3	4	5

9.*	My self-confidence would remain the same if I sought professional help for a problem I could not resolve.	1	2	3	4	5
10.	I would feel worse about myself if I could not solve my own problems.	1	2	3	4	5

Appendix 5.3: Attitudes Towards Seeking Professional Psychological Help Scale (ATSPPH-SF)

ATSPPHS

K-number: ________________

Instructions:
Read each statement carefully and indicate your degree of agreement using the scale below (0-1-2-3).

No.	Item	Disagree	Partly disagree	Partly agree	Agree
1.	If I believed I was having a mental breakdown, my first inclination would be to get professional attention.	0	1	2	3
2.*	The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	0	1	2	3
3.	If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.	0	1	2	3
4.*	There is something admirable in the attitude of a person who is willing to cope with his conflicts and fears *without* resorting to professional help.	0	1	2	3
5.	I would want to get psychological help if I were worried or upset for a long period of time.	0	1	2	3
6.	I might want to have psychological counselling in the future.	0	1	2	3
7.	A person with an emotional problem is not likely to solve it alone; he *is* likely to solve it with professional help.	0	1	2	3

8.*	Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.	0	1	2	3
9.*	A person should work out his own problems; getting psychological counselling would be a last resort.	0	1	2	3
10.*	Personal and emotional troubles, like many things, tend to work out by themselves.	0	1	2	3

Appendix 5.4: Actual Help-Seeking Questionnaire (AHSQ)

AHSQ

K-number: ________________

Instructions:
Below is a list of people who you might seek help or advice from if you were experiencing a personal or emotional problem. Tick any of these who you have gone to for advice or help **in the past 2 weeks** for a personal or emotional problem and briefly describe the type of problem you went to them about.

No.	Item	Yes (tick if applies)	Briefly describe the type of problem
3a.	Partner (e.g. significant boyfriend or girlfriend)	☐	
3b.	Friend (not related to you)	☐	
3c.	Parent	☐	
3d.	Other relative/family member	☐	
3e.	Mental health professional (e.g. university counsellor, psychologist, psychiatrist)	☐	
3f.	Phone help line (e.g. Samaritans)	☐	
3g.	Family doctor / GP	☐	
3h.	Teacher (e.g. year advisor, university lecturer)	☐	
3i.	Some else not listed above (please describe who this was) ________________	☐	
3j.	I have not sought help from anyone for my problem	☐	

Appendix 5.5: Warwick-Edinburgh Mental Well-Being Scale (WEMWBS).

WEMWBS

K-number: ________________

Instructions:
Below are some statements about feelings and thoughts. Please circle the number that best describes your experience of each **over the last 2 weeks**

No.	Item	None of the time	Rarely	Some of the time	Often	All of the time
1.	I've been feeling optimistic about the future	1	2	3	4	5
2.	I've been feeling useful	1	2	3	4	5
3.	I've been feeling relaxed	1	2	3	4	5
4.	I've been feeling interested in other people	1	2	3	4	5
5.	I've had energy to spare	1	2	3	4	5
6.	I've been dealing with problems well	1	2	3	4	5
7.	I've been thinking clearly	1	2	3	4	5
8.	I've been feeling good about myself	1	2	3	4	5
9.	I've been feeling close to other people	1	2	3	4	5
10.	I've been feeling confident	1	2	3	4	5
11.	I've been able to make up my own mind about things	1	2	3	4	5
12.	I've been feeling loved	1	2	3	4	5
13.	I've been interested in new things	1	2	3	4	5
14.	I've been feeling cheerful	1	2	3	4	5

Appendix 5.6: Ethical approval for pilot interventions

Research Ethics Office

Franklin Wilkins Building
5.9 Waterloo Bridge Wing
Waterloo Road
London SE1 9NH
Telephone 020 7848 4020/4070/4077
rec@kcl.ac.uk

Ilyas Sagar-Ouriaghli 04/09/2019

Dear Ilyas
LRS-18/19-13460 Men-tality: A help-seeking intervention for male students

Thank you for submitting your application for the above project. I am pleased to inform you that full approval has been granted by the PNM Research Ethics Panel

Ethical approval has been granted for a period of **three years** from 4 September 2019. You will not be sent a reminder when your approval has lapsed and if you require an extension you should complete a modification request, details of which can be found here:

https://internal.kcl.ac.uk/innovation/research/ethics/applications/modifications.aspx

Please ensure that you follow the guidelines for good research practice as laid out in UKRIO's Code of Practice for research:
https://www.kcl.ac.uk/research/support/integrity-good-conduct/index.aspx

Any unforeseen ethical problems arising during the course of the project should be reported to the panel Chair, via the Research Ethics Office. Please note that we may, for the purposes of audit, contact you to ascertain the status of your research.

We wish you every success with your research.

Yours sincerely,
Ms Laura Stackpoole
Senior Research Ethics Officer For and on behalf of:
PNM Research Ethics Panel

04/12/2019
Dear Ilyas
Reference Number: RESCM-19/20-13460
Study Title: Men-tality: A help-seeking intervention for male students

Modification Review Outcome: Full Approval

Thank you for submitting a modification request for the above study. This is a letter to confirm that your request has now been granted Full Approval. If you have any questions regarding your application please contact the Research Ethics Office at rec@kcl.ac.uk.

Kind regards

Ms Laura Stackpoole
Senior Research Ethics Officer **on behalf of**
PNM Research Ethics Panel

Research Ethics Office

Franklin Wilkins Building
5.9 Waterloo Bridge Wing
Waterloo Road
London SE1 9NH
Telephone 020 7848 4020/4070/4077
rec@kcl.ac.uk

Ilyas Sagar-Ouriaghli 22/01/2020

Dear Ilyas,
LRS-19/20-14632 Man Cave: Social Support for Male Students

Thank you for submitting your application for the above project. I am pleased to inform you that full approval has been granted by the PNM Research Ethics Panel

Ethical approval has been granted for a period of **three years** from 22 January 2020. You will not be sent a reminder when your approval has lapsed and if you require an extension you should complete a modification request, details of which can be found here:

https://internal.kcl.ac.uk/innovation/research/ethics/applications/modifications.aspx

Please ensure that you follow the guidelines for good research practice as laid out in UKRIO's Code of Practice for research:
https://www.kcl.ac.uk/research/support/integrity-good-conduct/index.aspx

Any unforeseen ethical problems arising during the course of the project should be reported to the panel Chair, via the Research Ethics Office. Please note that we may, for the purposes of audit, contact you to ascertain the status of your research.

We wish you every success with your research.

Yours sincerely,
Mr James Patterson
Senior Research Ethics Officer For and on behalf of:
PNM Research Ethics Panel

Appendix 5.7: The TIDieR (Template for Intervention Development and Replication) Checklist.

The TIDieR (Template for Intervention Description and Replication) Checklist*:

Information to include when describing an intervention and the location of the information

Item number	Item	Where located ** Primary paper (page number)	Other † (details)
	BRIEF NAME		
1.	Provide the name or a phrase that describes the intervention.	pg. 139.	______________
	WHY		
2.	Describe any rationale, theory, or goal of the elements essential to the intervention.	pg. 140 – 143.	______________
	WHAT		
3.	Materials: Describe any physical or informational materials used in the intervention, including those provided to participants or used in intervention delivery or in training of intervention providers. Provide information on where the materials can be accessed (e.g. online appendix, URL).	pg. 143 – 151.	______________
4.	Procedures: Describe each of the procedures, activities, and/or processes used in the intervention, including any enabling or support activities.	pg. 144 – 151.	______________
	WHO PROVIDED		
5.	For each category of intervention provider (e.g. psychologist, nursing assistant), describe their expertise, background and any specific training given.	pg. 146.	______________
	HOW		
6.	Describe the modes of delivery (e.g. face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group.	pg. 145 – 151.	______________

	WHERE		
7.	Describe the type(s) of location(s) where the intervention occurred, including any necessary infrastructure or relevant features.	pg. 145 – 151.	______________
	WHEN and HOW MUCH		
8.	Describe the number of times the intervention was delivered and over what period of time including the number of sessions, their schedule, and their duration, intensity or dose.	pg. 145 – 151.	______________
	TAILORING		
9.	If the intervention was planned to be personalised, titrated or adapted, then describe what, why, when, and how.	pg. 145 – 151.	______________
	MODIFICATIONS		
10.‡	If the intervention was modified during the course of the study, describe the changes (what, why, when, and how).	pg. 145 – 151.	______________
	HOW WELL		
11.	Planned: If intervention adherence or fidelity was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them.	pg. 147 – 148.	______________
12.‡	Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.	pg. 153 - 154, figure 1.	______________

** **Authors** - use N/A if an item is not applicable for the intervention being described. **Reviewers** – use '?' if information about the element is not reported/not sufficiently reported. † If the information is not provided in the primary paper, give details of where this information is available. This may include locations such as a published protocol or other published papers (provide citation details) or a website (provide the URL).

‡ If completing the TIDieR checklist for a protocol, these items are not relevant to the protocol and cannot be described until the study is complete.
with the appropriate checklist for that study design (see www.equator-network.org).

Appendix 5.8: The CONSORT Checklist for reporting a pilot or feasibility trial.

CONSORT 2010 checklist of information to include when reporting a pilot or feasibility trial*

Section/Topic	Item No	Checklist item	Reported on page No
Title and abstract			
	1a	Identification as a pilot or feasibility randomised trial in the title	139
	1b	Structured summary of pilot trial design, methods, results, and conclusions (for specific guidance see CONSORT abstract extension for pilot trials)	141
Introduction			
Background and objectives	2a	Scientific background and explanation of rationale for future definitive trial, and reasons for randomised pilot trial	141-142
	2b	Specific objectives or research questions for pilot trial	142-143
Methods			
Trial design	3a	Description of pilot trial design (such as parallel, factorial) including allocation ratio	143
	3b	Important changes to methods after pilot trial commencement (such as eligibility criteria), with reasons	149 – 151
Participants	4a	Eligibility criteria for participants	151
	4b	Settings and locations where the data were collected	149 – 151
	4c	How participants were identified and consented	149
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered	147 – 151
Outcomes	6a	Completely defined prespecified assessments or measurements to address each pilot trial objective specified in 2b, including how and when they were assessed	143 – 145
	6b	Any changes to pilot trial assessments or measurements after the pilot trial commenced, with reasons	144 – 151
	6c	If applicable, prespecified criteria used to judge whether, or how, to proceed with future definitive trial	n/a
Sample size	7a	Rationale for numbers in the pilot trial	151
	7b	When applicable, explanation of any interim analyses and stopping guidelines	n/a
Randomisation:			
Sequence generation	8a	Method used to generate the random allocation sequence	n/a
	8b	Type of randomisation(s); details of any restriction (such as blocking and block size)	n/a
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned	n/a

Implementation	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions	n/a
Blinding	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how	n/a
	11b	If relevant, description of the similarity of interventions	147 – 151
Statistical methods	12	Methods used to address each pilot trial objective whether qualitative or quantitative	154 – 162
Results			
Participant flow (a diagram is strongly recommended)	13a	For each group, the numbers of participants who were approached and/or assessed for eligibility, randomly assigned, received intended treatment, and were assessed for each objective	151 – 153
	13b	For each group, losses and exclusions after randomisation, together with reasons	151 – 153
Recruitment	14a	Dates defining the periods of recruitment and follow-up	145 – 152
	14b	Why the pilot trial ended or was stopped	146
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group	153
Numbers analysed	16	For each objective, number of participants (denominator) included in each analysis. If relevant, these numbers should be by randomised group	153 – 162
Outcomes and estimation	17	For each objective, results including expressions of uncertainty (such as 95% confidence interval) for any estimates. If relevant, these results should be by randomised group	154 – 162
Ancillary analyses	18	Results of any other analyses performed that could be used to inform the future definitive trial	154 – 162
Harms	19	All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	154 - 162
	19a	If relevant, other important unintended consequences	n/a
Discussion			
Limitations	20	Pilot trial limitations, addressing sources of potential bias and remaining uncertainty about feasibility	167 – 168
Generalisability	21	Generalisability (applicability) of pilot trial methods and findings to future definitive trial and other studies	162 – 168
Interpretation	22	Interpretation consistent with pilot trial objectives and findings, balancing potential benefits and harms, and considering other relevant evidence	154 – 162
	22a	Implications for progression from pilot to future definitive trial, including any proposed amendments	200
Other information			
Registration	23	Registration number for pilot trial and name of trial registry	n/a
Protocol	24	Where the pilot trial protocol can be accessed, if available	n/a
Funding	25	Sources of funding and other support (such as supply of drugs), role of funders	n/a
	26	Ethical approval or approval by research review committee, confirmed with reference number	145

Citation: Eldridge SM, Chan CL, Campbell MJ, Bond CM, Hopewell S, Thabane L, et al. CONSORT 2010 statement: extension to randomised pilot and feasibility trials. BMJ. 2016;355.

*We strongly recommend reading this statement in conjunction with the CONSORT 2010, extension to randomised pilot and feasibility trials, Explanation and Elaboration for important clarifications on all the items. If relevant, we also recommend reading CONSORT extensions for cluster randomised trials, non-inferiority and equivalence trials, non-pharmacological treatments, herbal interventions, and pragmatic trials. Additional extensions are forthcoming: for those and for up to date references relevant to this checklist, see www.consort-statement.org.

Appendix 5.9: Summary of voting poll sent to male students to identify appropriate names for intervention 1.

Question 1: Please select the names that you like the most.

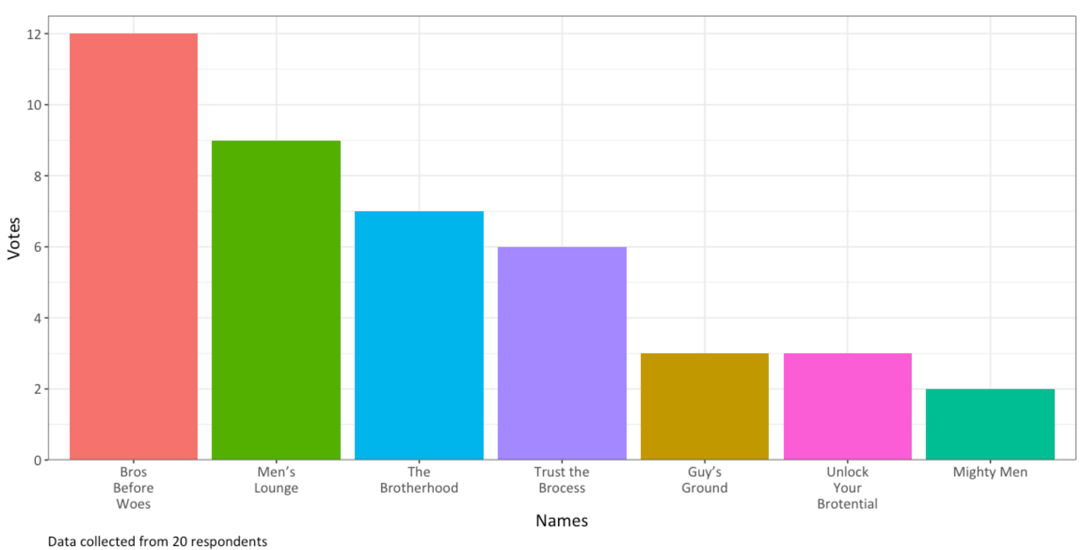


Figure a. Bar chart summarising total votes for names suggested to participants in round 1.

Question 2: Please provide a list of names you think would work/like the sound of.

Suggested Names
Men's Health Group
Knights of the BroTable
Fight Club
MENtal Health Services
Mental Wealth
Men-Tality

Question 3: Please provide any other comments we should consider when developing a name.

Additional comments
I don't think bro should be used - would diminish the reputation of the group
Cannot stand the word bro, it makes me think of straight white men and toxic masculinity and I would not go to anything with the word bro in it.
I like the idea of puns and less serious titles as it makes it more welcoming and light-hearted
Anonymous set up could be helpful. I.e. don't publish the venue but tell those who are interested where to meet and rotate venues.
Bro may seem targeted only to younger people
I really dislike 'Bro' or any word play including it
Other options that aren't puns would be nice
The simpler the name the more appealing it is, however, at the same time - the inclusion of words like 'Man', 'Male', or 'Bro' too much can also make it less appealing. Acronyms might make it easier as well.

Not a fan of the word bro. Too... Frat. But the word brother is good, since it depicts family and support
I think Bro carries some jocky/laddy connotations that might be off putting to some (although I do like the excellent bro puns above!)
Bro seems to colloquial. I like the idea of it centralising around “men”. Makes it’s a lot clearer

Q4. Please provide any names you think would work/like the sound of

Subsequently, the most voted 3 names (Bros Before woes, Men’s Lounge, The Brotherhood) were pooled with student name suggestions before voting again as a ‘final’ decision round (figure b).

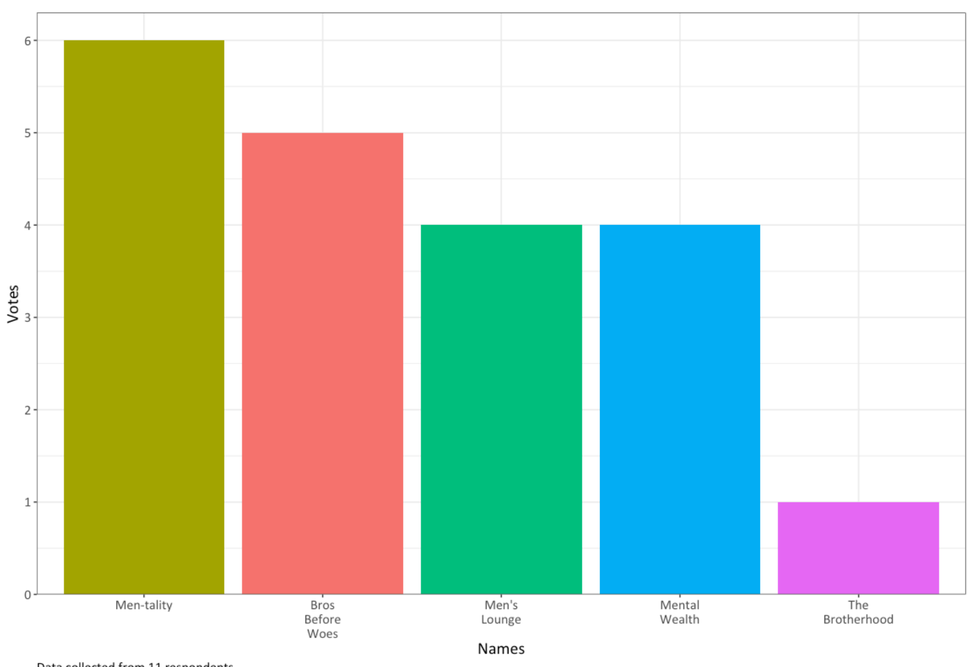


Figure b. Round 2 of voting for names for intervention 1

Appendix 5.10: Participant information sheets.

Men-tality: Information Sheet

Invitation

I would like to invite you to participate in this investigation which forms part of a PhD research project. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please get in touch if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

The purpose of the study is to provide male students with more knowledge surrounding mental well-being, coping strategies and how to go about accessing psychological support. This workshop has been co-developed with other male students at King's College London (KCL) to improve their general well-being whilst at university. Please note that this workshop does not aim to capture your personal mental health experiences and therefore will only need to disclose personal information if you feel comfortable to do so. Additionally, please refrain from disclosing any illegal activity (e.g. substance misuse) as this is beyond the scope of this workshop.

Why have I been invited?

You are being invited to participate in this study because you are currently a student at King's College London (KCL). The current workshop is available to all male students at KCL.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way. Once you have read the information sheet, please contact us if you have any questions that will help you decide whether to take part. If you do decide to take part, we will ask you to sign a consent form and you will be given a copy of this consent form to keep.

What will happen if I take part?

If you choose to take part in the study, you will be asked to firstly complete a brief questionnaire capturing some basic details about yourself and other questionnaires relating to your well-being, personality and understanding of supportive services. You will be asked to attend two sessions lasting up to 2 hours. This project will **not** be asking you about any direct

or indirect experiences you have had with mental health, nor will it ask you to disclose any personal information regarding this. This workshop seeks to provide you with better knowledge and understanding of mental health that may be useful now, or in the future whilst you are at university.

Honorarium

As a way to say thank-you for taking part in this study, a miniature FIFA-tournament (fastest goal) will be organised where the following prizes will be awarded.
1st place: £50 amazon voucher
2nd place: £25 amazon voucher
3rd place: £10 amazon voucher

What are the possible risks of taking part?

There are no anticipated risks associated with participation in this study. However, some students may feel upset or uncomfortable talking about mental health. Given that the research will be conducted by experienced researchers, this will be sensitively handled. If anyone is significantly upset during the course of the investigation, they will be supported, and information regarding continued additional support will be provided both before and after the study. As stated, you will not be required to disclose any of your individual experiences, so you should only do so if you feel comfortable. In the instance that any information disclosed regarding your immediate safety, the research team will want to ensure your safety and with your consent, may pass this information on to King's College Student Services.

What are the possible benefits of taking part?

Often, male students are less likely to seek help for psychological support contributing to higher suicide rates compared to female students. The current workshop may provide you with further knowledge and understanding of psychological difficulties which may be useful for you currently or in the future whilst at university. Furthermore, this workshop provides an opportunity to network with other male students in a fun and informal setting.

What if I change my mind about taking part?

You are free withdraw at any point of the study, without having to give a reason. Withdrawing from the study will not affect you in any way. You are able to withdraw your data from the study up until 2 weeks after your initial attendance date, after which withdrawal of your data will no longer be possible. If you choose to withdraw from the study after taking part, your rights to access, change or move your information are limited due to the interactive nature of group workshops.

Data handling and confidentiality

Your data will be processed in accordance with the General Data Protection Regulation 2016 (GDPR). Subsequently, all questionnaire responses will be stored within a locked filing cabinet contained within an office with restricted office access. All information will be kept confidential and only shared within the research study team, exceptions may apply if any information is disclosed regarding illegal activity or risk of harm to yourself or others. The findings will be eventually written up as part of a conference presentation, PhD thesis or publication. In this instance, all identifiable information shall be removed only to provide an overall summary of everyone's responses so that individual results cannot be linked with you in anyway. Data will be kept up to 3 years after collection, and only shared within the research team and will only be shared with a third party if you have consented to do so.

Data protection statement

The data controller for this project will be King's College London (KCL). The University will process your personal data for the purpose of the research outlined above. The legal basis for processing your personal data for research purposes under GDPR is a 'task in the public interest'. You can provide your consent for the use of your personal data in this study by completing the consent form that has been provided to you.

You have the right to access information held about you. Your right of access can be exercised in accordance with the General Data Protection Regulation (GDPR). You also have other rights including rights of correction, erasure, objection, and data portability. Questions, comments and requests about your personal data can also be sent to the King's College London Data Protection Officer Mr Albert Chan info-compliance@kcl.ac.uk. If you wish to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk.

How is the project being funded?

This study is being funded by the National Institute of Health Research Maudsley Biomedical Research Centre. Further information can be seen here;
https://www.nihr.ac.uk/about-us/how-we-are-managed/our-structure/infrastructure/biomedical-research-centres.html

What will happen to the results of the study?

The results of the study will be summarised in a PhD thesis as well as prepared for publication that will aim to summarise the opinions and views men have for improving male help-seeking. Reports will not include data that is identifiable. Published findings will be available online and through various electronic journal databases, which are readily accessible for KCL students.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Ilyas Sagar-Ouriaghli
ilyas.sagar-ouriaghli@kcl.ac.uk

NIHR Maudsley Biomedical Research Centre PhD Student
Department of Psychology
King's College London
Addiction Sciences Building – 4th Floor, 4.04
1-4 Windsor Walk, Denmark Hill, London
SE5 8BB

What if I have further questions, or if something goes wrong?

If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact King's College London using the details below for further advice and information:

Dr June Brown
Senior Lecturer in Clinical Psychology
Lead for Student Mental Health Research, KCL Student Services
Psychology Department (PO77)
Institute of Psychiatry, Psychology and Neuroscience
De Crespigny Park
London SE5 8AF

Tel: 020-7848-5004

Thank you for reading this information sheet and for considering taking part in this research.

Psychological Strength for Men:
Information Sheet

Invitation

I would like to invite you to participate in this workshop which forms part of a PhD research project. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please get in touch if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

The purpose of the study is to provide male students with skills and techniques on how to improve their psychological strength and well-being. This workshop has been co-developed with other male students at King's College London (KCL) to improve their general well-being whilst at university. Please note that this workshop does not aim to capture your personal experiences and therefore will only need to disclose personal information if you feel comfortable to do so. Additionally, please refrain from disclosing any illegal activity (e.g. substance misuse) as this is beyond the scope of this workshop.

Why have I been invited?

You are being invited to participate in this study because you are currently a student at King's College London (KCL). The current workshop is available to all male students at KCL.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way. Once you have read the information sheet, please contact us if you have any questions that will help you decide whether to take part. If you do decide to take part, we will ask you to sign a consent form and you will be given a copy of this consent form to keep.

What will happen if I take part?

If you choose to take part in the study, you will be asked to firstly complete a brief questionnaire capturing some basic details about yourself and other questionnaires relating to your well-being, personality and understanding of supportive services. You will be asked to attend two sessions lasting up to 2 hours. This project will **not** be asking you about any direct or indirect experiences regarding your psychological health, nor will it ask you to disclose any personal information regarding this. This workshop seeks to provide you with better

knowledge, skills and techniques to improve your psychological strength either now, or in the future whilst you are at university.

Honorarium

As a way to say thank-you for taking part in this study, a miniature FIFA-tournament (fastest goal) will be organised where the following prizes will be awarded.
1st place: £50 amazon voucher
2nd place: £25 amazon voucher
3rd place: £10 amazon voucher

What are the possible risks of taking part?

There are no anticipated risks associated with participation in this study. However, some students may feel upset or uncomfortable during the workshop. Given that the research will be conducted by experienced researchers, this will be sensitively handled. If anyone is significantly upset during the course of the investigation, they will be supported, and information regarding continued additional support will be provided both before and after the study. As stated, you will not be required to disclose any of your individual experiences, so you should only do so if you feel comfortable. In the instance that any information disclosed regarding your immediate safety, the research team will want to ensure your safety and with your consent, may pass this information on to King's College Student Services.

What are the possible benefits of taking part?

Often, male students are less likely to seek help for psychological support compared to female students. The current workshop may provide you with further knowledge and understanding of psychological difficulties which may be useful for you currently or in the future whilst at university. Furthermore, this workshop provides an opportunity to network with other male students in an informal setting.

What if I change my mind about taking part?

You are free withdraw at any point of the study, without having to give a reason. Withdrawing from the study will not affect you in any way. You are able to withdraw your data from the study up until 2 weeks after your initial attendance date, after which withdrawal of your data will no longer be possible. If you choose to withdraw from the study after taking part, your rights to access, change or move your information are limited due to the interactive nature of group workshops.

Data handling and confidentiality

Your data will be processed in accordance with the General Data Protection Regulation 2016 (GDPR). Subsequently, all questionnaire responses will be stored within a locked filing cabinet contained within an office with restricted office access. All information will be kept confidential and only shared within the research study team, exceptions may apply if any

information is disclosed regarding illegal activity or risk of harm to yourself or others. The findings will be eventually written up as part of a conference presentation, PhD thesis or publication. In this instance, all identifiable information shall be removed only to provide an overall summary of everyone's responses so that individual results cannot be linked with you in anyway. Data will be kept up to 3 years after collection, and only shared within the research team and will only be shared with a third party if you have consented to do so.

Data protection statement

The data controller for this project will be King's College London (KCL). The University will process your personal data for the purpose of the research outlined above. The legal basis for processing your personal data for research purposes under GDPR is a 'task in the public interest'. You can provide your consent for the use of your personal data in this study by completing the consent form that has been provided to you.

You have the right to access information held about you. Your right of access can be exercised in accordance with the General Data Protection Regulation (GDPR). You also have other rights including rights of correction, erasure, objection, and data portability. Questions, comments and requests about your personal data can also be sent to the King's College London Data Protection Officer Mr Albert Chan info-compliance@kcl.ac.uk. If you wish to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk.

How is the project being funded?

This study is being funded by the National Institute of Health Research Maudsley Biomedical Research Centre. Further information can be seen here;
https://www.nihr.ac.uk/about-us/how-we-are-managed/our-structure/infrastructure/biomedical-research-centres.html

What will happen to the results of the study?

The results of the study will be summarised in a PhD thesis as well as prepared for publication that will aim to summarise the opinions and views men have for improving male help-seeking. Reports will not include data that is identifiable. Published findings will be available online and through various electronic journal databases, which are readily accessible for KCL students.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Ilyas Sagar-Ouriaghli
ilyas.sagar-ouriaghli@kcl.ac.uk

NIHR Maudsley Biomedical Research Centre PhD Student
Department of Psychology
King's College London
Addiction Sciences Building – 4th Floor, 4.04
1-4 Windsor Walk, Denmark Hill, London
SE5 8BB

What if I have further questions, or if something goes wrong?

If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact King's College London using the details below for further advice and information:

Dr June Brown
Senior Lecturer in Clinical Psychology
Lead for Student Mental Health Research, KCL Student Services
Psychology Department (PO77)
Institute of Psychiatry, Psychology and Neuroscience
De Crespigny Park
London SE5 8AF

Tel: 020-7848-5004

Thank you for reading this information sheet and for considering taking part in this research.

Information Sheet

Invitation

I would like to invite you to participate in this workshop. Before deciding, it is important to understand why the research is being done and what this involves. Take time to read the following information. Please speak to a member of the research team if there is anything that is not clear or if you would like more information.

What is the purpose of the workshop?

This study aims to provide male students with an open space to socialise with other male students helping to contribute to better psychological well-being and experience at university. Additionally, there are leaflets available for you about sport, health and psychological well-being. These are for you to take freely. This drop-in is does not expect you to disclose personal information, and you should only do so if you feel comfortable to do so.

Why have I been invited?

You are being invited because you are a male student at King’s College London (KCL).

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to and choosing not to take part will not disadvantage you in any way. Please speak to a member of the research team if you have any questions. If you decide to take part, you will be asked to sign a consent form.

What will happen if I take part?

You will be asked to complete a brief questionnaire about yourself, your well-being and personality. You are required to attend a minimum of one drop-in session. You are welcome to stay as long as you wish. After the drop-ins have been completed, we will ask you to complete a short online survey at 2-weeks and 4-weeks follow up.

Example questions from the questionnaires include:

1. What are you currently studying?
2. Indicate your degree of agreement [0 = disagree, 1 = partly disagree, 2 = partly disagree, 3 = agree]

   “The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts”
3. Describe your experience over the past 2 weeks [1 = none of the time, 2 = rarely, 3 = some of the time, 4 = often, 5 = all of the time]

   “I’ve been dealing with problems well”

4. Indicate your degree of agreement [1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree]

"I would feel okay about myself if I made the choice to seek professional help"

Honorarium

To say thank-you for taking part in this study, we will offer £5 amazon vouchers as part of a game's activity within each drop-in.

What are the possible risks of taking part?

There are no anticipated risks associated with this study. If at any point you feel upset or uncomfortable this will be sensitively handled by experienced researchers. You will be supported, and information regarding continued additional support will be provided both before and after the workshop. If there are concerns regarding your immediate safety, the research team may pass this information on to King's College Student Services.

What are the possible benefits of taking part?

KCL Male students currently do not have any spaces or societies where they can gather on interact with one another. Male students have smaller support networks which can have a negative impact on their well-being and physical health. The current workshop provides an opportunity to find social support from others and other information if needed.

What if I change my mind about taking part?

You are free withdraw at any point of the study, without having to give a reason and will not affect you in any way. You can withdraw your data up until 2 weeks after your attendance date, after which withdrawal of your data will no longer be possible. If you choose to withdraw from the study after taking part, your rights to access, change or move your information are limited due to the interactive nature of group workshops.

What will happen to the results of the study?

The results of the study will be summarised in a PhD thesis as well as prepared for publication that summarises the workshop. **Reports will not include data that is identifiable**.

Data handling and confidentiality

Your data will be processed in accordance with the General Data Protection Regulation 2016 (GDPR). Subsequently, all questionnaire responses will be stored within a locked filing cabinet contained within an office with restricted office access. **All information will be kept confidential** and only shared within the research study team, exceptions may apply if any information is disclosed regarding illegal activity or risk of harm to yourself or others. Results will be eventually written up as part of a conference presentation, PhD thesis or publication. In this instance, all identifiable information will be removed so that individual results cannot be linked with you in anyway. Data will be kept up to 3 years after collection, and only shared

within the research team and will only be shared with a third party if you have consented to do so.

Data protection statement

The data controller for this project will be King's College London (KCL). The University will process your personal data for the purpose of the research outlined above. The legal basis for processing your personal data for research purposes under GDPR is a 'task in the public interest'. You can provide your consent for the use of your personal data in this study by completing the consent form that has been provided to you. You have the right to access information held about you. Your right of access can be exercised in accordance with the General Data Protection Regulation (GDPR). You also have other rights including rights of correction, erasure, objection, and data portability. Questions, comments and requests about your personal data can also be sent to the King's College London Data Protection Officer Mr Albert Chan info-compliance@kcl.ac.uk. If you wish to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk.

How is the project being funded?

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Who should I contact for further information?

If you have any questions or require more information about this study, please contact me on: ilyas.sagar-ouriaghli@kcl.ac.uk

What if I have further questions, or if something goes wrong?

If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact King's College London using the details below for further advice and information:

Dr June Brown
Senior Lecturer in Clinical Psychology
Lead for Student Mental Health Research, KCL Student Services

Tel: 020-7848-5004

Thank you for reading this information sheet and for considering taking part in this research.

Appendix 5.11: Participant consent forms

Men-tality: Participant Consent Form

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in.

	Please initial box
1. I confirm that I understand that by **initialling** each box I am consenting to this element of the study. I understand that it will be assumed that un-initialled boxes mean that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element I may be deemed ineligible for the study.	☐
2. I confirm that I have read and understood the information sheet dated **[Version 2, 27.08.19]** for the above study. I have had the opportunity to consider the information and asked questions which have been answered to my satisfaction.	☐
3. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason, up until 2 weeks after data collection.	☐
4. I consent to the processing of my personal information for the purposes explained to me in the Information Sheet. I understand that such information will be handled in accordance with the terms of the General Data Protection Regulation.	☐
5. I understand that my information may be subject to review by responsible individuals from the College for monitoring and audit purposes.	☐
6. I understand that confidentiality and anonymity will be maintained, and it will not be possible to identify me in any research outputs.	☐

7. I agree to be contacted in the future by King's College London researchers who would like to invite me to participate in follow up studies to this project, or in future studies of a similar nature. ☐

8. I agree that the research team may use my data for future research and understand that any such use of identifiable data would be reviewed and approved by a research ethics committee. (In such cases, as with this project, data would not be identifiable in any report). ☐

9. I understand that the information I have submitted will be anonymised as a part of a PhD thesis, conference presentation and a publishable report. ☐

10. I acknowledge that the absolute confidentiality of my contributions cannot be guaranteed due to the interactive nature of a focus group. ☐

______________________	__________________	_____________________
Name of Participant	**Date**	**Signature**
______________________	__________________	_____________________
Name of Researcher	**Date**	**Signature**

Psychological Strength for Men:

Consent Form

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in.

	Please initial box
1. I confirm that I understand that by **initialling** each box I am consenting to this element of the study. I understand that it will be assumed that un-initialled boxes mean that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element I may be deemed ineligible for the study.	☐
2. I confirm that I have read and understood the information sheet dated **[Version 3, 22.11.19]** for the above study. I have had the opportunity to consider the information and asked questions which have been answered to my satisfaction.	☐
3. I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason, up until 2 weeks after data collection.	☐
4. I consent to the processing of my personal information for the purposes explained to me in the Information Sheet. I understand that such information will be handled in accordance with the terms of the General Data Protection Regulation.	☐
5. I understand that my information may be subject to review by responsible individuals from the College for monitoring and audit purposes.	☐
6. I understand that confidentiality and anonymity will be maintained, and it will not be possible to identify me in any research outputs.	☐

7. I agree to be contacted in the future by King's College London researchers who would like to invite me to participate in follow up studies to this project, or in future studies of a similar nature. ☐

8. I agree that the research team may use my data for future research and understand that any such use of identifiable data would be reviewed and approved by a research ethics committee. (In such cases, as with this project, data would not be identifiable in any report). ☐

9. I understand that the information I have submitted will be anonymised as a part of a PhD thesis, conference presentation and a publishable report. ☐

10. I acknowledge that the absolute confidentiality of my contributions cannot be guaranteed due to the interactive nature of a focus group. ☐

________________________	___________________	______________________
Name of Participant	**Date**	**Signature**
________________________	___________________	______________________
Name of Researcher	**Date**	**Signature**

Consent Form

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.
The person organising the research must explain the project to you before you agree to take part. If you have any questions, please ask the researcher before you decide to take part.

Please initial box

1. I confirm that I understand that by **INITIALLING** each box I am consenting to this element of the study. I understand that by not giving consent for any one element I may be deemed ineligible for the study. ☐

2. I confirm that I have read and understood the information sheet dated **[Version 2, 09.01.20]** for the above workshop. I have considered the information and had my questions answered. ☐

3. I consent voluntarily to be in this workshop and understand that I can refuse to answer questions and can withdraw from the workshop, without having to give a reason, up until 2 weeks after data collection. ☐

4. I consent to the processing of my personal information for the purposes explained to me in the Information Sheet. I understand that my information will be handled in accordance to the General Data Protection Regulation Act. ☐

5. I understand that confidentiality and anonymity will be maintained, and it will not be possible to identify me in any research outputs. ☐

7. I agree to be contacted in the future by King's College London researchers who would like to invite me to participate in follow up studies to this project. ☐

8. I agree that the research team may use my data for future research and understand that any identifiable data would be reviewed by a research ethics committee. (As with this project, data would not be identifiable in any report). ☐

9. I understand that the information I have submitted will be anonymised as a part of a PhD thesis, conference presentation and a publishable report. ☐

10. I acknowledge that the absolute confidentiality of my contributions cannot be guaranteed due to the interactive nature of a workshops. ☐

______________________	______________________	______________________
Name of Student	**Date**	**Signature**

Appendix 5.12: Participant demographic questionnaire.

Demographic Questionnaire

Thank you for taking part in the current men's workshop. Please fill out the following questions in the spaces provided, write or tick the most appropriate option(s).

1. Age: ___________________
2. Which gender to you identify with?:

☐ Male
☐ Female
☐ Other (please specify) ___________________

3. How would you describe your ethnicity?:

☐ White British
☐ Any other White background
☐ Black African
☐ Black Caribbean
☐ Mixed White & Black African
☐ Mixed White & Black Caribbean
☐ Any other Black/African/Caribbean background
☐ Indian
☐ Pakistani
☐ Bangladeshi
☐ Chinese
☐ Any other Asian background
☐ Arab
☐ Other (please specify) ____________________________

4. What level of study are you completing?:

☐ Foundation
☐ Undergraduate
☐ Postgraduate (master's or PhD)
☐ Other (please specify) _________________

5. What are you currently studying? _____________________

6. Which faculty do you belong too?:
   - ☐ Arts and Humanities
   - ☐ The Dickinson Poon School of Law
   - ☐ Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care
   - ☐ King's Business School
   - ☐ Life Science & Medicine
   - ☐ Institute of Psychiatry, Psychology & Neuroscience
   - ☐ Dentistry, Oral & Craniofacial Sciences
   - ☐ Natural & Mathematical Sciences
   - ☐ Social Science & Policy
   - ☐ Other (please specify) _______________

7. Have you sought help from professional services for your mental health before? (e.g. Counselling Services, University well-being services, General Practitioner, A&E)
   - ☐ Yes
   - ☐ No
   - ☐ Prefer not to say

Appendix 5.13: Intervention posters.

RESEARCH & WELL-BEING OPPORTUNITY

This is a workshop for all male students that has been co-designed with other male students from KCL. This is an informal and social workshop providing you the opportunity to network with other male students whilst learning more about mental health and managing stressors whilst at university. The content covered will be of importance when coping with psychological difficulties either now or in the future. This is a 2-hour group workshop. Snacks are provided!

This project is funded by the National Institute of Health Research (NIHR) and seeks to improve the mental well-being of male students currently at KCL.

Contact Details:
Email: ilyas.sagar-ouriaghli@kcl.ac.uk
Mobile/Whattsap: 07502183157

CO-DESIGNED WITH OTHER STUDENTS FOR KCL MALE STUDENTS!

TAKE PART IN OUR FIFA TOURNAMENT TO WIN £50

x2 60-MINUTE WORKSHOP

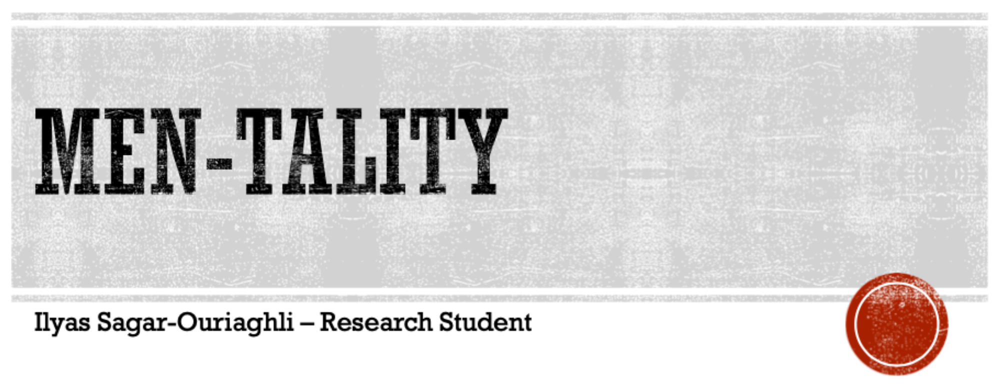
A PROJECT FUNDED BY THE NIHR

Pilot Intervention Poster Version 1 10.07.19
Ethical Clearance Reference Number: LRS-18/19-13460

KING'S College LONDON
NIHR | Maudsley Biomedical Research Centre
PSYCHOLOGICAL STRENGTH FOR MEN
Wednesday the 15TH & 22ND January 2020 from 1:15PM – 3:15PM
Bush House - South East Wing, Activity Room E (8th Floor)
Contact to ilyas.sagar-ouriaghli@kcl.ac.uk to sign up
This is a workshop for all male students that has been co-designed with other male students from KCL. This is a workshop aiming to provide you with skills and techniques on how to improve your psychological strength and succeed at university. This includes, time management, problem solving and action planning that will be useful to you either now or in the future. This is a 2-hour group workshop. Snacks are provided!
This project is funded by the National Institute of Health Research (NIHR) and seeks to improve the mental well-being of male students currently at KCL.
CO-DESIGNED WITH OTHER STUDENTS FOR KCL MALE STUDENTS!
TAKE PART IN OUR
FIFA TOURNAMENT TO WIN £50
x2 60-MINUTE WORKSHOP
Psychological Strength for Men Poster Version 3 22.11.19
Ethical Clearance Reference Number: LRS-18/19-13460

MAN CAVE
EVERY WEDNESDAY
29TH JANUARY - 19TH FEBRUARY 2020
1PM – 4PM
Bush House South East Wing - SU
This is a drop-in for MALE identifying students to relax, play games and socialise. There is also information about sports, health and well-being as part of a research project.
KING'S College LONDON
NIHR | Maudsley Biomedical Research Centre

Appendix 5.14: Intervention PowerPoint slides for Men-Tality (Intervention 1).



Ilyas Sagar-Ouriaghli – Research Student

PLEASE COMPLETE ALL THE QUESTIONS

- Consent Form
- Demographic Questionnaire
- ATSPPHS
- AHSQ

Pilot Intervention Baseline Battery Version 1 02.09.19
Ethical Clearance Reference Number: LRS-18/19-13460

Men-tality: Baseline Questionnaires

PLEASE DON'T FORGET YOUR K-NUMBER

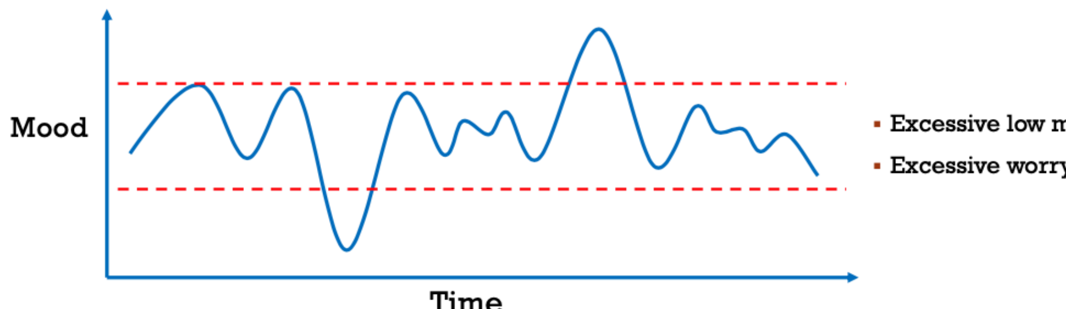
K-number: ______________

Thank you for taking part in the current men's mental health workshop. Please fill out the following questions in the spaces provided, write or tick the most appropriate option(s).

& of course, all your responses will be anonymous

SESSION 1

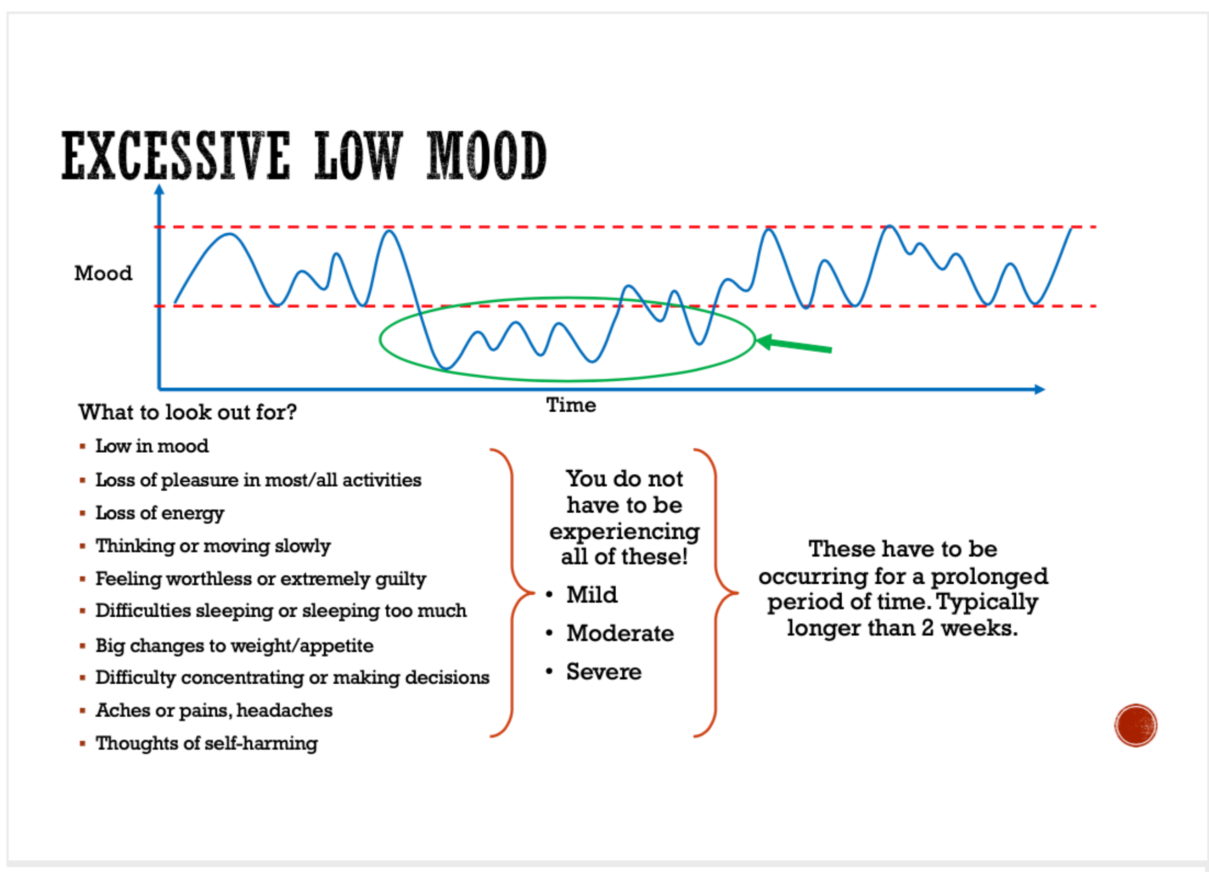
WHAT IS MENTAL HEALTH?



- Excessive low mood
- Excessive worry

What are the stressors at university?

- …



EXCESSIVE LOW MOOD CASE STUDY

Malik has settled at university and is doing well on his course. He spends a lot of time with his friends but often finds it hard to concentrate and pay attention to what other people are saying to him. For the last month, Malik hasn't enjoyed going out with friends and no longer enjoys the things he used to like doing. He also finds himself laying awake at night and unable to eat throughout the day.

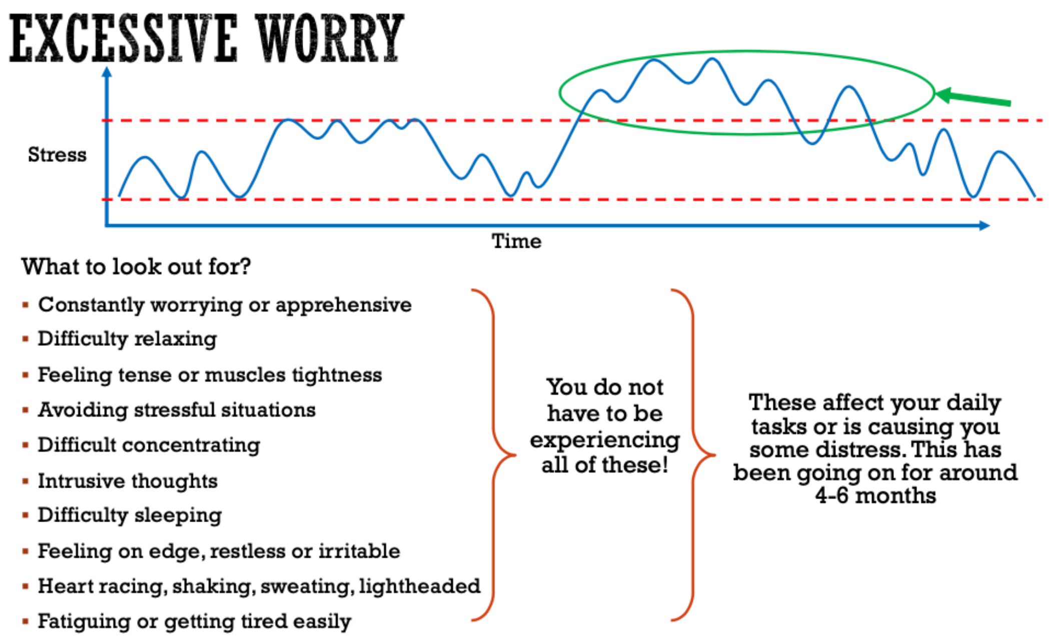
Difficulty concentrating

Loss of pleasure

Difficulty sleeping

Changes to appetite

1 month

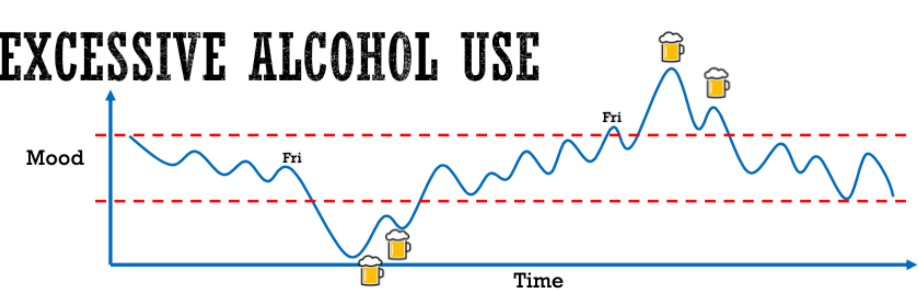


EXCESSIVE WORRY CASE STUDY

Tom is in his first year of university. For the past several months he has done well academically and appears quite extroverted, starting university has been difficult and his grades have been suffering. He is afraid of drawing attention to himself in his classes by asking "stupid questions" and has avoided meeting with his lecturers. He experiences particular difficulty in seminars, where there is less opportunity to hide than in a lecture theatre. He feels his mouth getting dry and his heart racing when even thinking about trying to get help. He has become more withdrawn and recently began missing classes.

Grades suffering | Avoiding stressful situations | Heart racing and dry mouth | Several months

EXCESSIVE ALCOHOL USE



Drinking may mask or hide difficulties!

How much is too much?

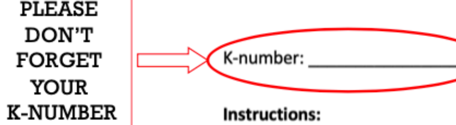
- 14 units per week is the upper limit for over 18's
- That's the equivalent to x6 pints of 4% beer
- Excessive drinking can interfere with sleep!
- Excessive drinking can increase stress and lower your mood over the long term!

QUICK SELF-CHECK UP

NIHR | Maudsley Biomedical Research Centre

PLEASE DON'T FORGET YOUR K-NUMBER

Men-tality: WEMWBS



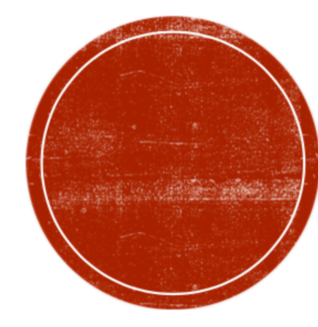
Instructions:
Below are some statements about feelings and thoughts. Please circle the number that best describes your experience of each **over the last 2 weeks**

No.	Item	None of the time	Rarely	Some of the time	Often	All of the time
1.	I've been feeling optimistic about the future	1	2	3	4	5
2.	I've been feeling useful	1	2	3	4	5

TAKE RESPONSIBILITY

- It's good to take responsibility and find appropriate support
- Support includes talking to your friends, family and/or professionals
- Other types of support may include:
  - Seeing your GP
  - Counselling
  - Medication
  - Others forms of therapy

WHY DON'T MEN ASK FOR HELP?

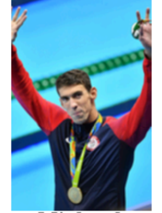


OTHER MALE FIGURES!

Stormzy

Chris Evans

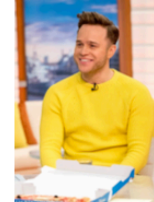
Ryan Reynolds


Michael Phelps

The Royals

Trevor Noah

Kid Cudi


Olly Murs

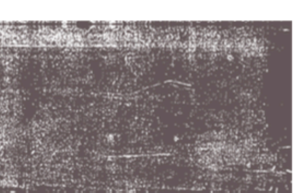
Dwayne Johnson

VIDEO CLIP 1

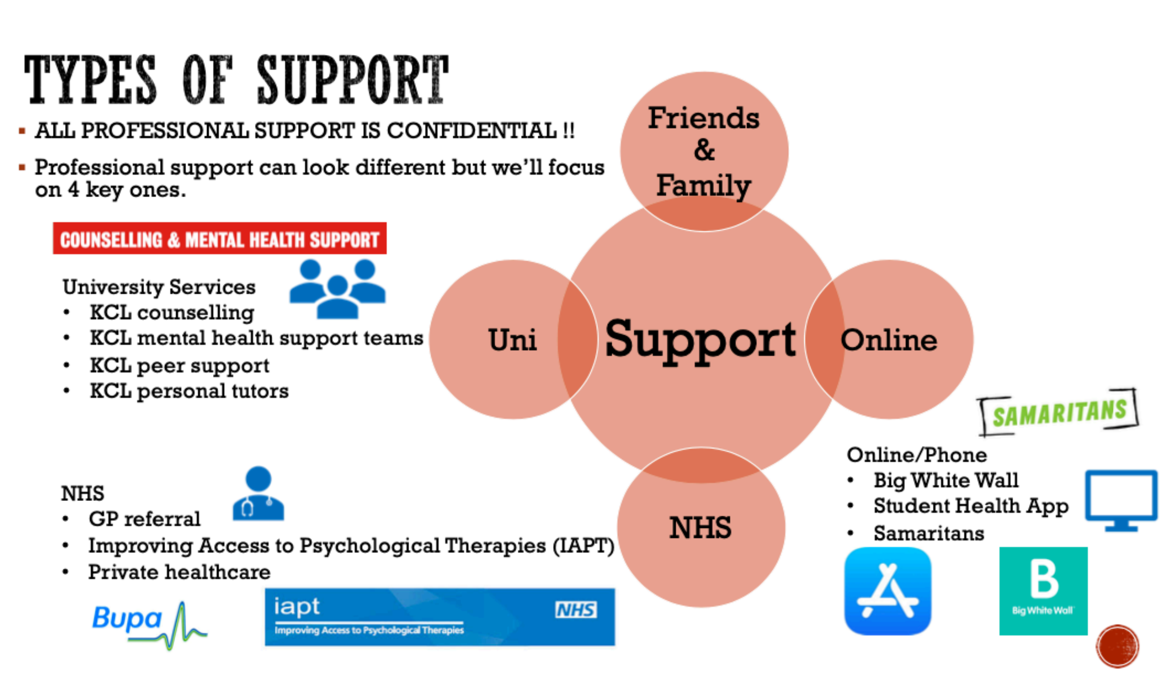
- BBC Man UP documentary.
  - Josh Denzel (From ITV's Love Island 2018)
  - James Ellington (2017 GB 100m & 200m sprinter)
  - David Cox (Scottish footballer)
  - Olu Maintain (Semi-professional footballer)

https://www.youtube.com/watch?v=z7t19NWJ85A&t=220s

1:40 – 4:40



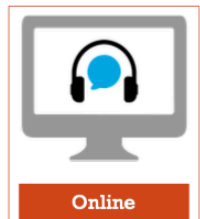
10 MINUTE
BREAK


TYPES OF SUPPORT
ALL PROFESSIONAL SUPPORT IS CONFIDENTIAL !!
Professional support can look different but we'll focus on 4 key ones.
COUNSELLING & MENTAL HEALTH SUPPORT
University Services
KCL counselling
KCL mental health support teams
KCL peer support
KCL personal tutors
NHS
GP referral
Improving Access to Psychological Therapies (IAPT)
Private healthcare
Bupa
iapt
NHS
Improving Access to Psychological Therapies
Friends & Family
Uni
Support
Online
NHS
SAMARITANS
Online/Phone
Big White Wall
Student Health App
Samaritans
Big White Wall

THE CHOICE IS YOURS

- Different types of support work better for different people

This will be different for every person!



This will vary across websites.

Big White Wall
- Peer support
- Self-management resources
- Information & advice
- Online therapy sessions (text, audio and video)
- No waiting lists

This depends on what support you access.

Personal Tutors

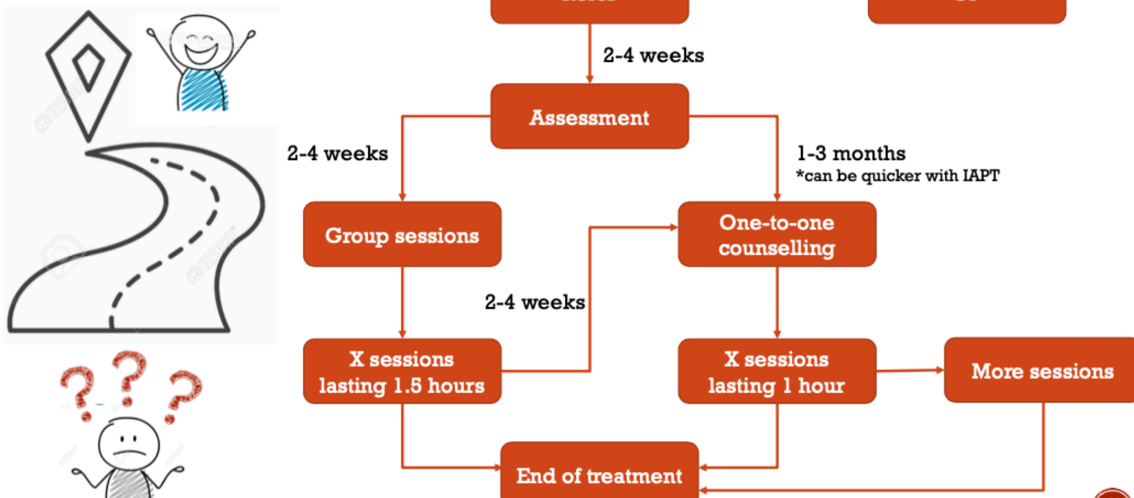
Counselling Services
- First appointment
- Identify what may work best
- Offered different types
- (groups, individual)
- Can receive 4-5 sessions of individual counselling

Access via your GP or self-refer to IAPT

GP
- Initial assessment
- Can offer medication
- Referral

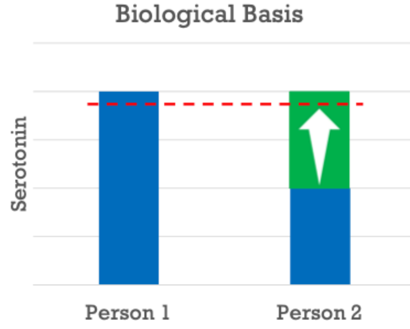
IAPT
- Initial assessment
- Offered different types (groups, individual)

PROFESSIONAL SUPPORT ROAD MAP



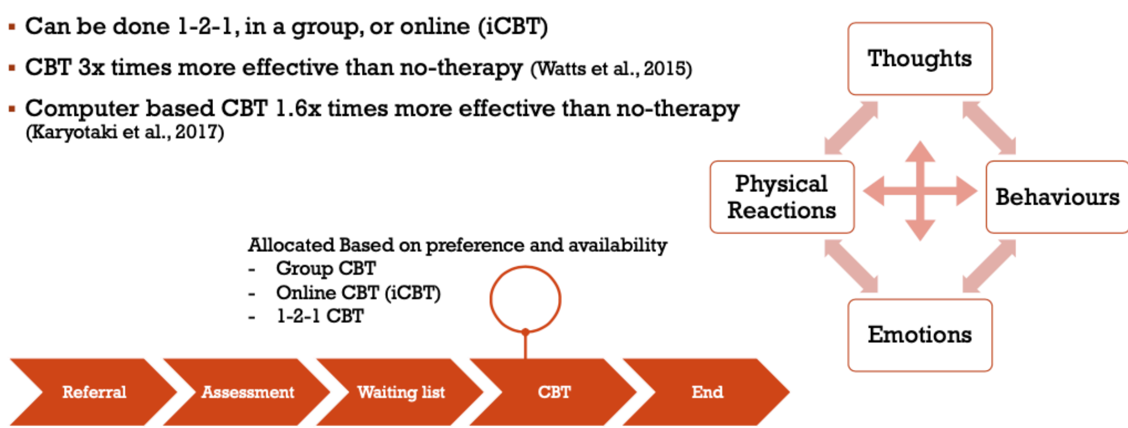
DOES IT WORK?: MEDICATION

- Medication does work! It can help to restore chemical imbalances in the brain
- Some people may have lower serotonin than others. Medication can boost serotonin levels
- Medication helps improve both low mood and stress (Cipriani et al., 2018, Arroll et al., 2016, Jakubovski et al., 2019)
- Should be prescribed for the short term



DOES IT WORK?: THERAPY

- Different types! – most commonly used is Cognitive Behavioural Therapy (CBT)
- Can be done 1-2-1, in a group, or online (iCBT)
- CBT 3x times more effective than no-therapy (Watts et al., 2015)
- Computer based CBT 1.6x times more effective than no-therapy (Karyotaki et al., 2017)



- This is different from counselling!

TAKE AWAY POINTS

- Signs of low mood, worry and drinking!
- It's important to look after yourself, take responsibility and find support when needed
  - Friends & Family
  - University Support Services
  - Counselling and/or Medication
- Getting professional support can be slow and it's better to ask sooner rather than later!
- There are lots of things that can be effective! The choice is YOURS

THANKS!

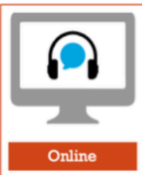
- Next week from 1:15pm – 3:15pm at ARC room
- We'll look at:
  - Relaxation Techniques
  - Problem-solving
  - Time Management
  - Developing an Action plan

SESSION 2

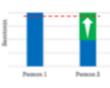
SESSION 1 RECAP

- We spoke about stressors at university which may affect your mental health
- We had a look at signs of low mood and worry & their duration

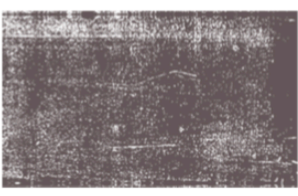
- We had a look at male celebrities who have achieved lots despite mental health difficulties
- We spoke about different kinds of support
  - Family and friends
  - Online Support
  - University support services
  - NHS services

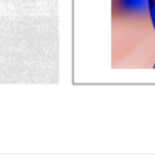


- Lastly, we looked at the effectiveness of medication and therapy
  - Key point was they they both work and you have the choice of either or both!



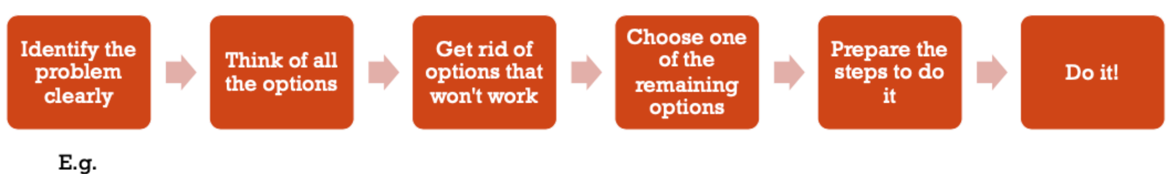
0:47 - 4:09





RELAXATION TECHNIQUES

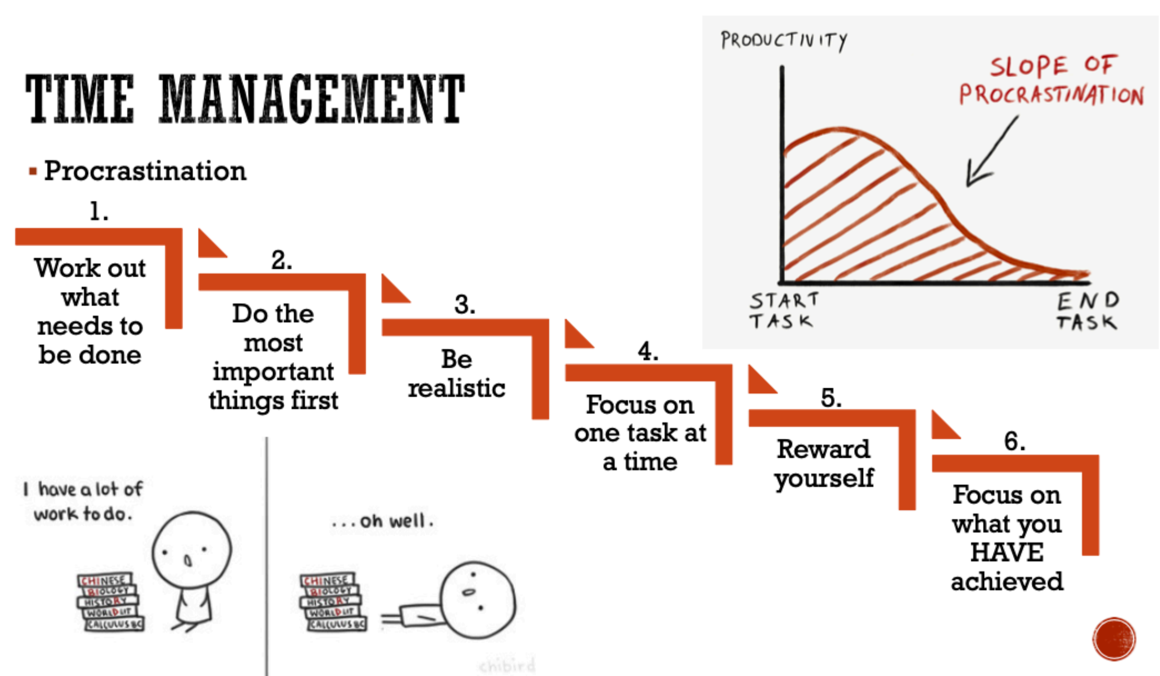
PROBLEM-SOLVING



E.g.
Getting
£1million in
6 months

Other things to consider:

- Can the problem be solved?
- Do one thing at a time
- Work on changing yourself – not others
- Sometimes doing nothing is best!



POOR TIME MANAGEMENT CASE STUDY

Adam often sleeps in and finds himself rushing to get to his lectures, or sometimes arrives late. After lectures he spends time talking in the library before going home. He wants to catch up on lecture notes and make a start on his coursework but puts it off for another day. Every Wednesday he finishes Uni early and goes home to nap and watch Netflix until the evening. When Adam does sit down to do work, he'll spend 8-10 hours in the library but gets distracted easily and only does around 1-2 hours of productive work.

Be more organised - Alarm

Avoidance – Do the most important things first

Work out what needs to be done

Be realistic

Take breaks – Reward yourself

Focus on what you HAVE achieved

ACTION PLANNING

Step 1

Identify 3 key problems

Step 2

List 3 things you can do in the next month

QUICK SELF-CHECK UP

PLEASE DON'T FORGET YOUR K-NUMBER

Men-tality: WEMWBS

K-number: _______________

Instructions:
Below are some statements about feelings and thoughts. Please circle the number that best describes your experience of each **over the last 2 weeks**

No.	Item	None of the time	Rarely	Some of the time	Often	All of the time
1.	I've been feeling optimistic about the future	1	2	3	4	5
2.	I've been feeling useful	1	2	3	4	5

SELF CHECK-UP

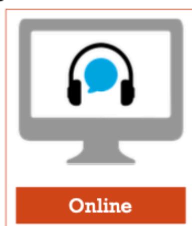
1. Add your scores up
2. Higher scores indicate better mental health (min 14, max 70)
3. However, average is around 50

No.	Item	None of the time	Rarely	Some of the time	Often	All of the time
1.	I've been feeling optimistic about the future	1	2	3	4	5
2.	I've been feeling useful	1	2	3	4	5
3.	I've been feeling relaxed	1	2	3	4	5
4.	I've been feeling interested in other people	1	2	3	4	5
5.	I've had energy to spare	1	2	3	4	5
6.	I've been dealing with problems well	1	2	3	4	5
7.	I've been thinking clearly	1	2	3	4	5
8.	I've been feeling good about myself	1	2	3	4	5
9.	I've been feeling close to other people	1	2	3	4	5
10.	I've been feeling confident	1	2	3	4	5
11.	I've been able to make up my own mind about things	1	2	3	4	5
12.	I've been feeling loved	1	2	3	4	5
13.	I've been interested in new things	1	2	3	4	5
14.	I've been feeling cheerful	1	2	3	4	5

LOW SCORES?

- If anyone thinks their scores are 'low' then maybe consider some of the options we've discussed throughout these sessions

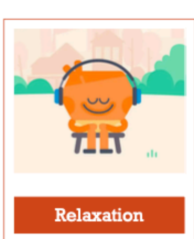
Family & Friends



Online

University

NHS



Relaxation

Problem Solving

Time Management

Action Planning

PLEASE COMPLETE ALL THE QUESTIONS

- Acceptability Questionnaire
- ATSPPHS
- AHSQ

- FU in person or online?
  - December 2018
  - January 2019

PLEASE DON'T FORGET YOUR K-NUMBER

Ethical Clearance Reference Number: LRS-18/19-13460

Men-tality: Post-Questionnaires

K-number: ________________

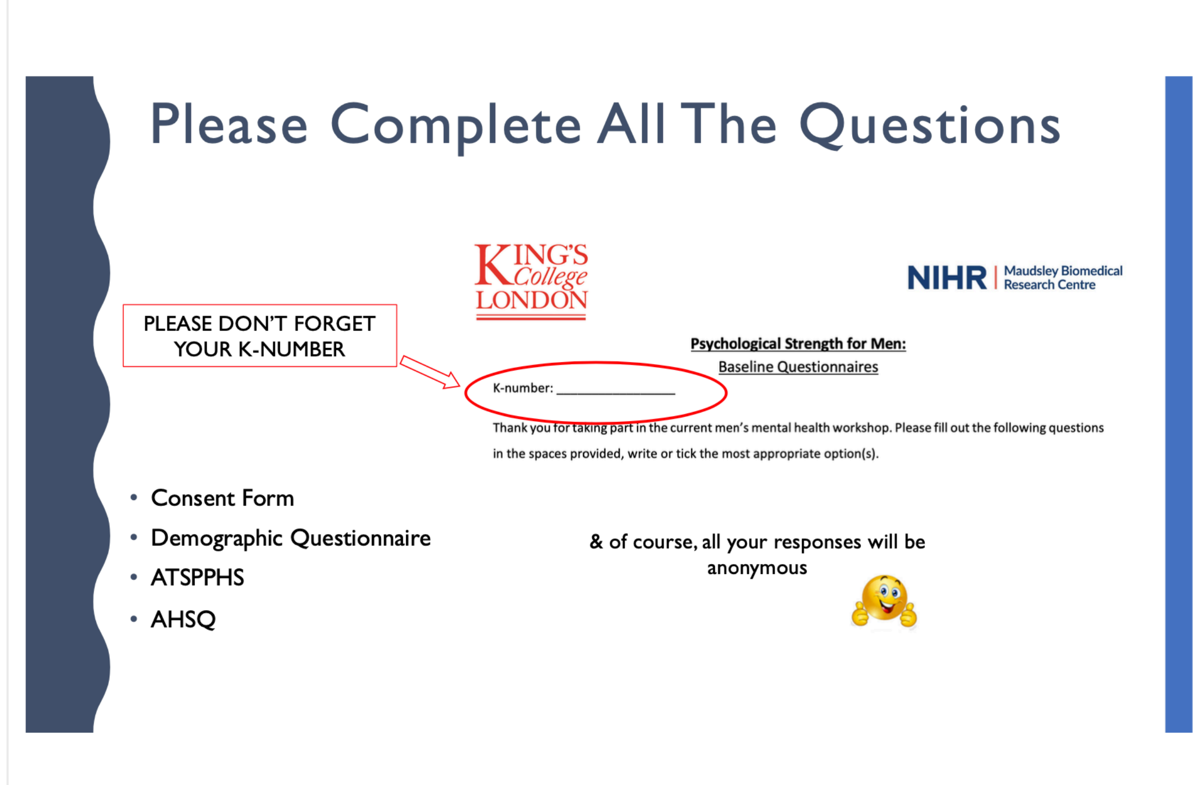
TFAQ

Instructions:

Read each question carefully and indicate your response using the scale below (1-2-3-4-5).

& of course, all your responses will be anonymous

Appendix 5.15: Intervention PowerPoint slides for Improving Your Psychological Strength (Intervention 2).

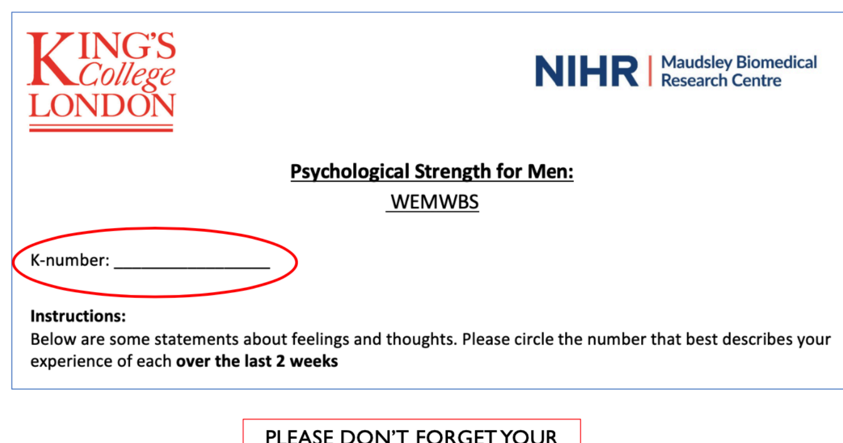


SESSION 1

Session Overview

- Part of my PhD research project – thankyou for taking part!
- Aim to focus on skills and techniques that can improve your psychological strength and well-being.
  - ➢ Action-planning
  - ➢ Goal setting + monitoring
  - ➢ Problem-solving
  - ➢ Relaxation techniques
  - ➢ Time management
- Session 2
  - ➢ Finding support
  - ➢ What to do if things don't improve?

Quick Self-Evaluation



KING'S College LONDON

NIHR | Maudsley Biomedical Research Centre

Psychological Strength for Men:

WEMWBS

K-number: ________________

Instructions:
Below are some statements about feelings and thoughts. Please circle the number that best describes your experience of each **over the last 2 weeks**

PLEASE DON'T FORGET YOUR K-NUMBER

Action-Planning

Low mood, confused, lonely, irritable, tired, etc…

Feel more isolated, friends stop trying and make less effort

Don't want to soicalise, don't pick up phone

Sleep during the day and binge TV

Feel more tired Less energy to do tasks

Avoid working, gaming or browse the internet

Nothing changes, fall further behind on work

Thinking about why I'm feeling this way and criticize self

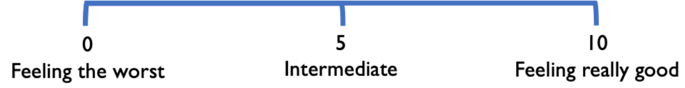
Worsens mood and reduces motivation

Comfort eating with crisps and sweets

Feel tired, gain weight and disgusted with self

Detective Work

- If you're unsure what behaviours might be affecting your mood negatively, try a diary.
- Log your activities and your mood on a scale from 0 to10



<table>
<tr><th>Time</th><th>Monday</th><th>Tuesday</th><th>Wednesday</th><th>Thursday</th><th>Friday</th><th>Saturday</th><th>Sunday</th></tr>
<tr><td>8-10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>10-12</td><td></td><td rowspan="3">Uni (6)</td><td rowspan="2">TV (4)</td><td rowspan="2">Uni (7)</td><td></td><td></td><td></td></tr>
<tr><td>12-2</td><td></td><td rowspan="2">Home (4)</td><td></td><td></td></tr>
<tr><td>2-4</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>4-6</td><td></td><td></td><td rowspan="2">Sports (8)</td><td></td><td rowspan="3">With friends (9)</td><td></td><td></td></tr>
<tr><td>6-8</td><td></td><td rowspan="2">TV (4)</td><td rowspan="2">Gaming (5)</td><td></td><td></td></tr>
<tr><td>8-10</td><td></td><td></td><td></td><td></td></tr>
<tr><td>10-12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Action-Planning pt2

- Focus is to 'break' each circle off by taking meaningful 'action'.
- Positive action will lead to more positive experiences which will improve well-being.
- A lot of people say they will do something meaningful when they're motivated or 'feel like it' – have an action-plan!

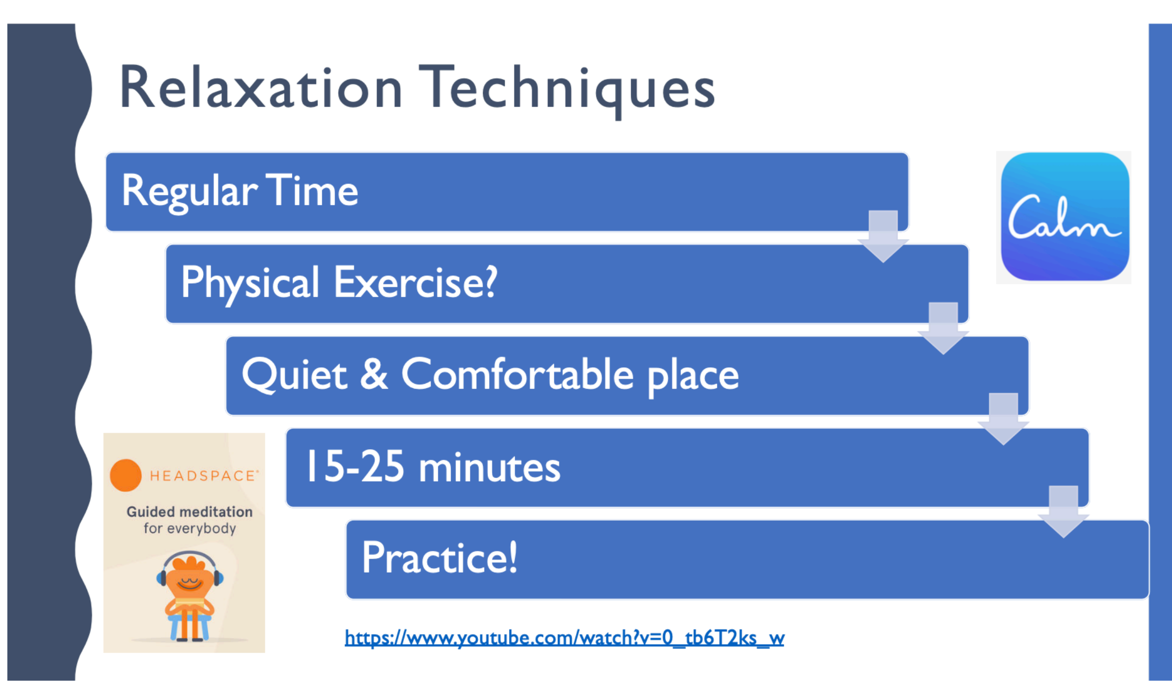
Selecting your action…

- Identify your values: these are like a compass on how to live by. Values can never be completed as there is always something more you can do.
  - E.g. "to be a healthy person"
- Identify a short, medium and/or long-term goal so you can fulfil your value. This should be specific, measurable, achievable, realistic and have a time frame.
  - E.g. "to go to the gym twice a week"
- Stick to your plan and focus on one thing at a time!

Have An Activity-Schedule

Activity	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Gym		✓		✓			
Mood	5	7	6	8	6	4	3

- As you start to do more, you may start to have more motivation to do more things.
- Just add a few more activities to your schedule – but remember to go slow!



Goal Setting + Monitoring

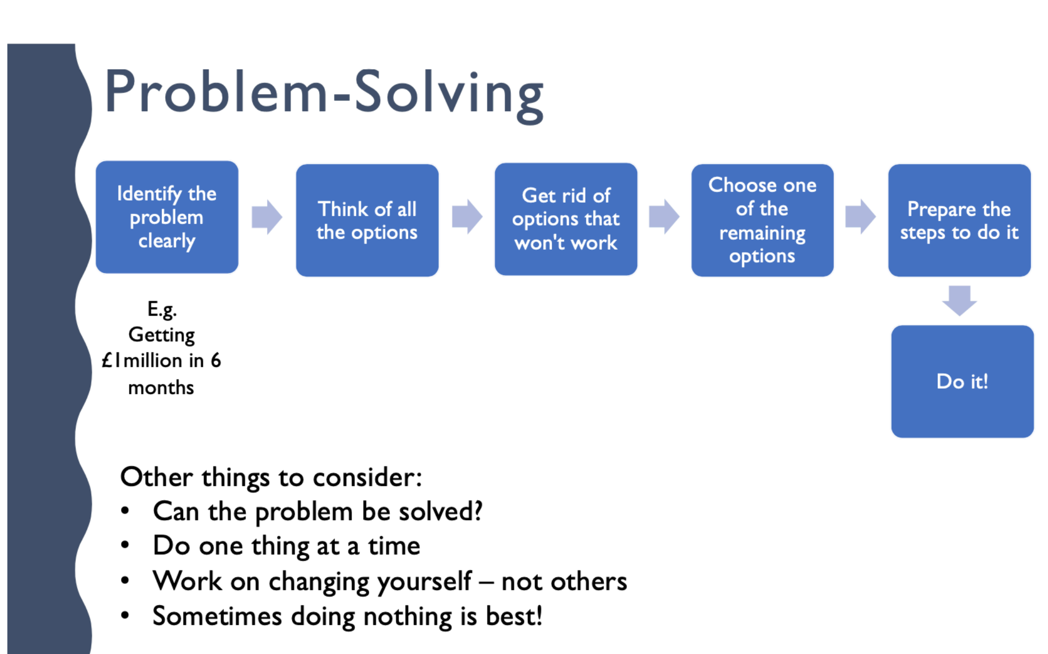
- Identify your values – these are not necessarily achievable and is your 'life compass'
- Rate from 1-10 how important it is to you (1 = not important, 10 = extremely important)
- Rate from 1-10 how consistent your actions have been towards that value in the **last week.**

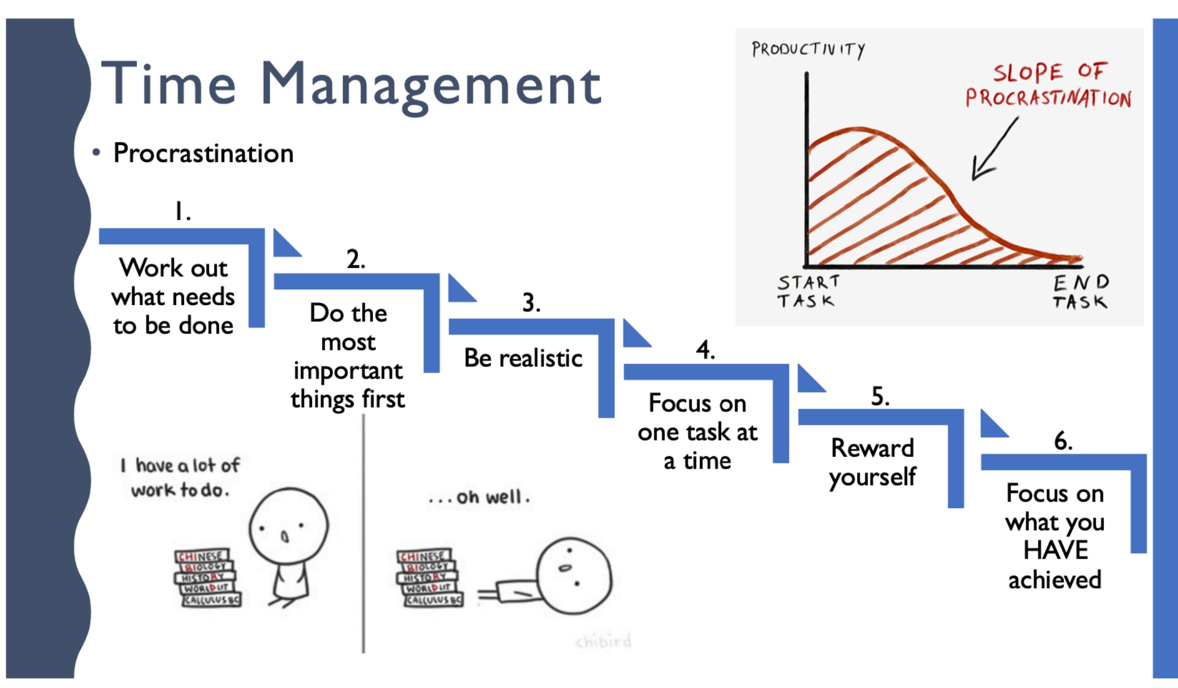
Value	Importance	Consistency
Family relations (relationships other than couples or parenting)		
Couples / marriage / intimate relationships		
Parenting		
Friendships / Social relationships		
Employment		
Education / Training		
Recreation		
Spirituality		
Community Life		
Physical Well-Being		

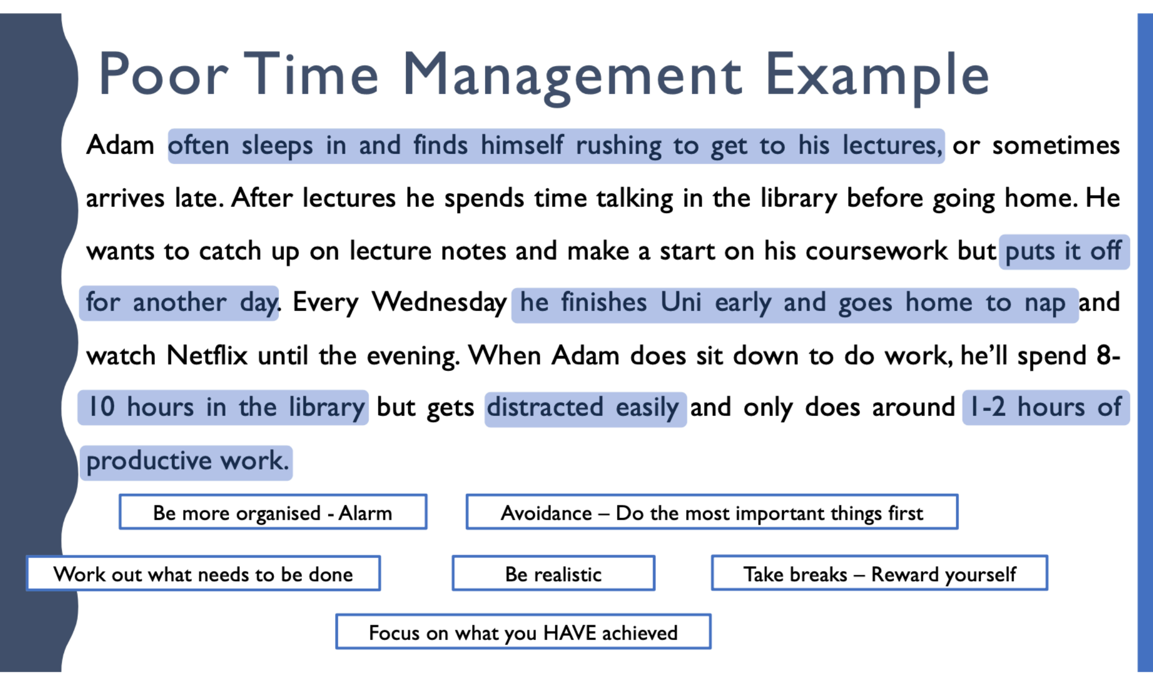
Goal Setting + Monitoring Pt 2

- Set a goal that is short, medium or long term
- Goals should be SMART goals.
- Keep a track of your goals daily, weekly or monthly
- Review your goals
  - Are you on track?
  - Is your goal realistic and achievable?
  - Have your values / goals changed?

10 MINUTE BREAK

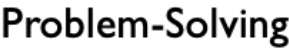



Time Management
Procrastination
1.
Work out what needs to be done
2.
Do the most important things first
3.
Be realistic
4.
Focus on one task at a time
5.
Reward yourself
6.
Focus on what you HAVE achieved
PRODUCTIVITY
SLOPE OF PROCRASTINATION
START TASK
END TASK
I have a lot of work to do.
...oh well.


Poor Time Management Example
Adam often sleeps in and finds himself rushing to get to his lectures, or sometimes arrives late. After lectures he spends time talking in the library before going home. He wants to catch up on lecture notes and make a start on his coursework but puts it off for another day. Every Wednesday he finishes Uni early and goes home to nap and watch Netflix until the evening. When Adam does sit down to do work, he'll spend 8-10 hours in the library but gets distracted easily and only does around 1-2 hours of productive work.
Be more organised - Alarm
Avoidance – Do the most important things first
Work out what needs to be done
Be realistic
Take breaks – Reward yourself
Focus on what you HAVE achieved

Recap

Action-planning
- Focus on building more positive goals to create 'momentum'
- Break negative 'cycles'
- Stick to your plan! Not when you 'feel like it'



Relaxation Techniques
- Calm, Headspace and YouTube are all good resources for videos
- Practice regularly!

Goal Setting
- Identify your life values before setting goals
- Make sure goals are SMART

Problem-Solving
- Identify, Options, Prepare steps & Do it!

Time Management
- Organise, prioritise, small steps, rewards and positivity

Next Week

- Next session is **22nd January** from 1:15pm – 3:15pm Activity Room E (same time and place)

- Recap
- Building support
- What to do if things don't improve?

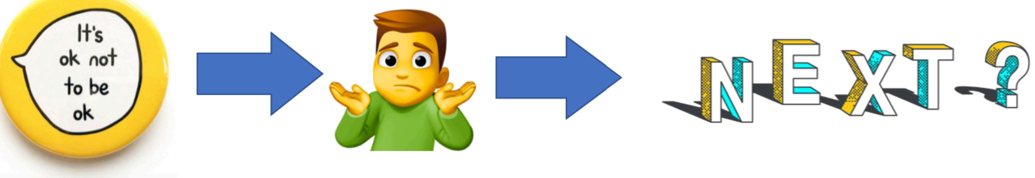
SESSION 2

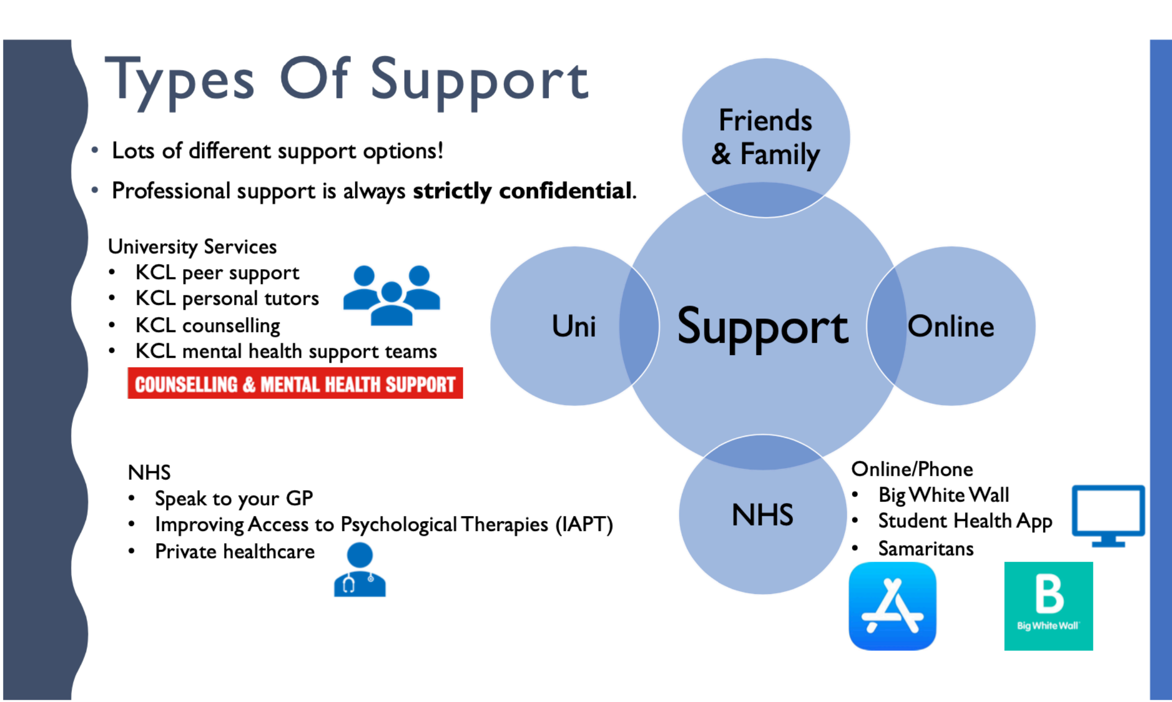
Session Overview

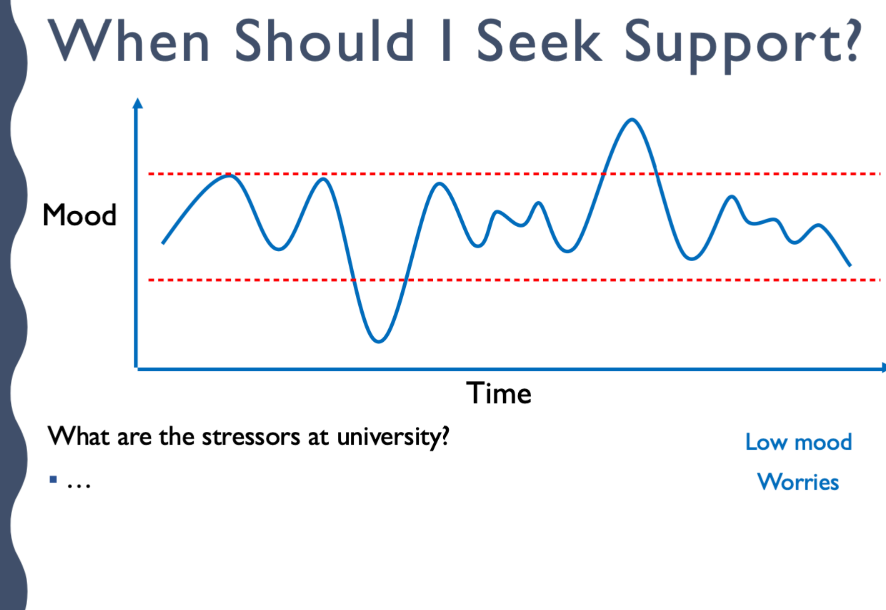
- Last week, we focused on skills and techniques to improve psychological strength and well-being.
  - ➢ Action-planning
  - ➢ Goal setting + monitoring
  - ➢ Problem-solving
  - ➢ Relaxation techniques
  - ➢ Time management
- Today's focus will look at:
  - ➢ Finding support
  - ➢ What to do if things don't improve?

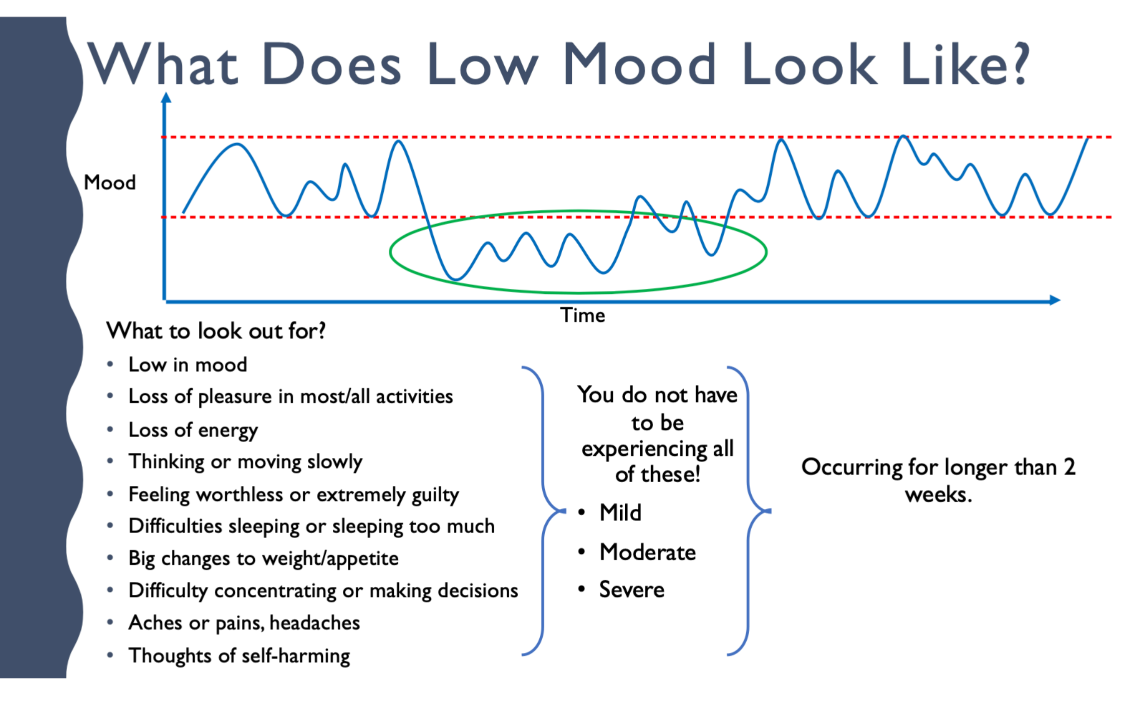
Take Responsibility

- It's good to take responsibility and find appropriate support
- Support includes talking to your friends, family and/or professionals
- Other types of support may include:
  - Speaking to your doctor
  - Speaking to a coach or counsellor
  - Medication
  - Other options






When Should I Seek Support?
Mood
Time
What are the stressors at university?
▪ …
Low mood
Worries


What Does Low Mood Look Like?
Mood
Time
What to look out for?
• Low in mood
• Loss of pleasure in most/all activities
• Loss of energy
• Thinking or moving slowly
• Feeling worthless or extremely guilty
• Difficulties sleeping or sleeping too much
• Big changes to weight/appetite
• Difficulty concentrating or making decisions
• Aches or pains, headaches
• Thoughts of self-harming
You do not have to be experiencing all of these!
• Mild
• Moderate
• Severe
Occurring for longer than 2 weeks.

Low Mood Example

Malik has settled at university and is doing well on his course. He spends a lot of time with his friends but often finds it hard to concentrate and pay attention to what other people are saying to him. For the last month, Malik hasn't enjoyed going out with friends and no longer enjoys the things he used to like doing. He also finds himself laying awake at night and unable to eat throughout the day.

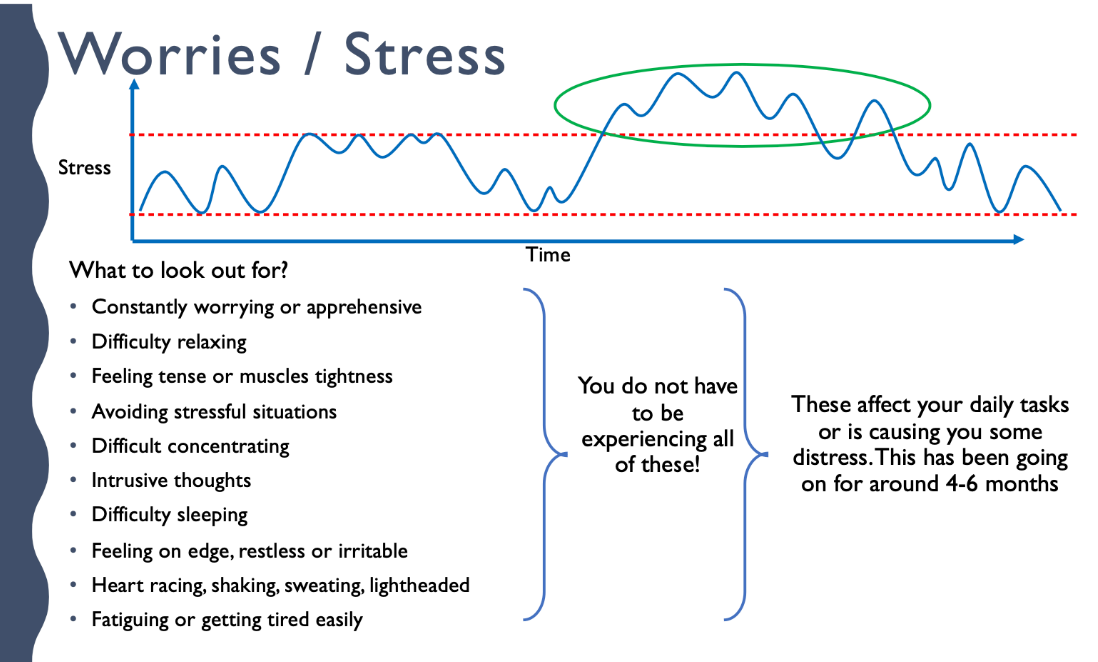
Difficulty concentrating

Loss of pleasure

Difficulty sleeping

Changes to appetite

I month



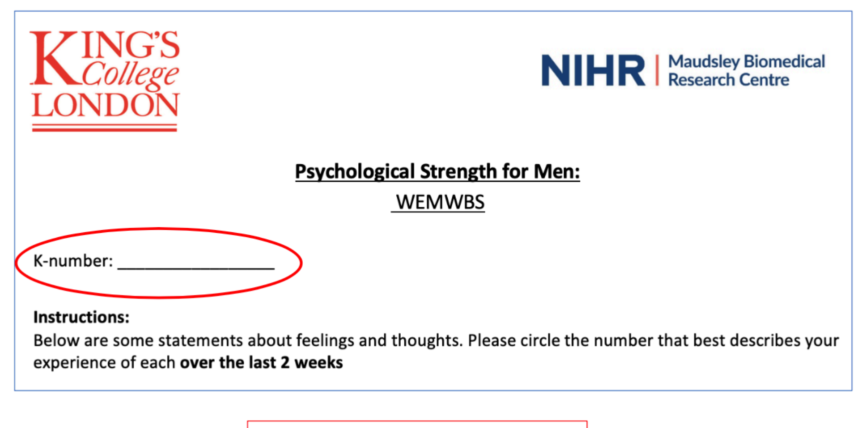
Excessive Worry Case Study

Tom is in his first year of university. For the past several months, after starting university things have been difficult and his grades have been suffering. He is worried about drawing attention to himself in his classes by asking "stupid questions" and has avoided meeting with his lecturers. He experiences particular difficulty in seminars, where there is less opportunity to hide than in a lecture theatre. He feels his mouth getting dry and his heart racing when even thinking about trying to get help. He has become more withdrawn and recently began missing classes.

Grades suffering | Avoiding stressful situations | Heart racing and dry mouth | Several months

10 MINUTE BREAK

Quick Self-Evaluation pt2



KING'S College LONDON

NIHR | Maudsley Biomedical Research Centre

Psychological Strength for Men:

WEMWBS

K-number: ________________

Instructions:
Below are some statements about feelings and thoughts. Please circle the number that best describes your experience of each **over the last 2 weeks**

PLEASE DON'T FORGET YOUR K-NUMBER

Self Check-Up

1. Add your scores up
2. Higher scores indicate better psychological well-being (min 14, max 70)
3. However, average is around 50

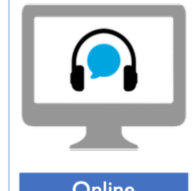
No.	Item	None of the time	Rarely	Some of the time	Often	All of the time
1.	I've been feeling optimistic about the future	1	2	3	4	5
2.	I've been feeling useful	1	2	3	4	5
3.	I've been feeling relaxed	1	2	3	4	5
4.	I've been feeling interested in other people	1	2	3	4	5
5.	I've had energy to spare	1	2	3	4	5
6.	I've been dealing with problems well	1	2	3	4	5
7.	I've been thinking clearly	1	2	3	4	5
8.	I've been feeling good about myself	1	2	3	4	5
9.	I've been feeling close to other people	1	2	3	4	5
10.	I've been feeling confident	1	2	3	4	5
11.	I've been able to make up my own mind about things	1	2	3	4	5
12.	I've been feeling loved	1	2	3	4	5
13.	I've been interested in new things	1	2	3	4	5
14.	I've been feeling cheerful	1	2	3	4	5

The Choice Is Yours

Different types of support work better for different people

Family & Friends

This will be different for every person!



Online

This will vary across websites.

Big White Wall

- Peer support
- Self-management resources
- Information & advice
- Online therapy sessions (text, audio and video)
- No waiting lists

University

This depends on what support you access.

Personal Tutors

Counselling Services

- First appointment
- Identify what may work best
- Offered different types
- (groups, individual)
- Can receive 4-5 sessions of 1:1

NHS

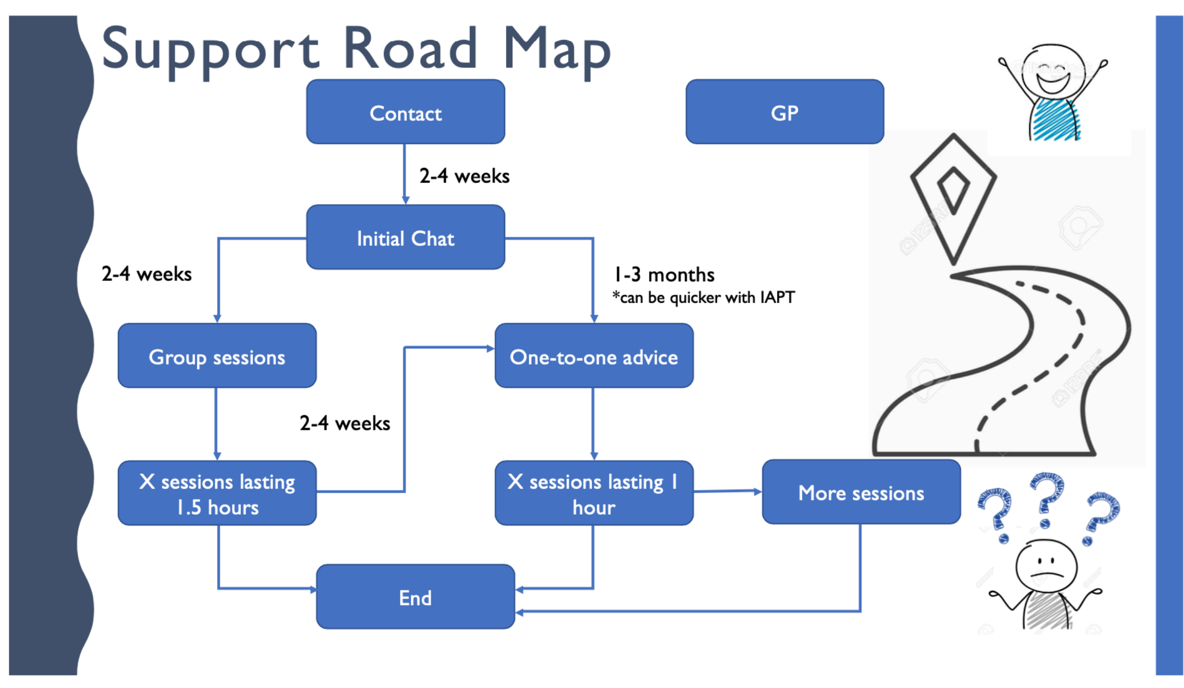
Talk to your Doctor or IAPT

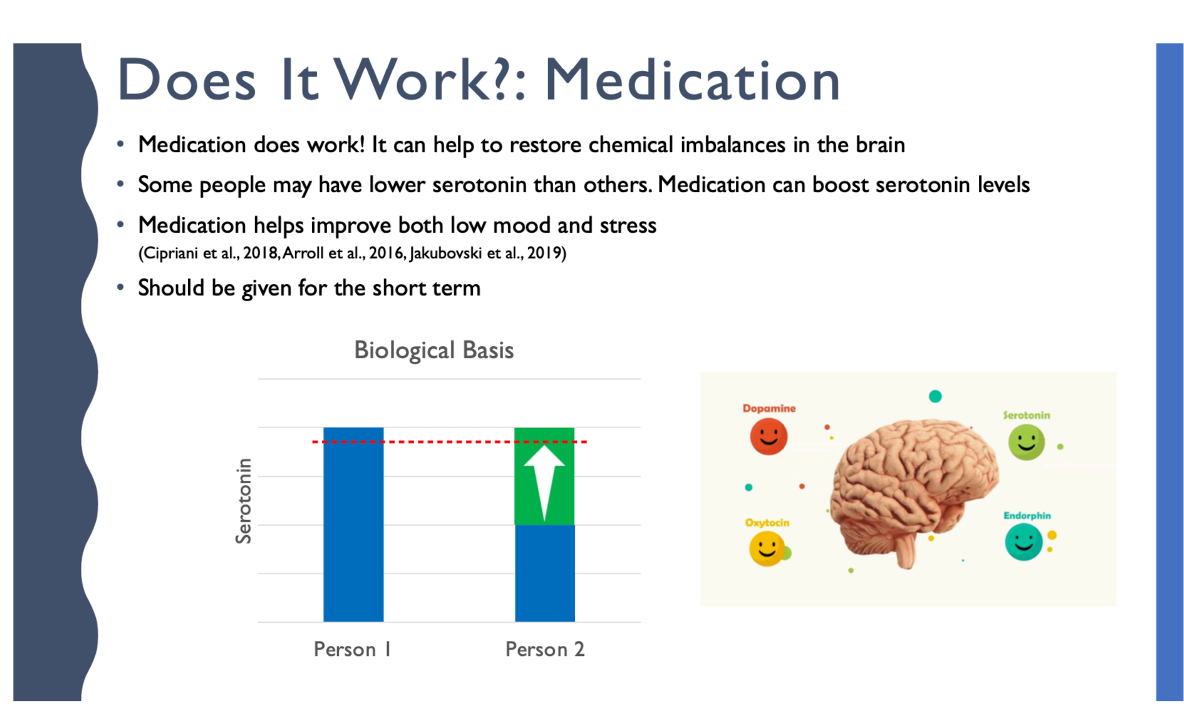
GP

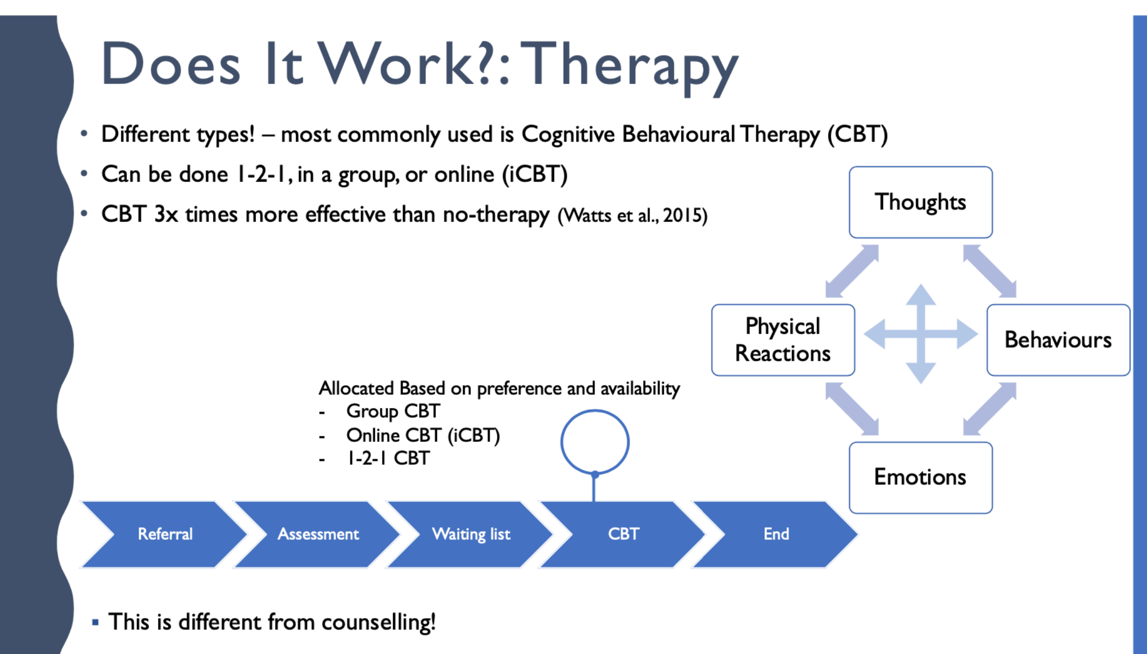
- Initial chat
- Can offer medication
- Referral

IAPT

- Initial chat
- Offered different types (groups, individual)

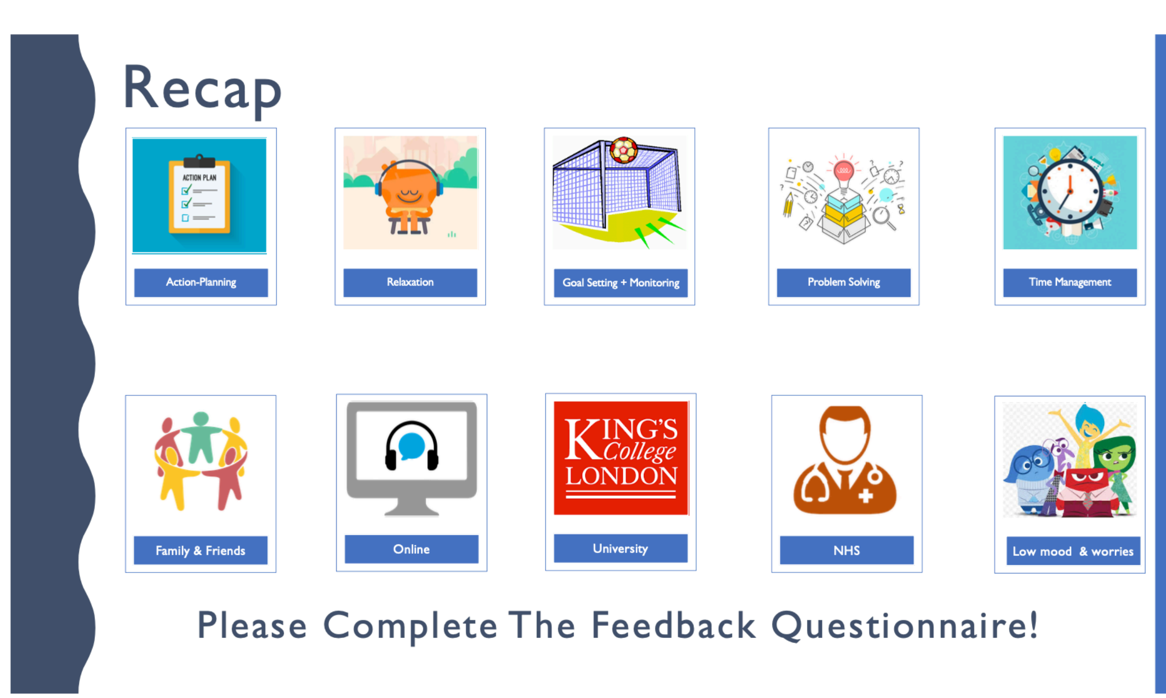

Support Road Map
Contact
GP
2-4 weeks
Initial Chat
2-4 weeks
1-3 months
*can be quicker with IAPT
Group sessions
One-to-one advice
2-4 weeks
X sessions lasting 1.5 hours
X sessions lasting 1 hour
More sessions
End


Does It Work?: Medication
Medication does work! It can help to restore chemical imbalances in the brain
Some people may have lower serotonin than others. Medication can boost serotonin levels
Medication helps improve both low mood and stress
(Cipriani et al., 2018, Arroll et al., 2016, Jakubovski et al., 2019)
Should be given for the short term
Biological Basis
Serotonin
Person 1
Person 2
Dopamine
Serotonin
Oxytocin
Endorphin



Take Away Points

- Covered a range of different skills and techniques you can use
  - ➢ Action-planning
  - ➢ Relaxation Techniques
  - ➢ Goal Setting + Monitoring
  - ➢ Problem-Solving
  - ➢ Time Management
- It's important to look after yourself, take responsibility and find support
  - – Friends & Family
  - – University
  - – A Coach, CBT or medication
- Getting professional support can be slow and it's better to ask sooner rather than later!
- There are lots of things that can be effective!


Recap
ACTION PLAN
Action-Planning
Relaxation
Goal Setting + Monitoring
Problem Solving
Time Management
Family & Friends
Online
KING'S College LONDON
University
NHS
Low mood & worries
Please Complete The Feedback Questionnaire!

Appendix 5.16: Mental Health Adapted Information Flyers for Man Cave (Intervention 3).

MORE INFORMATION

If after reading this booklet you are still unsure and require some additional information, please do not hesitate to contact or speak to your GP as they will be able to provide you with more information and guidance that is specific to your situation.

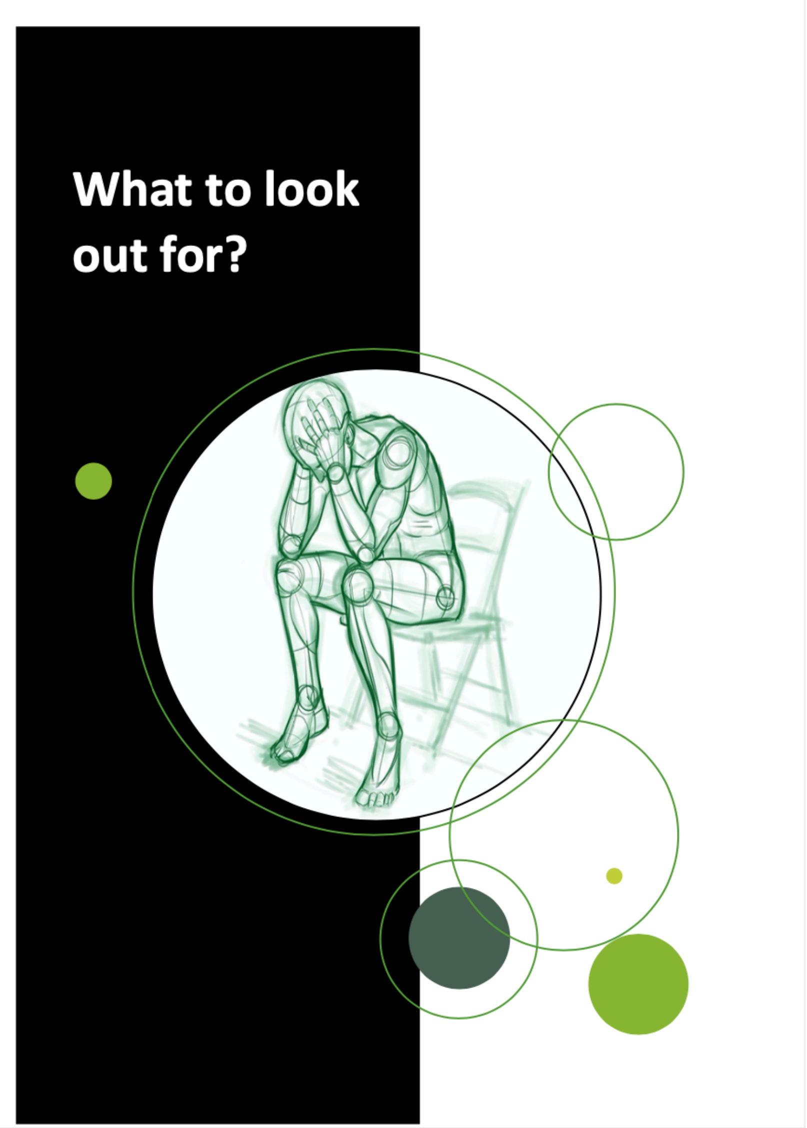
Alternatively, you can do some research online. A good website to look at is www.bigwhitewall.com. They have a range of information that might be helpful and explain things more clearly.

CONTACT US

If you have any further questions or require more information, please do not hesitate to contact a member of the research team via e-mail.

ilyas.sagar-ouriaghli@kcl.ac.uk

What to look out for?



LOW MOOD

Low mood often happens to everyone at some point during their lives. This can be more common whilst at University. However, when you have **persistent** negative feelings for **2 weeks or more** then it may be a strong indicator to take action.

Key things to look out for include:

- Low in mood
- Loss of pleasure in most/all activities
- Loss of energy
- Thinking or moving slowly
- Feeling worthless or very guilty
- Difficulties sleeping or sleeping too much
- Big changes to weight and/or appetite
- Difficulty concentrating or making decisions
- Aches, pains or headaches
- Thoughts of self-harming

SUPPORTIVE SERVICES

If after reading this booklet you suspect or realise you could improve your mental well-being please speak to people around you who you trust such as your friends and family.

You can also speak to a well-being service here at King's or through the NHS. These include:

- The King's Counselling and Well-Being teams
- Your personal tutor
- Your GP
- NHS Improving Access to Psychological Therapies (IAPT)

There are also a range of online support websites which you can access. These can provide additional information as well as support. These include:

- Big White Wall
- Nightline.org

HEAVY DRINKING

Sometimes when people are feeling low or very stressed, they may use alcohol and drugs to feel better. This can make it difficult to identify negative feelings as it hides or masks them.

Drinking in excess can begin to interfere with your sleep, lower your mood and increase your stress over the long term. This can create a cycle that is hard to break!

How much is too much?

For over 18's, the upper limit for alcohol use is 14 units per week. That's the equivalent to 6 pints of 4% beer **per week.** If you find yourself **regularly** drinking more than this on a weekly basis then it may be a good idea to take a break or speak to someone about it.

For more information go to: www.drinkaware.co.uk

HIGH STRESS OR WORRYING

High stress and excess worrying can be frequent when studying and being at university. This can often occur during exam season and around coursework deadlines. This can sometimes be a good thing! It may allow you to focus and actually achieve better grades overall.

However, when high stress or excessive worrying begins to **interfere** with your day to day routine and is **persistent** for **4-6 months** then it may be a strong indicator to take action.

Key things to look out for include:

- Constantly worrying or apprehension
- Difficulty relaxing
- Feeling tense or muscles tightness
- Avoiding stressful situations
- Difficult concentrating
- Intrusive thoughts
- Difficulty sleeping
- Feeling on edge, restless or irritable
- Heart racing, shaking, sweating, lightheaded
- Fatiguing or getting tired easily

SELF CHECK-UP

If you want to check how you're currently doing, please complete the questions in the table opposite. Circle the box that describes your experience of each over the last **2 weeks.**

After completing the table, add your scores together. Total scores range from 7-35. The higher your score the better your mental well-being. If you suspect your scores are low, it is a good idea to think about next steps and who you could speak to about it!

Questions	None of the time	Rarely	Sometimes	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5

Total Score: _______________

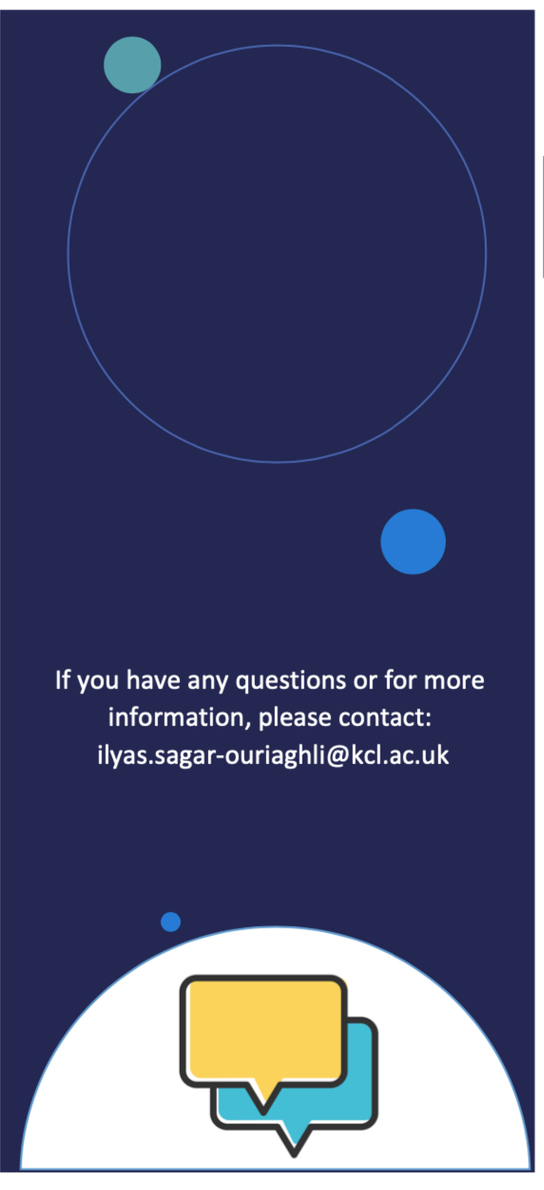
SUPPORTIVE SERVICES

This leaflet provides you with a list of different people and services you can speak to if you require some additional support.

This includes:

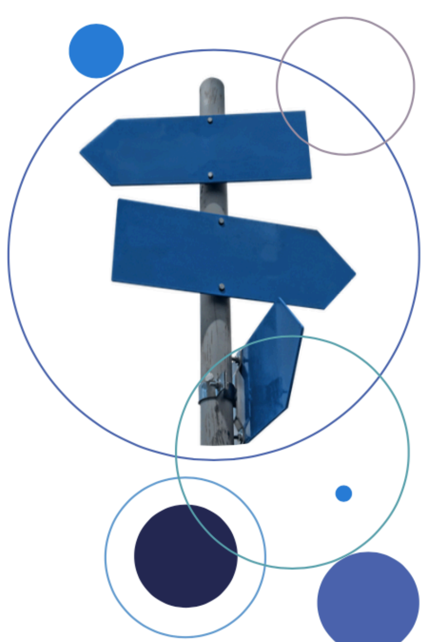
- KCL supportive services
- Different online support options
- Various NHS and professional support

All of these options are **strictly CONFIDENTIAL** and whatever you choose to speak about will never be shared with anyone else unless there is concern for your or someone else's safety.



If you have any questions or for more information, please contact: ilyas.sagar-ouriaghli@kcl.ac.uk

WHO CAN I SPEAK TO?



KING'S COUNSELLING

KCL counselling services offers a safe, **confidential** and supportive space to help you explore your problems and to allow you to share and gain insight into your feelings, thoughts and behaviour. Anything that is worrying you and disrupting your normal work, study or personal life can be discussed in counselling. You can contact the main Counselling Service at the Strand Campus 9am – 5pm on 020 7848 7017 or via counselling@kcl.ac.uk. For more information go to:

www.kcl.ac.uk/campuslife/services/counselling/

ONLINE SUPPORT

There are lots of different support options online. Big White Wall is a 24/7 safe and anonymous space online for you to share what's troubling you. You can choose an anonymous username and get **confidiental** support. Go to www.bigwhitewall.com for more details.

Nightline is a listening support and information helpline run by students for students; it offers non-judgmental, confidential listening support for any situation from 6pm – 8am. They can be contacted on 0207 631 0101 and listening@nightline.org.uk. For more details go to www.nightline.org.uk.

PROFESSIONAL SUPPORT

Always speak to your GP if you are unsure. They can help provide you with advice and guidance. They can also refer you to talking therapies or offer medication – depending on your preference.

Improving Access to Psychological Therapies (IAPT) is an NHS service that provides **confidential** evidence-based psychological therapies for anxiety or depression. The goal is to reduce day to day difficulties you have. For more information go to:

www.england.nhs.uk/mental-health/adults/iapt/

If you feel very unsafe, you can go to the nearest Accident & Emergency Department. London hospitals with 24-hour A&E departments include St Thomas', King's College Hospital and Royal Free Hampstead.