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**University of Southampton**

Faculty of Environmental and Life Sciences

School of Psychology

**A Thesis Examining Compassion and Help-Seeking in Men/Gay Men: Systematic  
Review, Meta-Analysis, and Randomised Controlled Trial**

by

**Philip Pampoulov**

**Supervised by Dr Alison Bennetts, Prof Margarita Ononaiye, and Dr Chris Irons**

Thesis for the degree of Doctorate in Clinical Psychology

May 2024

# University of Southampton

## Abstract

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Compassion and compassion-related training have frequently been linked to better well-being and psychological outcomes in different populations. However, compassion has been largely understudied in the field of male psychology. The first chapter of this thesis details a systematic review and meta-analysis of cross-sectional studies that investigated the relationship between self-compassion (SC) and aspects of help-seeking in men. Data was collected from four databases and seven studies, with a total of 2,210 male participants, met inclusion criteria and were included in a narrative synthesis. Meta-analyses found that there was a statistically significant positive correlation between SC and overall help-seeking, with SC associated with lower self-stigma of seeking help and more favourable attitudes towards help-seeking among men.

The second chapter is an empirical paper on the impact of a 14-day Compassionate Mind Training (CMT) on different psychological outcomes in adult gay men. The study used a randomised waitlist-controlled experimental design over three time points and did not find significant between- or within-subjects differences. Although the study suffered from an underpowered sample size at the post- and follow-up stages, baseline analyses revealed a significant positive correlation between conformity to masculine norms and blocks to compassion (shame, self-criticism, internalised homophobia), and showed that both SC and compassion from others predicted help-seeking intentions. Clinical implications and directions for future research are discussed.

**Keywords:** self-compassion, compassionate mind training, help-seeking, shame, men, gay men

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## **Research Thesis: Declaration of Authorship**

**Print name:** Philip Pampoulov

**Title of Thesis:** A Thesis Examining Compassion and Help-Seeking in Men/Gay Men:  
Systematic Review, Meta-Analysis, and Randomised Controlled Trial

**I declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.**

### **I confirm that:**

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission.

Signature:

Date: 16-05-2024

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To all my family and friends who have been alongside me, thank you for your unwavering support and all the fun moments that we have shared.

## **List of Abbreviations**

ACT	Acceptance Commitment Therapy
ATSPPH-SF	Attitudes Towards Seeking Professional Help Scale – Short Form
BCYCS	Building and Cultivating Your Compassionate Self
BPS	British Psychological Society
CCP	Compassion for a Close Person
CEAS	Compassionate Engagement and Action Scale
CfO	Compassion from Others
CFT	Compassion Focused Therapy
CFTS	Compassion for the Self
CMN	Conformity to Masculine Norms
CMNI	Conformity to Masculine Norms Inventory
CMT	Compassionate Mind Training
CtO	Compassion to Others
DV	Dependent Variable
ES	External Shame
EISS	External and Internal Shame Scale
ERGO	Ethics and Research Governance Online
FSCRS	Fears of Self-Criticising/Attacking and Self-Reassuring Scale
GHSQ	General Help-Seeking Questionnaire
HIS	Help-Seeking Intentions
IASMHS	Inventory of Attitudes Toward Seeking Mental Health Services
IH	Internalised Homophobia
IHI	Internalised Homonegativity Inventory
IS	Internal Shame

IV	Independent Variable
LGBTQ+	Lesbian, Gay, Bisexual, Trans, and Queer
MANOVA	Multivariate Analysis of Variance
MW	Mental Well-being
NHS	National Health Service
OS	Overall Shame
PATHS	Positive Attitudes Towards Help-Seeking
PFEVT	Postures, Facial Expressions, and Vocal Tones
PPI	Patient and Public Involvement
RS	Reassuring Self
SC	Self-Compassion
SCr	Self-Criticism
SCS	Self-Compassion Scale
SCS-SF	Self-Compassion Scale – Short Form
SRB	Soothing Rhythm Breathing
SQAC	Standard Quality Assessment Criteria
SSOSH	Self-Stigma of Seeking Help
SSOSHS	Self-Stigma of Seeking Help Scale
WEMWBS	Warwick-Edinburgh Mental Well-Being Scale

## Chapter 1

**Title:** What is the Relationship Between Self-Compassion and Help-Seeking in Men? A Systematic Review and Meta-Analysis

**Journal specification:** The journal 'Psychology of Men and Masculinity' was selected to guide preparation of this paper. Journal guidelines request APA 7<sup>th</sup> edition format style and that manuscripts should not exceed 7,500 words excluding tables, figures, and references.

**Word count (excluding tables, figures, and references):** 6,977

## **Abstract**

Research suggests that self-compassion is positively correlated with psychological well-being and likelihood of seeking help in both men and women. However, compared to women, men are less likely to engage in help-seeking behaviours across different settings. Furthermore, most of the literature on self-compassion considers all genders together, which makes it difficult to explore processes specific to men. This study aimed to review the evidence base exploring the relationship between self-compassion and aspects of help-seeking in the adult male population. A systematic review, narrative synthesis, and meta-analysis of original studies were carried out in line with PRISMA guidelines, using information collected from four databases (PsycINFO, PubMed, ProQuest, and Web of Science). The review identified seven studies which met inclusion criteria for a narrative synthesis, with an overall sample size of 2,210 male participants, ranging in age from 16 years to 70 years. Three separate meta-analyses were also conducted and found that self-compassion was significantly positively correlated with overall help-seeking in men and was associated with more favourable attitudes towards help-seeking as well as lower levels of self-stigma of seeking help. Clinical implications and possible directions for future research are discussed.

**Keywords:** self-compassion, compassion, help-seeking, men, males



## **Introduction**

### **Psychological Well-Being in Men**

Historically, a large proportion of the literature on psychological well-being has included a mixed-gender participant pool (Vickery, 2021). This can often make it difficult to explore psychological processes and mechanisms that are specific to the adult male population, and it is only in recent years that the topic of men's mental health has started to receive more academic attention (Bilsker et al., 2018). Public health policies are highlighting the need for more male-centred approaches when working therapeutically (British Psychological Society, 2022). In addition, the lack of male clinicians in the UK healthcare industry may potentially mean that male clients could find it harder to connect and open up to someone from the opposite gender (Dienhart, 2001).

It is unclear whether psychological services are ineffective at being able to engage male populations or whether there are social and psychological factors that obstruct men initiating the process of help-seeking in the first place. Smith et al. (2018) have argued that the proportion of men in the general population who experience mental health difficulties is much larger than what is reported, and that this might be due to gender differences, with women more likely to 'internalise' mental health problems like depression and anxiety, whereas men are more likely to 'externalise' these through violence and substance use. A recent systematic review by Lowther-Payne et al. (2023) found that gender was one of the most significant factors related to health inequalities in terms of access to adult mental health services in the UK, with men being more likely to experience health inequalities compared to women. It is also important to consider the role of wider societal narratives and expectations in relation to masculinity and gender roles, and how these can perpetuate unhelpful coping styles for the male population, such as hiding emotions (Sharp et al., 2022).

## **Help-Seeking in Men**

Help-seeking is a nuanced and complex coping process, which includes a breadth of different cognitive and behavioural facets related to the notion of seeking help, such as attitudes, intentions (or willingness), behaviours, as well as barriers to help-seeking (Gulliver et al., 2012; Rickwood & Thomas, 2012). The type of expected help can also vary from informal (e.g., seeking advice from friend or family member) to professional (e.g., mental health help from counsellor or therapist). There is a vast body of international literature suggesting that men are less likely to seek psychological help compared to women and that being male is associated with less favourable attitudes towards help-seeking (e.g., Addis & Mahalik, 2003; Galdas et al., 2005; Gonzalez et al., 2011; Leong & Zachar, 1999).

A systematic review by Seidler et al. (2016) has highlighted the problematic impact of conformity to traditional masculine norms and values as a potential barrier to help-seeking. On a similar note, a large-sample study of USA men from diverse backgrounds revealed that self-stigma of seeking counselling mediated the relationship between conformity to masculine norms and attitudes towards seeking counselling across different male groups (Vogel et al., 2011). Conformity to masculine norms relates to “meeting societal expectations for what constitutes masculinity in one’s public or private life” (Mahalik et al., 2003, p.3), whereas self-stigma of seeking help (SSOSH) is the perception that a person who seeks psychological treatment is socially unacceptable or undesirable (Vogel et al., 2006). Collectively, these studies propose that both conformity to masculine norms and SSOSH could affect the extent to which men feel confident and able to reach out for help when necessary. However, much remains unexamined when exploring factors that might facilitate help-seeking processes among men.

It is important to bear in mind that the notion of masculinity and what it means to be a man can vary across cultures, and that the majority of research has focused on a more Westernised perspective of traditional masculinity, thus creating bias within research itself

(Brannon, 2004). Central to men's mental health is the ability to foster an attitude of understanding and self-kindness towards one's difficulties despite the challenges of cultural narratives about masculinity (Wasylikiw & Clairo, 2018). As such, self-compassion (SC) represents an important aspect of well-being and could be seen as a potential way to break through barriers to help-seeking, such as SSOSH and conformity to masculine norms.

## **Overview of Theories of Compassion**

### ***Gilbert's Model of Compassion***

Gilbert defines compassion as "a sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it" (Gilbert & Choden, 2013, p. 94). Gilbert (2009) suggests that the development of compassion firstly involves engaging with one's own distress and difficulties, and then responding with courage, wisdom, and commitment to reduce or relieve that distress. According to Gilbert, compassion can also flow in three directions: from the self to the self (self-compassion), from the self towards others, and from others towards the self (Gilbert & Irons, 2005). Each flow can be inhibited and facilitated in different ways depending on the nature of the individual's attention, thinking, emotions, behaviour, and motivation (Gilbert, 2009; Gilbert & Irons, 2005). Gilbert's model of compassion has provided a helpful framework for different healthcare settings and his conceptualisation of SC has received empirical investigation. However, research into the flows to and from others is lacking and thus the model as a whole cannot yet be reported to have strong empirical support.

### ***Neff's Model of Compassion***

In contrast, Neff's (2003b) model of compassion only focuses on the concept of SC and describes it as being touched by and open to one's own suffering, not avoiding or disconnecting from it, and generating the desire to alleviate one's suffering and healing through kindness (Neff & Germer, 2017). Neff argues that SC involves three bipolar

constructs: (1) offering self-kindness and understanding rather than being judgemental or harshly self-critical, (2) engaging in meta-cognitive ability that permits recognition that experiences of the self are related to experiences of others rather than seeing them as isolated (termed ‘common humanity’), and (3) holding painful thoughts and feelings in mindful awareness rather than over-identifying or fusing with them (Neff, 2003a). Moreover, Neff (2003b) conceptualises SC as a positive attitude towards oneself, related to other aspects of psychological functioning, including self-esteem, identity, self-empathy, and emotion regulation, which can protect against negative consequences of self-judgement, isolation, and rumination. Although Neff’s model has informed international research (e.g., Finlay-Jones et al., 2018), it has also received criticism. It has been argued that Neff’s concept of ‘common humanity’ contradicts the idea of common humanity in Buddhist philosophy, with Neff encouraging one to compare themselves against others, whereas Buddhism emphasises the ‘oneness’ of the self as being part of the rest of humankind (Peng & Shen, 2012).

### ***Measuring Compassion***

One standardised outcome measure for capturing compassion is the Self-Compassion Scale (SCS), developed by Neff (2003a). The SCS has been used in different studies and countries, showing good levels of reliability and validity (e.g., Karakasidou et al., 2017). However, it has also received criticism for focusing on only one of the compassion flows as well as for its positive subscales accounting for marginal proportions of the variance in adaptive coping (Muris et al., 2018a). Due to this, researchers have cautioned against including the reversed negative subscales in the SCS as such a procedure could inflate the relationship between SC and psychopathology (Muris et al., 2018b). In addition, López et al. (2015) suggested that it is more appropriate to separate the positive and negative items of the SCS, as they seem to measure two different processes: SC and self-criticism, rather than one construct of SC.

Gilbert has also developed standardised measures of compassion, including the Compassionate Engagement and Action Scale (CEAS; Gilbert et al., 2017), which measures each of the three flows of compassion. Although Gilbert's measures do not focus solely on SC, the compassion from and to others scales and sections have received relatively little research compared to the SC-related ones, meaning that it may be difficult to compare the three compassion flows across studies and to know whether they lead to similar or different outcomes.

### **Effects of Self-Compassion**

SC has been suggested to aid in the improvement of psychological well-being in both men and women. For example, higher levels of SC have been shown to be associated with higher probability of seeking professional help within a large sample of male and female University students in the USA (Dschaak et al., 2021). In consideration of men specifically, SC has been shown to partially mediate the relationship between psychological distress as a result of past trauma and psychological well-being in male survivors of childhood maltreatment (Tarber et al., 2016). Furthermore, SC significantly mediated the relationship between mental health shame and mental health problems in a predominantly male sample of UK construction workers, with mental health shame directly predicting mental health problems along with indirect effects through SC on mental health problems (Kotera et al., 2019). Another study, which looked at gay men specifically, found that components of SC were a significant predictor of psychological well-being, suggesting that SC can be beneficial in cultivating better mental health for this population (Beard et al., 2017).

Although the majority of literature shows the benefits of SC, a meta-analysis by Wilson et al. (2018) found that SC-related therapies did not produce better outcomes compared to active control conditions. However, this study was critiqued by Kirby & Gilbert (2019), who argued that there was heterogeneity regarding the classification of "self-

compassion therapies” and that the measurement used to assess SC, Neff’s (2003a) SCS, provided a biased outcome.

### **Aims of the Current Review**

To date, there have been no systematic reviews regarding the interaction between SC and help-seeking in men specifically. Given that fewer males tend to access mental health services compared to females (Lowther-Payne et al., 2023; Scholz et al., 2022) and that there is limited literature in terms of psychological processes for men’s help-seeking (e.g., Seidler et al., 2016; Vogel et al., 2011), it seems important to explore if SC is related to help-seeking for this group. Taken together (e.g., Beard et al., 2017; Dschaak et al., 2021; Kotera et al., 2019), it would be reasonable to suggest that there might be some level of positive relationship between SC and favourable help-seeking attitudes, intentions, and/or behaviours among males. Conversely, it might also be reasonable to suggest that there might be a negative association between SC and barriers to help-seeking such as SSOSH.

The current paper aimed to answer the following question: ‘What is the relationship between SC and help-seeking in men?’

## **Method**

### **Registration and Protocol**

Version 1.0 of the protocol was registered on PROSPERO on 15<sup>th</sup> May 2023. The protocol was later revised and an amendment (Version 2.0) was registered on PROSPERO on 31<sup>st</sup> July 2023 (registration number: CRD42023411184). This can be accessed via:

[https://www.crd.york.ac.uk/prospero/display\\_record.php?RecordID=411184](https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=411184)

### **Information Sources**

This review was conducted and reported in adherence with the general principles recommended by the Centre for Reviews and Dissemination (CRD; Akers et al., 2009). Initial

scoping searches were carried out via Google Scholar, PROSPERO, and the University of Southampton's online library portal. After this, the following databases were searched: PsycINFO, PubMed, ProQuest, and Web of Science. Searching took place between 14<sup>th</sup>-21<sup>st</sup> July 2023. A second search was conducted on 26<sup>th</sup> and 27<sup>th</sup> October 2023 as more than three months had passed since the initial search. No new studies, which fit the review's inclusion criteria, were found during the second literature search.

### **Search Strategy**

The final search strategy was developed in collaboration with a librarian and the primary thesis supervisor, and was broken down into three sets of keywords. The first set of keywords was related to the variable of SC and included "compassion\*" OR "self-compassion\*" OR "self compassion\*" OR "self\*" OR "self-kind\*" OR "self kind\*" OR "kind\*". The second set of keywords was related to the variable of help-seeking and included "help-seek\*" OR "help seek\*" OR "help\*" OR "seek\*" OR "look\*". The third and last set of keywords was related to the target population of the review and included "men\*" OR "male\*". The three sets of keywords were then combined using the 'AND' Boolean Operator function to provide a final set of results. The reference lists of each of the selected studies were also hand searched to check for any relevant papers that fit the inclusion criteria.

### **Selection Process**

The screening and selection processes were completed following the PRISMA guidelines (Page et al., 2021). The first reviewer (the main author) and a second reviewer (a research assistant) cross-checked that the selected studies met inclusion criteria as well as studies' quality assessment. There were no disagreements between the first and second reviewer in respect of inclusion criteria. However, the initial Kappa coefficient was poor ( $k = 0.05$ ) due to several discrepancies in terms of studies' quality assessment. This was due to the quality assessment tool guidelines not being clear as well as some misunderstanding between

the first two reviewers about some of the quality assessment tool items. Following this, a second independent rating between the first two reviewers took place and this time the Kappa coefficient was much higher and within a satisfactory range when cross-checking took place ( $k = 0.84$ ). After consulting with the third reviewer, an agreement was made about any outstanding discrepancies.

### **Eligibility Criteria**

Full eligibility criteria are displayed in Table 1. If studies included a mixed-gender population, they were excluded in cases where results for all genders were not presented separately. Qualitative research was excluded due to quantitative studies being able to better generalise their findings to the wider study population (Polit & Beck, 2010). The age threshold was chosen to be 16 years and over because the age range for adults varies by country and there is a precedent of research including 16- to 17-year-olds as participants in a young adult sample due to them reaching adult levels of cognitive capacity (Icenogle et al., 2019). The term ‘help-seeking’ referred to the aforementioned cognitive and behavioural facets of help-seeking (Gulliver et al., 2012), including attitudes, intentions (or willingness), behaviour, as well as barriers to help-seeking. Grey literature was also included within the review in order to avoid publication bias (Boland et al., 2017).

**Table 1**

*Systematic Review Inclusion and Exclusion Criteria*

Inclusion criteria	Exclusion criteria
1. Quantitative studies	1. Qualitative studies
2. Study used correlational analysis	2. Study did not use correlational analysis
3. Study is available in English	3. Study is not available in English
4. Study findings are available	4. Study findings are not available
5. Participants are aged 16 and over	5. Participants are under the age of 16



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6. Participants identify as male OR if other genders took part, results for each gender are reported separately	6. Not all participants identify as male OR results for each gender are not reported separately
7. Study includes validated measures of SC	7. Study does not include validated measures of SC
8. Study includes validated measures related to help-seeking	8. Study does not include validated measures related to help-seeking

---

### **Risk of Bias Assessment**

The Standard Quality Assessment Criteria of Evaluating Primary Research from a Variety of Fields (SQAC; Kmet et al., 2004) tool was used to assess the quality of the included studies. The authors of the SQAC tool define the following quality rating score cut-offs: any scores higher than 0.80 as ‘strong’, 0.70-0.79 as ‘good’, 0.50-0.69 as ‘adequate’, and any scores lower than 0.50 as ‘limited’ (Kmet et al., 2004). In line with systematic review guidelines (Boland et al., 2017), each of the selected studies was assessed with the SQAC tool by two reviewers.

### **Study Selection**

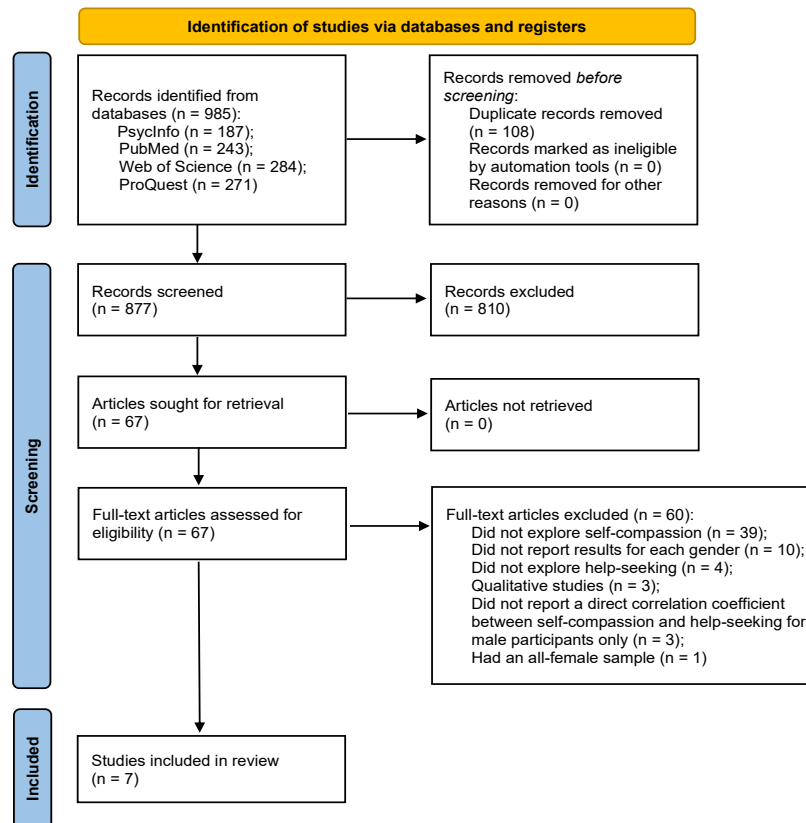
Figure 1 provides a visual representation of the study selection process using the PRISMA flow diagram (Page et al., 2021). Initially, a total of 985 papers were identified from four databases. One of these (ProQuest) included grey literature, namely unpublished doctoral theses and dissertations from different higher education establishments internationally. There were 108 duplicates in total that were removed. The titles and abstracts of the remaining 877 papers were screened to assess for eligibility. As a result, 810 papers were excluded during the initial screening process.

The remaining 67 studies were read in full, which resulted in 60 studies being excluded from the final analysis due to not meeting the inclusion criteria. More specifically, 39 studies did not explore SC as a variable whereas four studies did not explore help-seeking

as a variable; 10 studies<sup>1</sup> did not report the results for all genders; three studies<sup>1</sup> reported descriptive statistics for all genders separately but did not report inferential statistics

**Figure 1**

*PRISMA Flow Diagram (Page et al., 2021)*



(i.e., Pearson's  $r$  correlation coefficient) by gender; three studies were qualitative; one study had an all-female sample. This resulted in seven papers being included in the final synthesis.

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<sup>1</sup> The main author from each of these 13 papers was contacted via email to request gender-specific data. However, three of the authors did not have contact details and the remaining 10 did not reply.

## **Methods of Data Synthesis and Analysis**

The seven studies which met inclusion criteria were included in a narrative synthesis, regardless of their risk of bias assessment results, taking into account the impact of key characteristics of the studies, limitations, and their implications for the presence and direction of an effect. There was a good amount of homogeneity between the reviewed studies in terms of outcome measures used and type of population (i.e., University students), hence it was deemed appropriate to conduct a meta-analysis (Boland et al., 2017). Three meta-analyses were run, each exploring the relationship between SC and one facet of help-seeking (i.e., SSOSH, positive attitudes towards help-seeking, and overall help-seeking).

In order to meet inclusion criteria for meta-analysis, studies needed to provide bivariate associations (Pearson's  $r$  correlation coefficient) between SC and a facet of help-seeking for male participants only. The meta-analyses were conducted using the `metafor` and `dmetar` packages in the RStudio software, version 4.3.2 (Polanin et al., 2017). Random-effects models were used for each meta-analysis to estimate the weighted average effects, which assumes heterogeneity in effect sizes across studies, and may improve generalisability of results (Card, 2012).

## **Results**

### **Study Characteristics**

Study characteristics are displayed in full in Table 2 and in Appendix A. The publication dates of the seven reviewed studies ranged between 2017 and 2023. The full texts of six studies were published in peer-reviewed journals (Booth et al., 2019; Heath et al., 2017; Kantar & Yalçin, 2023; Komlenac et al., 2023; Reis et al., 2019; Wasylkiw & Clairo, 2018) and one study was an unpublished doctoral thesis (Hansen, 2022). All the studies used a cross-sectional design. Two studies recruited from the general population, one of which targeted male athletes (Wasylkiw & Clairo, 2018), whereas one initially targeted University students but then opened this up to adults from any educational background (Komlenac et al.,

2023). The remaining five studies recruited solely from University settings. Three studies were conducted in the USA (Booth et al., 2019; Hansen, 2022; Heath et al., 2017), two in Canada (Reis et al., 2019; Wasylkiw & Clairo, 2018), one in Turkey (Kantar & Yalçin, 2023), and one in Austria (Komlenac et al., 2023).

The studies included a total of 2,210 male participants, with male sample sizes ranging from 48 (Hansen, 2022) to 777 (Booth et al., 2019). The mean sample size across the seven studies was 316 whereas the median sample size was 172. Across all reviewed studies, male participants' age ranged from 16 years (Reis et al., 2019) to 70 years (Hansen, 2022). The mean participant age across the seven studies was 25.2 whereas the median participant age was 22.8.

Six studies recorded the ethnicity of their participants whereas Kantar and Yalçin (2023) asked participants for demographic information; however, they do not mention whether this captured race/ethnicity. Two studies (Reis et al., 2019; Wasylkiw & Clairo, 2018) recorded their participants' ethnicity but do not provide a full breakdown of the data and only report on the majority ethnicities (i.e., White/Caucasian).

## **Outcome Measures**

### ***SC Outcome Measures***

In terms of SC, all seven studies used the Self-Compassion Scale (SCS; Neff, 2003a). Komlenac et al. (2023) used an adapted German version of the measure (Hupfeld & Ruffieux, 2011), whereas Kantar & Yalçin (2023) used a short-form version of the SCS (Raes et al., 2011), which had been adapted to Turkish (Kantaş, 2013).

**Table 2***Characteristics of Studies Included in the Systematic Review*

Study	No. of Male Participants	SC Outcome Measures	Help-Seeking Outcome Measures	Analytic Strategy	Key Findings	Quality Assessment Score
Booth et al., 2019	777	SCS	SSOSHS	Structural equation modelling	SC was a significant negative predictor of SSOSH in men.	0.86 (strong)
Hansen, 2022*	48	SCS	IASMHS	Bivariate correlations and linear regression analysis	SC was significantly positively correlated with positive attitudes towards seeking mental health help among gay men.	0.86 (strong)
Heath et al., 2017	284	SCS	SSOSHS	Bivariate correlations and structural equation modelling	SC was significantly negatively correlated with SSOSH in men.	0.86 (strong)
Kantar & Yalçın, 2023	595	SCS-SF	SSOSHS, ATSPPH-SF	Bivariate correlations and serial multiple mediational analyses	SC was significantly positively correlated with positive attitudes towards seeking psychological help and significantly negatively correlated with SSOSH in men.	0.91 (strong)
Komlenac et al., 2023	168	SCS	SSOSHS, Help-Seeking Intentions	Chi-square tests, <i>t</i> -tests, bivariate correlations, and two manifest path models	In male participants, SC was significantly positively correlated with positive help-seeking intentions and significantly negatively correlated with SSOSH.	0.91 (strong)
Reis et al., 2019	172	SCS	SSOSHS	Bivariate correlations, semi-partial	SC was significantly negatively correlated with SSOSH among male athletes.	0.82 (strong)

Wasyliw & Clairo, 2018	166	SCS	SSOSHS, IASMHS	correlations, and hierarchical regression analyses Independent <i>t</i> -tests, bivariate correlations, and structural equation modelling	SC was significantly negatively correlated with SSOSH. SC significantly predicted more positive attitudes towards seeking help for intercollegiate athletes but not for a comparison group of men.	0.86 (strong)
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*Note.* \* = Unpublished thesis; ATSPPH-SF = Attitudes Toward Seeking Professional Help Scale – Short Form (Fischer & Farina, 1995); IASMHS = Inventory of Attitudes Toward Seeking Mental Health Services (Mackenzie et al., 2004); SCS = Self-Compassion Scale (Neff, 2003a); SCS-SF = Self-Compassion Scale – Short Form (Raes et al., 2011); SSOSHS = Self-Stigma of Seeking Help Scale (Vogel et al., 2006)

### ***Help-Seeking Outcome Measures***

The most common outcome measure related to help-seeking was the Self-Stigma of Seeking Help Scale (SSOSHS; Vogel et al., 2006), which taps into negatively connotated help-seeking attitudes. The SSOSHS was used by six of the reviewed studies (Booth et al., 2019; Heath et al., 2017; Kantar & Yalçin, 2023; Komlenac et al., 2023; Reis et al., 2019; Wasylkiw & Clairo, 2018). Two studies (Hansen, 2022; Wasylkiw & Clairo, 2018) used the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS; MacKenzie et al., 2004), which explores positive help-seeking attitudes. One study (Kantar & Yalçin, 2023) used the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPH-SF; Fischer & Farina, 1995) looking at positive help-seeking attitudes, with Kantar & Yalçin (2023) using an adapted Turkish version of the measure (Topkaya, 2011). Komlenac et al. (2023) measured participants' help-seeking intentions based on three vignettes in the context of interpersonal violence, which have been used by previous research (Cole & Ingram, 2020).

### **Risk of Bias in Studies**

The quality assessment score for each study, assessed by the SQAC tool (Kmet et al., 2004), is presented in Table 2. Appendix B provides the complete quality assessment. All studies were rated 'strong' in terms of their methodological quality.

### **Results of Narrative Synthesis**

#### ***Direct Relationship Between SC and Help-Seeking***

**SC and SSOSH.** Six studies explored SSOSH (Booth et al., 2019; Heath et al., 2017; Kantar & Yalçin, 2023; Komlenac et al., 2023; Reis et al., 2019; Wasylkiw & Clairo, 2018). All of these found that SC was significantly negatively correlated with SSOSH, with higher levels of SC associated with lower levels of SSOSH.

**SC and Attitudes Towards Help-Seeking.** Of the seven reviewed studies, three (Hansen, 2022; Kantar & Yalçin, 2023; Wasylkiw & Clairo, 2018) explored positive attitudes towards help-seeking (PATHS). All of them found that SC was significantly positively correlated with PATHS, with higher levels of SC associated with more positive help-seeking attitudes. However, it is worth noting that in Wasylkiw and Clairo's (2018) paper, this was only true for men in intercollegiate sports teams and not for the comparison group who were not in such teams.

**SC and Intentions to Seek Help.** Of the seven reviewed studies, one explored intentions to seek help (Komlenac et al., 2023). They found that SC was significantly positively correlated with intentions to seek help, with higher levels of SC associated with greater intentions of seeking help.

#### ***Indirect Relationship Between SC and Help-Seeking***

Five studies (Booth et al., 2019; Heath et al., 2017; Kantar & Yalçin, 2023; Komlenac et al., 2023; Wasylkiw & Clairo, 2018) explored the role of SC as a mediator or moderator of the relationship between help-seeking and another variable.

**SC as a Mediator.** Kantar and Yalçin (2023) found that SC significantly mediated the relationship between masculine gender role stress and PATHS in men.

**SC as a Moderator.** Two studies (Heath et al., 2017; Komlenac et al., 2023) reported that SC moderated the relationship between conformity to masculine norms and SSOSH, with SC weakening the link between the two. Wasylkiw and Clairo (2018) found that SC significantly moderated the relationship between sports group membership and SSOSH. Booth et al. (2019) found that SC significantly moderated the association between masculine gender role stress and SSOSH.



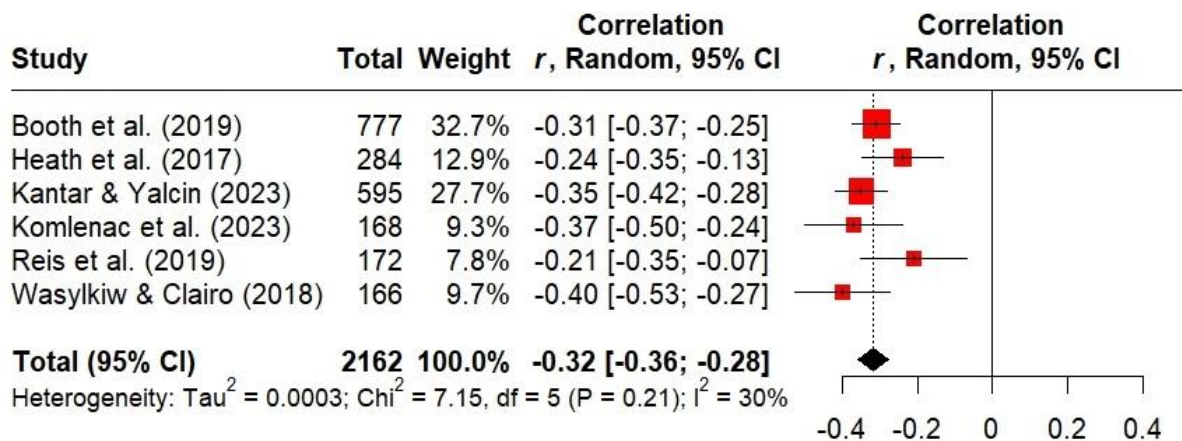
## Results of Meta-Analyses<sup>1</sup>

### *Correlation Between SC and SSOSH*

Six of the seven studies looked at the correlation between SC and SSOSH (Booth et al., 2019; Heath et al., 2017; Kantar & Yalçin, 2023; Komlenac et al., 2023; Reis et al., 2019; Wasylkiw & Clairo, 2018). A meta-analysis of independent samples, using a random effects model, revealed a moderate effect size of -0.32 (95% CI [-.36; -.28];  $p < .001$ ) in favour of a negative association between SC and SSOSH, suggesting that males with higher levels of SC experienced lower levels of SSOSH (see Figure 2). Studies were not significantly heterogenous ( $Q = 7.15$ ,  $p = .21$ ,  $I^2 = 30\%$ ,  $\tau = .02$ ) and Egger’s regression test for funnel plot asymmetry was not significant ( $z = -0.53$ ,  $p = .77$ ), suggesting that there was no evidence of publication bias.

**Figure 2**

*Forest Plot of Effect Sizes for the Association Between SC and SSOSH*



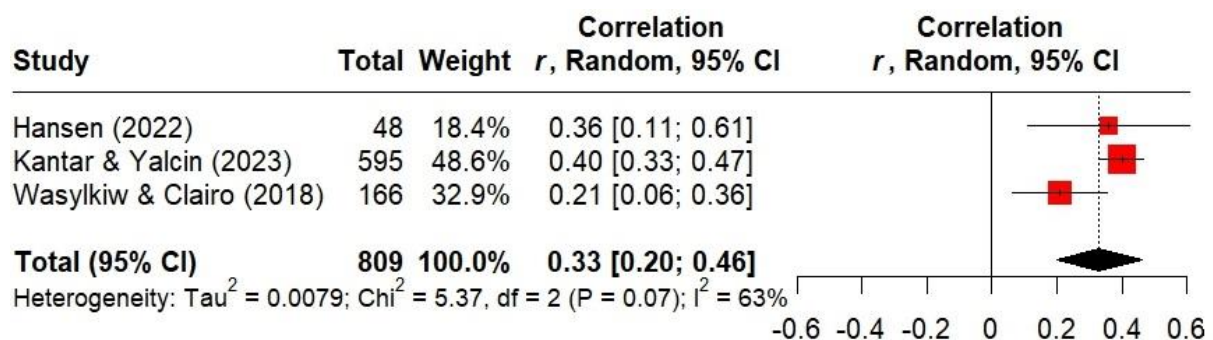
<sup>1</sup> Funnel plots for each analysis are available in Appendices C-E.

### ***Correlation Between SC and PATHS***

Three studies looked at the correlation between SC and PATHS (Hansen, 2022; Kantar & Yalçin, 2023; Wasylkiw & Clairo, 2018). A meta-analysis of independent samples, using a random effects model, revealed a moderate effect size of 0.33 (95% CI [.20; .46];  $p < .001$ ) in favour of a positive association between SC and help-seeking attitudes, suggesting that males with higher levels of SC expressed more positive attitudes towards help-seeking (see Figure 3). Although  $I^2$  was equal to 63%, which would normally indicate moderate level of heterogeneity, neither Egger's regression test for funnel plot asymmetry ( $z = -1.73, p = .58$ ) nor the rank correlation test for funnel plot asymmetry ( $Q = 5.37, \tau = .09, p = .07$ ) were statistically significant, suggesting that there was no evidence of publication bias. However, it is important to note that this particular analysis was only based on three studies, which could have meant that Egger's test might have lacked statistical power to detect bias (Harrer et al., 2021).

**Figure 3**

*Forest Plot of Effect Sizes for the Association Between SC and PATHS*



### ***Correlation Between SC and Overall Help-Seeking***

Finally, a three-level meta-analysis was conducted in order to look at the association between SC and overall help-seeking as a general concept due to the data including non-

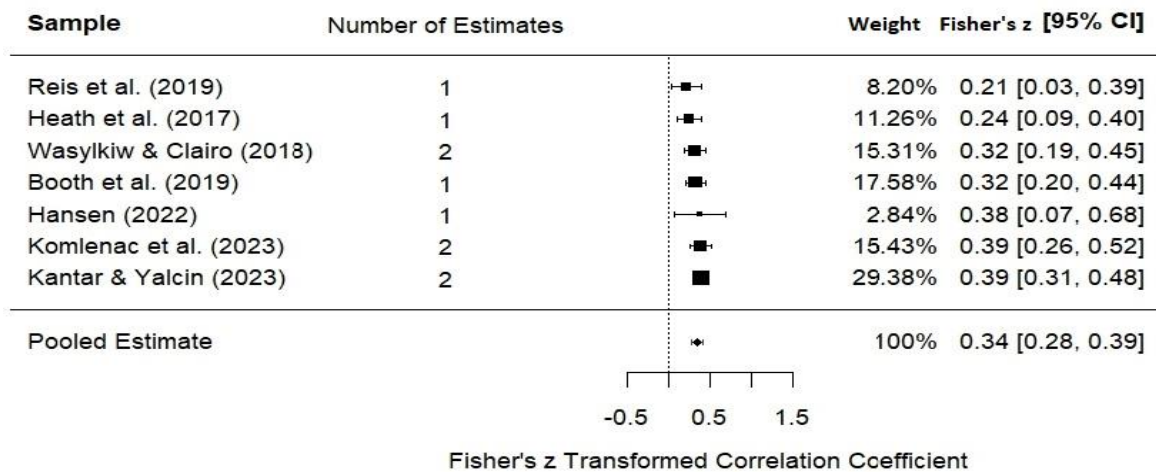
independent effect sizes (Cheung, 2019). As only one study (Komlenac et al., 2023) from the seven included in the meta-analysis explored the relationship between SC and intentions to seek help, this meant that a meta-analysis was not possible to carry out on those two variables alone (Boland et al., 2017). However, the study's data could still be included in the overall help-seeking three-level meta-analysis.

Measures related to aspects of help-seeking were drawn from seven samples of male-only participants, including 10 effect sizes from seven individual studies (Booth et al, 2019; Hansen, 2022; Heath et al., 2017; Kantar & Yalçin, 2023; Komlenac et al., 2023; Reis et al., 2019; Wasylkiw & Clairo, 2018). Guidelines by Harrer et al. (2021) suggest that when conducting a meta-analysis, correlations between two variables can be multiplied by 1 or -1 in order to conceptually align them according to the main review question. Therefore, Pearson's  $r$  correlations between SC and SSOSH were multiplied by -1 in order to conceptually align all the help-seeking measures (i.e., self-stigma, attitudes, and intentions). An analysis of outliers did not reveal any outliers in the data.

Results showed that there was a moderate effect size of  $r = 0.33$ , (95% CI [.27, .39];  $p < .001$ ) in favour of a positive association between SC and overall help-seeking measures, meaning that men with higher levels of SC were more likely to have better scores on help-seeking measures.  $I^2$  was 38.94%, with estimated variance components  $\tau^2_{\text{Level 3}} = 0.002$  and  $\tau^2_{\text{Level 2}} = 0.001$ , meaning that  $I^2_{\text{Level 3}} = 23.38\%$  of the total variation could be attributed to between-cluster heterogeneity, and  $I^2_{\text{Level 2}} = 15.57\%$  to within-cluster heterogeneity (see Table 3). Egger's regression test for funnel plot asymmetry was not significant ( $z = -0.91$ ,  $p = .43$ ), suggesting that there was no evidence of publication bias.

**Table 3***Summary Table of Three-Level Meta-Analysis*

Effect sizes ( $k$ )	Samples ( $k$ )	Pooled $r$	95% CI lb	95% CI ub	$p$ -value	$I^2_{level\ 3}$	$I^2_{level\ 2}$
10	7	0.33	0.27	0.39	< .001	23.38%	15.57%

**Figure 4***Forest Plot of Three-Level Meta-Analysis Between SC and Overall Help-Seeking*

*Note.* Fisher's z values were converted to Pearson's  $r$  coefficients when reporting the final results.

## Discussion

### Summary of Findings

The current paper investigated the relationship between SC and help-seeking in adult men. A three-level meta-analysis of seven studies showed that there was a significant positive correlation between SC and overall help-seeking measures in males, with higher SC associated with better help-seeking outcomes. In particular, two separate meta-analyses demonstrated that SC was associated with significantly lower SSOSH and higher PATHS. These findings were reflected in the narrative synthesis and add to existing research on mixed-gender samples, where a similar trend has been observed (Dschaak et al., 2021).

In one of the reviewed studies (Wasylikiw & Clairo, 2018), SC's significant positive correlation with PATHS was only true for men in intercollegiate sports teams and not for the comparison group who were not in such teams. The authors speculate it may not be the collision aspect of the sport but rather the cohesiveness of the team that might promote SC within such an environment. This fits with Gilbert's (2009) idea of motivation linking to compassion (i.e., co-operative motives within a team facilitating SC) as well as with Neff's (2003a) construct of common humanity in recognising that experiences of the self are related to those of others rather than seeing them as isolated.

The most commonly explored facet of help-seeking among the reviewed studies was SSOSH, which is often seen as a barrier to help-seeking (Vogel et al., 2006). Shame has been described as an integral emotional element of the experience of self-stigma (Luoma & Platt, 2015) and research has shown a negative correlation between SC and shame in both mixed-gender (Sedighimornani et al., 2019) and male-only samples (Reilly et al., 2014). Thus, the observed negative correlation between SC and SSOSH in the present study was unsurprising. Although the causal direction between SC and SSOSH is not entirely clear yet, the observed negative association between the two variables suggests there could be an inhibitory relationship, with SC inhibiting SSOSH. This would fit with Gilbert's (2009) compassion theory, which argues that each compassion flow (including SC) can be inhibited and facilitated in different ways depending on the nature of a person's attention, thinking, emotions, behaviour, and motivation. For example, if a person experienced higher SSOSH, this could affect their cognition, emotions, and behaviour, which could then inhibit their level of SC. It would be helpful for further research to explore whether the cultivation of SC has an impact on reducing SSOSH.

Another finding was that SC could act as a moderator or mediator between aspects of help-seeking and other variables related to gender-specific processes. For instance, two of the

papers (Heath et al., 2017; Komlenac et al., 2023) found that SC significantly weakened the relationship between conformity to masculine norms and SSOSH. Research has shown that higher levels of SC are related to lower masculine norm adherence in men (Reilly et al., 2014), and results of this review further this by suggesting that SC could also have an indirect effect on the relationship between facets of help-seeking and facilitators or barriers to help-seeking. This links with Gilbert's (2009; Gilbert et al., 2017) theory that motivation plays an important role in relation to forming intentions (and later action) to be helpful to the self or others in times of suffering.

### **Strengths and Limitations of the Reviewed Studies**

All the reviewed studies had a rating of 'strong' in terms of their quality assessment (Kmet et al., 2004). This suggests the synthesised data is based on reliable and robust international research. The quality assessment process demonstrated that all seven papers used standardised outcome measures that were relevant to their research questions and utilised study designs that were evident and appropriate.

However, there was high variability with regard to sample size (ranging from 48 to 777) and the facet of help-seeking investigated across studies, making it difficult to conclusively infer whether findings would be equally observed across different help-seeking domains. One of the trends that the quality assessment tool picked up on was that most research used convenience sampling within a University setting, meaning the potential for self-selection bias and limitation in the generalisability of the data need to be considered when interpreting the results. Future research with male-only participants could expand its recruitment to the general population. Another trend observed was that not all of the studies provided clear estimates of effect size as well as power analyses, making it difficult to establish whether their results were based on sufficient level of statistical power. It would

therefore be helpful for further research to make such data and analyses more explicit in their Method and Results sections.

The majority of the reviewed studies were conducted in Western countries, with most participants identifying as White, and not all of the studies provided a full breakdown of all participant ethnicities. This is particularly important in light of research showing that there is variation at the intersection of race and ethnicity in relation to help-seeking behaviour in men (Parent et al., 2018). The predominantly Western research further challenges generalisation of the results to different male populations and highlights the need for further research in men's health to take into account the role of cultural diversity and intersectionality (e.g., men from poorer socio-economic backgrounds or from a sexual or gender minority). Indeed, it is important for specific cultural and social factors to be considered when implementing Western conceptualisations and approaches about compassion to non-Western settings (Kariyawasam et al., 2022), especially knowing that the notion of SC in itself stems from Eastern Buddhist philosophy (Gilbert, 2014). Much of the literature assumes that males would be a homogenous group. However, this is not the case, particularly when considering individuals from sexual and gender minorities (Ferlatte et al., 2020). It would therefore be important for future research to make it clear which population they are targeting (e.g., cisgender men versus people who identify as male) and why.

The mean participant age across the reviewed studies was 25.2 years of age, which highlights the relatively young age of the different samples. This could likely be due to the aforementioned point about the majority of the studies using convenience sampling from University settings rather than from the wider general male population. The young age of the overall sample is important to consider in relation to inter-generational effects and what this could mean about the generalisability of the findings. Research has shown that there are differences in men's cross-cohort beliefs about notions of masculinity and help-seeking

(Assadi, 2021) as well as that age can significantly moderate the relationship between SC and mental help-seeking attitudes among counsellors (Aruta et al., 2023). Therefore, it would be helpful for future research on similar topics to either ensure an equal age spread of participants or to target more specific age groups among men (e.g., over-65s).

Lastly, all seven papers used Neff's Self-Compassion Scale (SCS; Neff, 2003a) to measure SC and not all of them explicitly reported whether they included the reverse-scored subscales. The SCS has historically been criticised for focusing on one aspect of compassion (towards the self) as well as for mixing negative states, such as isolation and self-judgement, with components of SC (Muris et al., 2018a). This means that the data captured by the reviewed studies would likely have a level of bias towards Neff's description of SC. Findings from previous studies that separate the bipolar structure of the SCS might suggest that the overall correlation between SC and help-seeking might be inflated because of the inclusion of the negative factors of the SCS (Muris et al., 2018b). Therefore, future research could explore how other notions of compassion, such as Gilbert's (Gilbert, 2009), relate to facets of help-seeking in men.

### **Strengths and Limitations of the Systematic Review and Meta-Analysis**

To the author's knowledge, this is the first study to systematically review and analyse the relationship between SC and help-seeking specifically within the adult male population. This is an important and growing area of research, considering that there is a shift in clinical psychology and wider literature towards exploring processes for under-researched groups in order to better understand any unique differences in their presentation (Gee et al., 2022).

The review used a robust method following PRISMA guidelines (Page et al., 2021) and ensuring that at least two reviewers assessed study quality and inclusion criteria, in line with good practice recommendations (Boland et al., 2017). The current paper also screened unpublished theses, addressing the potential risk of publication bias.



A meta-analysis was used to explore data from the reviewed studies, following a rigorous method (Harrer et al., 2021). This not only provided a more precise estimate of the effect size, but also helped to explore the level of heterogeneity across studies (Lee, 2018).

The current review focused solely on SC and, in doing so, does not include literature on the other two flows of compassion (i.e., from self to others and from others to self). This introduced a level of bias towards one of the compassion flows rather than exploring compassion more holistically, thus creating more of an alignment with Neff's (2003b) compassion theory rather than Gilbert's (2009). Both compassion from others and compassion towards others may have important implications on help-seeking that are not subject to systematic review.

The conceptualisation of help-seeking employed in this review could be considered too broad and could encompass a wide range of contexts, for example seeking informal help or advice from a friend versus professional psychological help. As mentioned earlier, there are different components of help-seeking and debates as to whether this has to do with attitudes, intentions, behaviours, or barriers (Gulliver et al., 2012). A broad conceptualisation was chosen due to this being the first systematic review exploring SC and help-seeking in a male population. Future research could not only focus on the relationship between SC and a particular facet of help-seeking, but also investigate if SC's relationship with help-seeking is facilitative or inhibitory.

All studies measured additional variables, such as masculine gender role stress, internalised homonegativity, and lifetime experience of intimate partner violence. However, exploring these was beyond the scope of this paper. Although such factors do not feature explicitly in compassion theory, they may still have other clinical and theoretical implications, therefore future research should explore the direct relationship between such variables and SC and/or facets of help-seeking.

During the screening process, ambiguity was found in the exclusion criterion that results for each gender are not reported separately. Future reviews should clarify their definition of “results” as referring to descriptive statistics or results from inferential analyses.

Lastly, it can be argued that the SQAC tool (Kmet et al., 2004), which was used to assess the quality of the reviewed studies, did not have a rigorous scoring system across all items. For instance, on item 9 regarding appropriateness of the sample size, the tool does not make it explicit whether a power analysis needs to have been reported for an answer of ‘Yes’, even if all of the results in the study were statistically significant. Therefore, future studies could use alternative quality assessment tools with clearer scoring guidelines.

### **Clinical Implications**

In terms of working directly with males in a professional setting, the review’s findings suggest that if men have a non-compassionate, critical, and judging view of themselves, and believe that seeking help is shameful or weak, these could be crucial barriers to the help-seeking process. Certain psychological approaches, such as Compassion Focused Therapy (CFT) and Acceptance Commitment Therapy (ACT), are known to target experiences of self-stigma and shame in different populations (Stynes et al., 2022). Men who present to mental health services with high levels of self-stigma and low SC could be offered such interventions in the first instance.

SC’s indirect relationship with help-seeking prompts questions about the role of societal narratives and expectations around ‘being a man’, as well as the degree of conformity to such norms. For example, in many cultures, masculinity can be associated with notions of power, dominance, and not showing vulnerability (Connell & Messerschmidt, 2005). As a result, deviating from masculine ‘scripts’, which may be perceived as occurring through opening up in therapy or showing SC, can leave men feeling exposed, vulnerable, and not being able to seek help or share emotions in a safe environment (Izugbara & Undie, 2008).

Although some men might interpret SC as a sign of weakness (Reis et al., 2022), the CFT definition of compassion is that it often requires strength and courage (Gilbert, 2009). As such, for many men, given the presence of shame linked to help-seeking, reaching out for support can be seen as an act of courageous compassion.

The question remains in terms of how to best reach out to men who are struggling to seek help to begin with. A recent briefing paper by the British Psychological Society (BPS) discusses the importance of gender within psychological therapy settings and the lack of research in the area (BPS, 2022). More specifically, it emphasises the need to provide a more outreach- and community-based therapeutic approach when working with males (e.g., Men's Sheds). This involves working with men within an individual or group-based supportive environment, where they can engage in goal-based, action-oriented activities. Certain third sector organisations have already started addressing these issues (Connell, 2023) by reaching out to men in their local communities and encouraging them to speak about their mental health rather than 'manning up', thus aiming to reduce level of stigma. This is particularly relevant when thinking about Neff's (2003b) conceptualisation of SC as a positive self-attitude which can protect against negative consequences of self-judgement.

## **Conclusion**

The current systematic review explored the relationship between SC and help-seeking in men. Findings showed that there was a significant direct correlation between SC and overall help-seeking measures, particularly with regard to reduced SSOSH and increased PATHS. SC was also shown to have an indirect effect as a mediator and moderator between aspects of help-seeking and barriers to help-seeking, such as conformity to masculine norms and masculine gender role stress. This is the first study to explore the above relationship specifically within the adult male population and it highlights the importance of SC with

regard to men's well-being, setting the stage for future research to focus on facilitators of SC in men as well as barriers to male help-seeking.

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## **Chapter 2**

**Title:** Evaluating the Effectiveness of a Brief ‘Compassionate Mind Training’ on Levels of Internalised Homophobia, Shame, and Help-Seeking Intentions in Gay Men: A Randomised Controlled Trial

**Journal specification:** The journal ‘Psychology of Sexual Orientation and Gender Diversity’ was selected to guide preparation of this paper. Journal guidelines request APA 7<sup>th</sup> edition format style and that manuscripts should not exceed 7,500 words excluding tables, figures, and references.

**Word count (excluding tables, figures, and references):** 8,392

### **Abstract**

Evidence suggests that self-compassion is positively correlated with well-being in gay men. However, to date, there have been no studies investigating the causal effect of compassion-related training on different psychological outcomes for this population. The current pilot study evaluated the effectiveness of a 14-day online ‘Compassionate Mind Training’ (CMT) on levels of internalised homophobia, external and internal shame, compassion towards self and from others, help-seeking intentions, and mental well-being in gay men aged 18 years and above. The study used a 2x3 design with two groups (CMT versus control) and three time points (pre, post, and follow-up). Results demonstrated that there was no significant effect of group or time. Correlational analyses at baseline revealed a significant positive association between conformity to masculine norms and blocks to compassion (i.e., shame, self-criticism, internalised homophobia), and showed that both self-compassion and compassion from others predicted help-seeking intentions. Clinical implications and directions for future research are discussed.

**Keywords:** gay men, compassion, internalised homophobia, shame, help-seeking

## **Introduction**

### **Research on LGBTQ+ Populations**

Research often assumes the LGBTQ+ population to be a single homogenous group, and thus combines different subgroups (i.e., lesbian, gay, bisexual, trans, and queer) in their recruitment and analyses (McCutcheon & Morrison, 2021). The latter could often lead to unequal sample ratios from the LGBTQ+ population in literature, meaning that it can be difficult to explore processes for a specific group within it. The focus of the current paper is on adult gay men in particular.

### **Mental Health in Gay Men**

Research indicates that men are less likely to engage in help-seeking behaviours for their mental health and have less favourable attitudes towards help-seeking compared to women (Galdas et al., 2005; Harris et al., 2016; Nam et al., 2010; Wendt & Shafer, 2016). A recent systematic review (Lowther-Payne et al., 2023) found that gender was one of the most significant factors related to health inequalities regarding access to adult mental health services in the UK, with men more likely to experience health inequalities than women.

In terms of differences with non-LGBTQ+ men, Matos et al. (2017b) demonstrated that gay men reported significantly higher levels of shame and depressive symptoms as well as lower levels of self-compassion compared to heterosexual men. Gay men can present with higher levels of vulnerability to mental health problems compared to other sexual minority groups. For example, a study by Grabski et al. (2022) found that gay men were less likely to seek help from a professional compared to bisexual men. Gay men have also been shown to report significantly higher levels of self-hate and self-criticism compared to both heterosexual men and other sexual minority groups (Nappa et al., 2022). It has been argued that this increased vulnerability to mental health problems in gay men might be due not only to hostile and stigmatising societal narratives around the LGBTQ+ community, but also to a need to conform to traditional masculine norms, which could have an impact on their well-being



(Thepsourinthone et al., 2020). Although bisexual men are also subject to masculine norms, gay men are argued to be most adversely affected by heteronormative constructions of masculinity and are more likely to experience violence and discrimination based on gender norm deviation compared to other LGBTQ+ groups (Sánchez, 2016).

### **Internalised Homophobia and Shame**

Internalised homophobia (IH), also known as internalised homonegativity, refers to a set of negative internalised self-beliefs about homosexuality, which could influence the development of psychological distress among sexual minority populations (Cornish, 2012). Examples of IH could include negative beliefs about the self ('I feel ashamed of my sexuality') as well as towards others ('I feel it is morally wrong to be attracted to the same gender'). IH is both a conscious and unconscious reaction to external negative attitudes towards people from a LGBTQ+ background (Lyons, 2020). Studies suggest that IH can lead to LGBTQ+ individuals denying their sexual identity as well as experiencing shame, fear, and self-criticism about who they are because of societal narratives and stigma about being from a sexual minority (Carvalho & Guiomar, 2022; Thepsourinthone et al., 2020). Puckett et al. (2015) suggested that both self-criticism and connectedness to a sexual minority community are potential targets when working to improve the mental health of service users with high IH.

In consideration of shame, Gilbert (1998) differentiates between external and internal shame – the former involves a distressing awareness that others view the self negatively, whereas the latter involves self-generated criticism and negative self-evaluation (Gilbert, 1998). In gay men, chronic shame appears to be related to mental health problems (Bybee et al., 2009) and there is a strong positive relationship between IH and overall shame (Allen & Oleson, 1999). IH has been shown to predict higher levels of psychological distress and lower levels of life satisfaction among sexual minorities, including gay men (Puckett et al., 2015;

Wen & Zheng, 2019). This highlights the important role that both IH and shame can play in terms of perpetuating mental health difficulties in gay men, particularly the way they view themselves and the world around them. It should be noted that much of the research on gay men has looked at overall shame (e.g., Bybee et al., 2009) rather than exploring external and internal shame (Gilbert, 1998) separately, thus making it difficult to know whether specific types of shame have a stronger effect for this population.

## **Compassion and Compassionate Training**

### ***Theories of Compassion***

One important factor regarding improving mental health outcomes for different populations is compassion (Kirby et al., 2017). Paul Gilbert, the developer of Compassion Focused Therapy (CFT), defines compassion as “a sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it” (Gilbert & Choden, 2013, p. 94). In that sense, developing compassion firstly involves engaging with distress and difficulties, and then responding with courage, wisdom, and commitment to reduce or alleviate that distress. Gilbert argues that compassion can flow in three directions: from the self to the self (self-compassion), from the self towards others, and from others towards the self (Gilbert & Irons, 2005). Of the three flows of compassion, SC has historically received the most attention in research studies.

According to Gilbert (2009), there are three emotion regulation systems: threat, drive, and soothing. The threat system activates bursts of arousal that alert us to threats and motivate us to take action. This system can respond to both external (e.g., violence) and internal stimuli (e.g., images, emotions, judgements). The drive system is goal-directed and helps to pursue resources and achievements. The soothing system is focused around giving and receiving care, warmth, and empathy. Its function is to help connect to our own needs and those of others to manage distress (Gilbert & Irons, 2005). Gilbert’s (2009) CFT model

was originally developed to address difficulties with shame and self-criticism, which are seen as transdiagnostic factors that can both contribute to and maintain a range of mental health problems (Gilbert & Procter, 2006).

It is essential to acknowledge differences in how compassion is theorised and interpreted across cultures and researchers. For instance, Neff (2003b) only focuses on the flow of self-compassion (SC) and describes it as feeling compassion for others by noticing their suffering, feeling moved by it, and offering understanding and kindness. Neff (2003b) also argues that the notion of SC involves three bipolar constructs: (1) offering self-kindness and understanding rather than being self-critical, (2) recognise that experiences of the self are related to experiences of others instead of seeing them as isolated, and (3) holding painful thoughts and feelings in mindful awareness rather than over-identifying with them.

Despite the different perspectives on compassion, there is an agreement that it plays an important part in emotional well-being (e.g., Kirby et al., 2017). A recent systematic review and meta-analysis by Helminen et al. (2023) identified SC as a coping resource for different LGBTQ+ populations, including gay men. Higher levels of SC in LGBTQ+ individuals are associated with higher levels of psychological well-being and social support while also being associated with lower levels of depression, anxiety, psychological distress, stigma, IH, and suicidal ideation (Carvalho & Guiomar, 2022). These links suggest that mental healthcare in the LGBTQ+ population may benefit from promoting SC.

Most studies investigating SC among gay men have used Neff's Self-Compassion Scale (SCS; Neff, 2003a) rather than Gilbert's compassion-related measures. It could be argued that this may bias the literature to Neff's conceptualisation. This is important to consider in light of criticism of Neff's scale, with some cautioning against including the reversed negative subscales in the SCS as this could inflate the relationship between SC and psychopathology (Muris et al., 2018).

### ***The Role of SC for Gay Men***

There has been a growing evidence base about the positive role of SC on the mental well-being of gay men. In support, Matos et al. (2017b) found that gay men reported lower levels of SC and psychological flexibility (defined in the paper as “the ability to be in the present moment and willingly experience difficult internal events”; p. 100) compared to heterosexual men. This study also noted that SC and psychological flexibility are more strongly correlated with depression and internal shame in gay men than in heterosexual men. Furthermore, SC was a significant mediator of the relationship between memories of warmth and internal shame for gay men but not for heterosexual men. A recent systematic review by Pampoulov et al. (2024) found a significant positive correlation between SC and help-seeking in the adult male population and one of the reviewed studies (Hansen, 2022) demonstrated this link specifically in gay males. The direct and indirect effect of SC on variables related to well-being in gay men highlight the importance of SC for that population.

More recently, SC has been found to mediate the relationship between IH and anxiety in sexual minority groups, with greater IH predicting less SC, which in turn predicted greater levels of anxiety (Brown & Maragos, 2022). SC has been shown to be positively related to well-being in gay men (Beard et al., 2017) and there are further implications from literature that higher SC in gay males is linked to lower psychological distress arising from their minority status (Bowlen, 2020; Sugianto et al., 2019). For instance, SC has been shown to be a significant positive predictor for levels of life satisfaction for gay men (Jennings & Tan, 2014). In addition, SC was negatively correlated with experiences of hopelessness among gay men in a study by Li et al. (2022).

### ***Compassionate Mind Training***

The above evidence suggests that there is support for the usefulness of a compassion-focused training to target self-criticism in sexual minority individuals, in particular gay men,

where self-criticism levels can be higher compared to both heterosexual men and other sexual minority groups (Nappa et al., 2021). Compassionate Mind Training (CMT) is a therapeutic approach which enables people with high levels of self-criticism to develop greater compassion (Gilbert & Procter, 2006). CMT consists of a set of practices that work with physiological processes, such as breathing, body posture, facial expressions, voice tone training, and imagery (Irons & Heriot-Maitland, 2021). In addition, CMT practices focus on conceptualising and engaging with an inner sense of one's own compassionate self-identity, with qualities that embody kindness, wisdom, strength, and commitment (Matos et al., 2018). Studies have shown that CMT can be effective in increasing some of the compassion flows in healthcare professionals (Atuk, 2020; Timings, 2022), as well as in reducing levels of self-criticism and increasing levels of compassion in a mixed-gender general adult population (Gilbert & Procter, 2006; Irons & Heriot-Maitland, 2021; Matos et al., 2017a). There have also been promising findings from an online version of CMT with non-clinical samples (Halamová et al., 2020; Northover et al., 2021), suggesting a possible aspect of cost-effectiveness without the direct involvement of mental health professionals.

### **Purpose of the Present Study**

To date, there has been no research looking at how effective CMT could be specifically for gay men. Moreover, the focus of compassion and its benefits on psychological well-being for gay men is particularly important, bearing in mind that this population presents with higher levels of self-criticism compared to both heterosexual men and other sexual minority groups (Matos et al., 2017b; Nappa et al., 2021). It would be expected that exposure to masculine stereotypes and societal narratives about being gay could serve as an external threat for gay men whereas IH, self-criticism, and shame could be seen as a source of internal threat. These, in turn, could undermine the soothing (i.e., SC) and drive systems (i.e., help-seeking) of gay men. It could therefore be anticipated that a training aimed

at helping gay men cultivate the three flows of compassion, such as CMT, could lead to an increase in well-being and help-seeking outcomes as well as a decrease in levels of IH, shame, and self-criticism.

Given the promising outcomes that CMT has shown with mixed-gender samples (Halamová et al., 2020; Irons & Heriot-Maitland, 2021; Matos et al., 2017a; Timings, 2022), the current paper aimed to explore whether a brief online 14-day CMT programme would have a positive impact on well-being variables for a non-clinical sample of adult gay men. In addition, in line with Pampoulov et al.'s (2024) findings, the study sought to explore the predictive power of compassion-related variables on help-seeking in this population.

## **Hypotheses**

Based on previous literature, the following predictions for this study were made:

**Hypothesis 1:** Participants in the CMT condition will show significantly lower levels of IH, shame, and self-criticism compared to the control condition post-training. It is anticipated that these differences will be maintained at a two-week follow-up period.

**Hypothesis 2:** Participants in the CMT condition will show significantly higher levels of help-seeking intentions, SC, compassion from others (CfO), and mental well-being compared to the control condition post-training. It is anticipated that these differences will be maintained at a two-week follow-up period.

**Hypothesis 3:** Conformity to masculine norms (CMN) will be positively correlated with IH, shame, and self-criticism at pre-training level.

**Hypothesis 4:** CMN will be negatively correlated with help-seeking intentions, SC, CfO, and mental well-being at pre-training level.

**Hypothesis 5:** Levels of SC, CfO, shame, and self-criticism will predict help-seeking intentions at pre-training.

## **Method**

### **Ethics**

The current study was approved by the University of Southampton's ethics committee (ERGO number 79267; see Appendix F).

### **Power Analysis**

Power analyses were conducted using G\*Power version 3.1.9.2 (Faul et al., 2009) prior to the study. Assuming a medium effect size of  $f = 0.25$  based on previous quantitative research on CMT (Atuk, 2020; Timings, 2022), and power of 0.80 (Cohen, 1992), a minimum of 158 participants was suggested for a repeated-measures multivariate analysis of variance (MANOVA) at three time points with two groups to test Hypotheses 1-2.

A second power analysis was conducted to estimate a sample target for Hypotheses 3-5 at baseline. Assuming a medium effect size of .30 based on previous cross-sectional research exploring CMN, compassion, and help-seeking among males (e.g., Hansen, 2022; Komlenac et al., 2023), and power of 0.80 (Cohen, 1992), a minimum of 67 participants was suggested for correlational analyses.

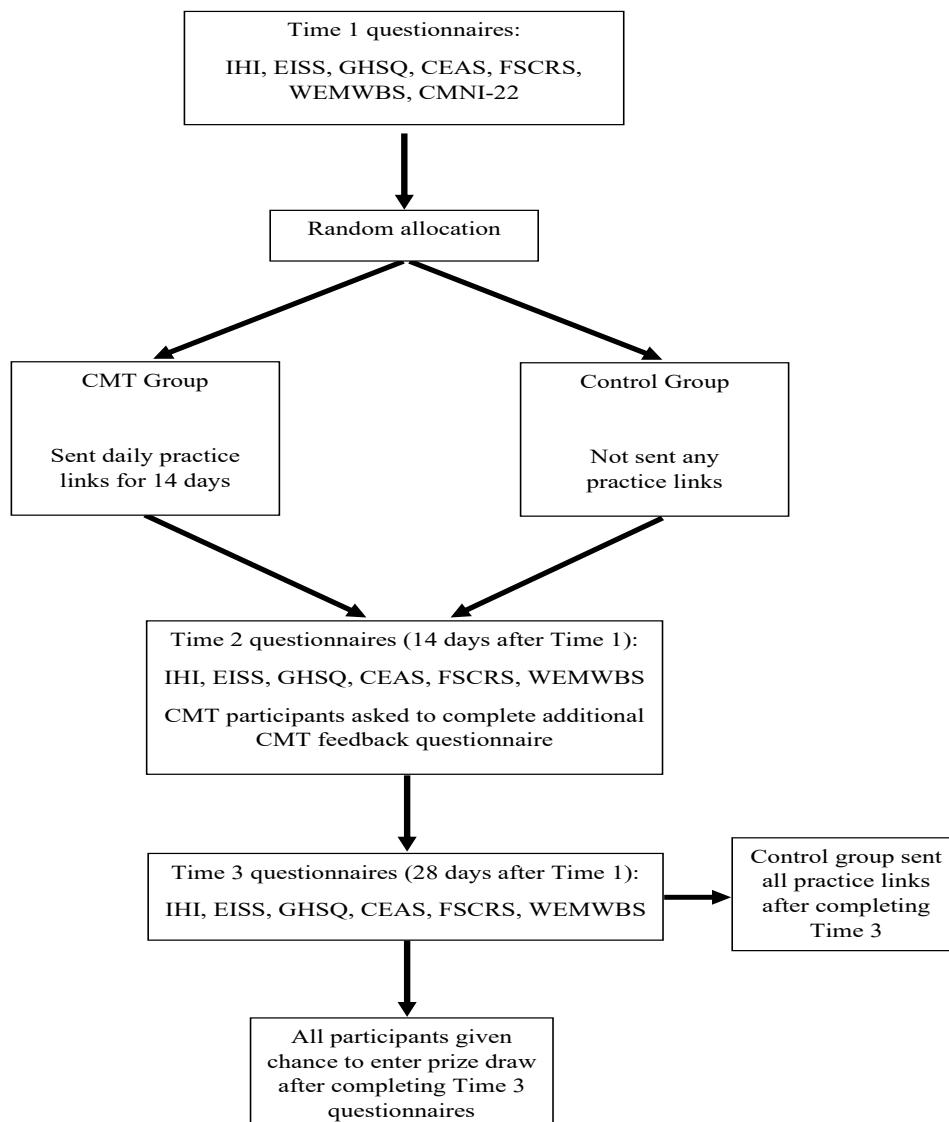
### **Design and Procedure**

The study was based on randomised controlled trial (RCT) principles, with outcome measures completed at three time points over a 28-day period (Figure 5).

Following consent, participants completed a demographic form and a set of outcome measures – Figure 5 outlines the order in which measures were completed. Next, participants were randomly allocated to either the CMT group or control group condition. A 3:1 random allocation ratio was used, with participants being three times more likely to be randomly allocated to the CMT group. This was decided because a previous study, which used a similar RCT design with online CMT (Atuk, 2020), had a significant dropout rate for participants in the CMT condition when using a 50:50 allocation ratio.

**Figure 5**

*Study Design*



Participants in the CMT group were provided daily links for CMT practices for a duration of 14 days. Participants in the control group were provided the same CMT links only after they had completed their follow-up (Time 3) measures if they wished to access them.

Any participants who returned their completed outcome measures at the end of the follow-up stage were given the choice to enter a prize draw for one of 10x£20 Amazon vouchers, as well as to be sent a copy of the results once the study was completed.



Data for this study was collected between 17<sup>th</sup> May 2023 and 29<sup>th</sup> March 2024.

## **Participants**

### ***Inclusion Criteria***

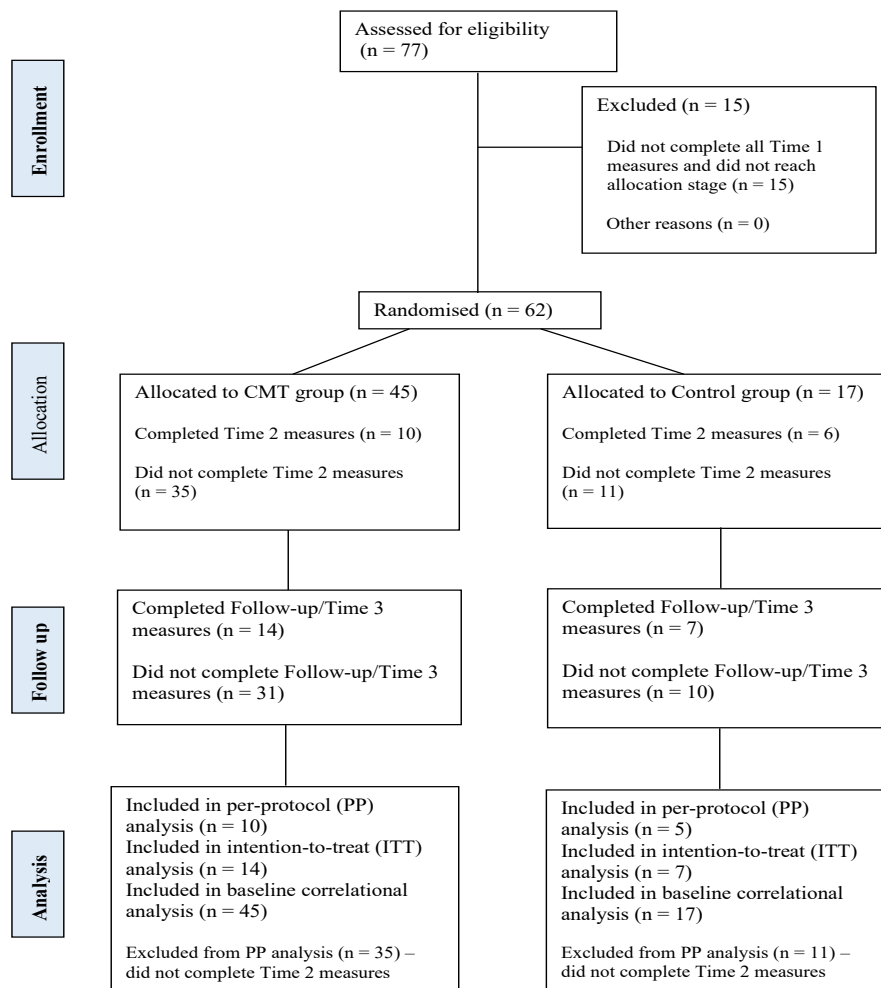
This study was aimed at a non-clinical population. Participants needed to: (1) be at least 18 years of age, (2) identify as a gay man, which could include transgender gay men, and (3) have a level of English sufficient to engage with the project (self-ascertained by participants).

Those who did not meet criteria for this study were: (1) people under the age of 18 years old, (2) people who identified as either heterosexual or as a different sexual minority than a gay man (e.g., lesbian, bisexual), and (3) those who did not have a sufficient level of English to engage with the project.

### ***Number of Participants***

The CONSORT diagram in Figure 6 provides a full breakdown of participant numbers and dropouts at each stage of the study. A total of 77 gay men accessed the study. Of those, 62 participants fully completed their Time 1 questionnaires, with 45 being assigned to the CMT condition and 17 to the control group. From the CMT group, 10 participants completed their post-training questionnaires and 14 completed their follow-up measures, with 10 participants having completed their questionnaires at all three time points. From the control group, six completed Time 2 measures and seven completed Time 3 measures, with five participants having completed their questionnaires at all three time points.

**Figure 6**  
*CONSORT Diagram*



### ***Participant Demographics***

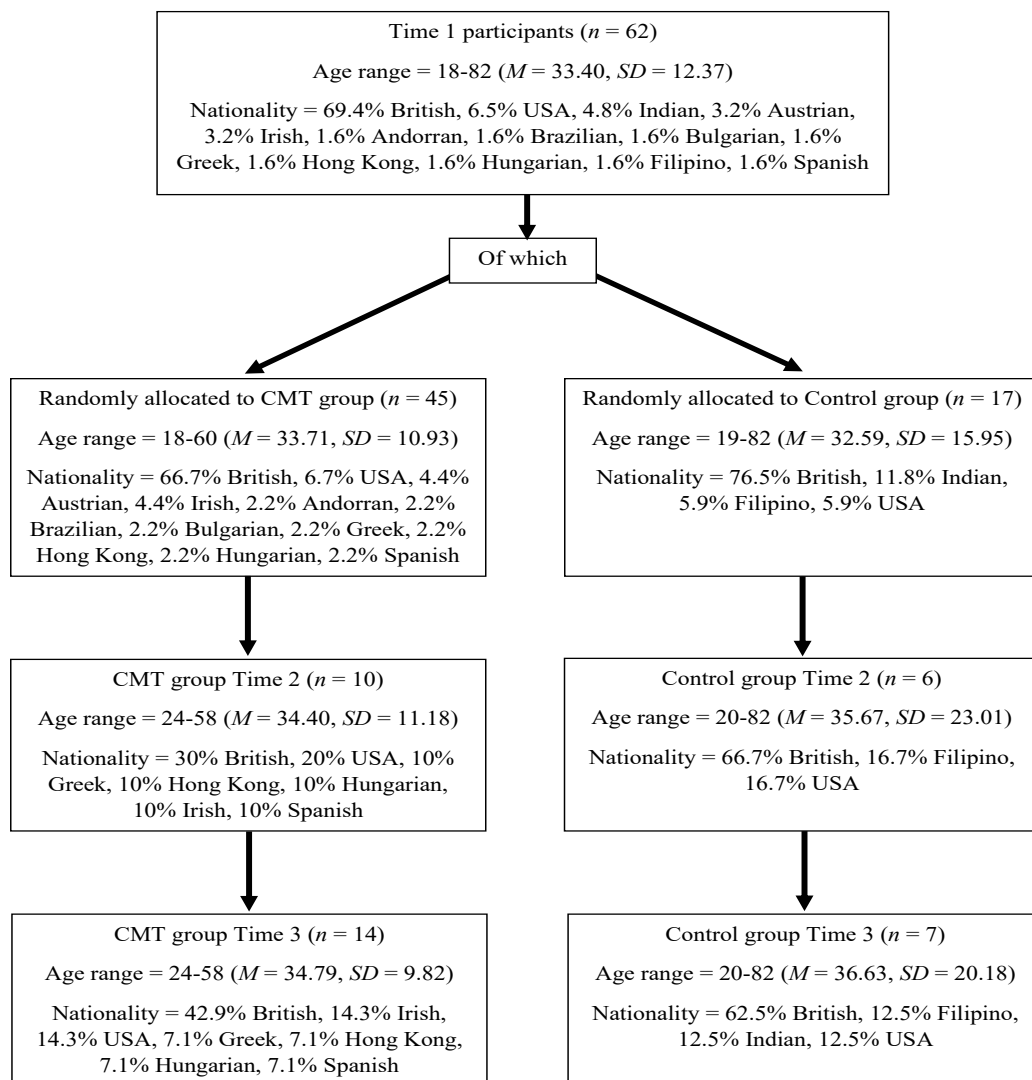
Please see Figure 7 which breaks down demographic data on participants' age and nationality based on group and time point.

### ***Recruitment***

The study was advertised to relevant groups and organisations (e.g., LGBTQ+ charities) via email, social media platforms (e.g., LinkedIn), and study posters at the University of Southampton Highfield campus, community centres, and supermarkets.

## Figure 7

### Participant Demographic Data



## Patient and Public Involvement

Patient and public involvement (PPI) was used in the design of the current study. More specifically, a focus group of seven contributors took place on 24th March 2023, the aim of which was to get contributors' opinions on the outcome measures that were planned to be used in the study. The focus group was open to gay men from the general public. There was a general consensus from the focus group that the intended outcome measures were

relevant to the study topic and that the individual items were easy to understand. All focus group contributors were paid £15 for their contribution.

## **Outcome Measures**

### ***Demographic Form***

Participants first completed an online demographic form, where they were required to select their age, gender, sexual orientation, and nationality. Participants were automatically excluded if they ticked anything other than gay and male.

### ***Internalised Homonegativity Inventory (IHI; Mayfield, 2001)***

The IHI measures levels of IH through a six-point likert scale, with higher scores depicting higher levels of IH. It contains 23 statements loaded onto three subscales: Personal Homonegativity ('I feel ashamed of my homosexuality'), Gay Affirmation (reverse-scored; 'I am proud to be gay'), and Morality of Homosexuality ('I believe it is morally wrong for men to be attracted to each other'). The IHI has been shown to have good levels of internal consistency with an overall Cronbach's alpha score of .91, ranging between .70 and .89 for the individual subscales (Mayfield, 2001). Cronbach's alpha in the current sample for overall IH was .89, ranging between .76-.90 for the three subscales.

### ***External and Internal Shame Scale (EISS; Ferreira et al., 2020)***

This measure has eight items that assess level of shame. Half of the items assess internal shame (with statements beginning with 'I am...') whereas the other half explore external shame (with statements beginning with 'Other people...'). For each statement, participants indicated on a five-point likert scale how often they feel what is described, with answers ranging from 0 (*never*) to 4 (*always*), with higher scores indicating higher shame. The EISS has good internal consistency and concurrent validity in different international samples (Hiramatsu et al., 2021), with an overall Cronbach's alpha of .89 (.80 for the external and .82 for the internal shame subscales respectively; Ferreira et al., 2020). Cronbach's alpha

in the current sample for overall shame was .88, with .79 for the external and .78 for the internal shame subscales.

### ***General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005)***

This questionnaire measures the extent to which people are likely to seek help (or help-seeking intentions) from different sources, including family, friends, colleagues, and healthcare professionals. It is split into two sections, with 10 questions each. The first section asks how likely people are to seek help from others if they are having a personal or emotional problem, whereas the second section asks the same question but within the context of experiencing suicidal thoughts. For the purposes of this study, only the first section of the questionnaire was used as it was felt that the second section was not relevant to the study aims. For each question, participants had to indicate how likely they were to seek help from that source on a likert scale ranging from 1 (*extremely unlikely*) to 7 (*extremely likely*). The GHSQ has demonstrated good reliability and validity, with an overall Cronbach's alpha score of .85 and .70 for the personal/emotional problem section (Wilson et al., 2005). Cronbach's alpha in the current sample was .75.

### ***Compassionate Engagement and Action Scale (CEAS; Gilbert et al., 2017)***

This scale assesses compassion across two domains: engagement with suffering, and action towards trying to alleviate and prevent suffering (Gilbert & Choden, 2013), across the three compassion flows. Each flow is measured using 13 items with answers ranging on a scale from 1 (*never*) to 10 (*always*), with higher scores indicating greater levels of compassionate engagement. For this study, the questions from the compassion towards others section were not used as they were less relevant to the research question. This scale was chosen due to it exploring more than one compassion flow as well as due to criticism of the SCS (Neff, 2003a) around inflating psychopathology (Muris et al., 2018). The CEAS has good internal reliability and validity, with Cronbach's alpha scores for the CfO section

ranging between .89-.91 and for the SC section ranging between .72-.90 (Gilbert et al., 2017). Cronbach's alpha in the current sample ranged between .79-.84 for the SC section and between .85-.86 for the CfO section.

***The Forms of Self-Criticising/Attacking & Self-Reassuring Scale (FSCRS; Gilbert et al., 2004)***

The FSCRS measures self-criticism and the ability to self-reassure. It consists of 22 items split into three sections: the inadequate self, the hated self (both of which form self-criticism), and the self-reassuring self. Responses are given on a five-point likert scale, ranging from 0 (*not at all like me*) to 4 (*extremely like me*). The FSCRS has high internal consistency across the three sections, with Cronbach's alpha of .90 for inadequate self and .86 for the hated self and self-reassurance subscales (Gilbert et al., 2004), having been validated across different samples (Navarrete et al., 2021). For the present study, scores from the inadequate and hated self sections were combined in order to look at the overall self-criticism score, which has been done in previous literature (e.g., Dunn & Luchner, 2022). Cronbach's alpha in the current sample was .91 for the self-criticism section and .87 for the reassured self.

***Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007)***

The WEMWBS is a 14-item scale that assesses cognitive processes, feelings, and the quality of interpersonal relationships to measure well-being over the previous two weeks (e.g., 'I've been feeling relaxed'). It uses a five-point likert scale, ranging from 1 (*none of the time*) to 5 (*all of the time*), with higher scores indicating better psychological well-being. The WEMWBS has indicated good internal consistency and content validity, with Cronbach's alpha of .89 in a student sample and .91 in a wider population sample (Tennant et al., 2007). Cronbach's alpha in the current sample was .91. The WEMWBS was chosen as a well-being measure for the study as it is well suited for general population samples.

### ***The Conformity to Masculine Norms Inventory (CMNI-22; Mahalik et al., 2003)***

The CMNI-22 is an abbreviated version (Owen, 2011) of the original CMNI measure developed by Mahalik et al. (2003). This questionnaire is used to measure adherence to traditional Western masculine norms and values, such as ‘I never ask for help’ and ‘I enjoy taking risks’. The CMNI-22 consists of 22 items, each measured on a four-point likert scale, ranging from 0 (*strongly disagree*) to 3 (*strongly agree*), with higher scores indicating greater levels of masculine norm adherence. Although the CMNI-22 has produced lower reliability scores compared to the original 94-item version, with a Cronbach’s alpha of .72 in a male sample (Owen, 2011), it has been deemed appropriate for use across diverse representations of culture and biological sex (Kivisalu et al., 2015). Cronbach’s alpha in the current sample was .69. The CMNI-22 was only used at the Time 1 point in the current study as it was planned to be treated as a covariate in the statistical analyses in order to control for its possible effect on the other outcome measures.

### ***CMT Engagement Feedback Questions***

At the end of each day during the two-week CMT, participants in the CMT condition were asked to answer a question on how well they were able to engage with the practices. The answers varied on a five-point likert scale ranging from 1 (*not very well*) to 5 (*very well*).

After completing the two-week CMT, participants in the CMT condition completed a brief feedback questionnaire regarding the accessibility of the training in addition to their Time 2 measures. The feedback questionnaire, adapted from Timings (2022), contained 11 statements (e.g., ‘Going through the CMT practices was worth my time’), with answers ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) – see Appendix P.

### ***CMT: Design and Tasks***

The current study used an English version of the CMT scripts, developed for a two-week CMT by Matos et al. (2017a), and converted into audio recordings for UK use by Atuk

(2020). The study also incorporated a psychoeducation video by Timings (2022), converted from Matos et al.'s (2017a) psychoeducation booklet. The CMT scripts included the following practices:

1. Postures, Facial Expressions, and Vocal Tones (PFEVT)
2. Mindfulness
3. Soothing Rhythm Breathing (SRB)
4. Building and Cultivating Your Compassionate Self (BCYCS)
5. Compassion for a Close Person (CCP)
6. Compassion for the Self (CFTS)

Table 4 outlines the schedule of practices over the 14-day period based on Timings' (2022) and Matos et al.'s (2017a) CMT protocol. Participants in the CMT group were sent a daily link to the relevant practice via email. The audio recordings were stored and available on SoundCloud through a secure link. At the end of each practice, CMT group participants were encouraged to embody their compassionate self in their daily life via text prompt.

**Table 4**

*Schedule of CMT Practices*

Day	Type of practice	Length (min)	Day	Type of practice	Length (min)
1	Psychoeducational video	20:06	8	CFTS	5:39
2	PFEVT and SRB	19:44	9	BCYCS	13:07
3	Mindfulness and PFEVT	19:24	10	CCP	5:32
4	SRB and Mindfulness	17:46	11	CFTS	5:39
5	Psychoeducational video	20:06	12	BCYCS	13:07
6	BCYCS	13:07	13	CCP	5:32



## Data Management

Data was collected via the Qualtrics software. Participant answers were confidential, anonymised at point of analysis, and were stored securely on a password-protected University of Southampton computer.

## Results

### Overview of Data

Table 5 displays means and standard deviations of outcome measures for the CMT and control group across the three time points. Only 10 participants from the CMT and five from the control group had complete datasets across all three time points<sup>1</sup>. Appendix T presents average scores across measures for all participants at baseline only.

### Normality Assumptions

The repeated-measures data was not suitable for parametric analysis of longitudinal data as it did not meet normality assumptions for a MANOVA (Field, 2018). The main reason for this was that the final sample size was very underpowered in comparison to the target size of 158 and Box's test of homogeneity of variance could not be performed when inputting all of the measures together. As a result, non-parametric statistical tests were performed (Field, 2018). Baseline data met normality assumptions for cross-sectional analyses, with no multicollinearity observed.

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<sup>1</sup> Following a discussion among the research team, it was decided to keep all CMT participants' scores in the analysis, even if they accessed less than half of the 14 practices.

## Data Analysis

For Hypotheses 1-2, non-parametric tests were performed due to normality assumptions for MANOVA being violated. For between-subjects analyses, a one-tailed Mann-Whitney U test was carried out to determine if there were predicted differences in scores between the CMT and control group across Time 2 and Time 3. Additional within-subjects analyses were conducted for each outcome measure over the three time points in order to look at the effect of time using the Friedman test. Due to a high level of missing datasets at both Time 2 (66%) and Time 3 (74%), Intention to Treat (ITT) and Per-Protocol (PP) were conducted as additional analyses.

**Table 5**

*Means and Standard Deviations for Both Groups*

Outcome measure	CMT Group ( <i>n</i> = 10)			Control Group ( <i>n</i> = 5)		
	Time 1	Time 2	Time 3	Time 1	Time 2	Time 3
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
IHI overall score	1.80 (0.80)	1.75 (0.94)	1.69 (0.94)	1.58 (0.64)	1.55 (0.66)	1.61 (0.77)
External shame	1.87 (0.87)	1.80 (0.83)	1.83 (0.99)	1.65 (0.58)	1.40 (0.65)	1.65 (0.45)
Internal shame	1.78 (0.84)	1.60 (1.17)	1.35 (1.08)	1.30 (0.91)	1.35 (0.89)	1.45 (0.74)
EISS overall score	1.81 (0.81)	1.80 (0.92)	1.59 (0.97)	1.48 (0.60)	1.38 (0.64)	1.55 (0.51)
Help-seeking intentions	4.52 (0.81)	4.49 (1.02)	4.38 (1.03)	4.52 (0.68)	4.13 (0.61)	4.19 (1.14)
SC	7.33 (1.28)	7.49 (1.48)	7.70 (1.45)	6.90 (1.03)	7.50 (1.42)	7.36 (1.31)
CfO	6.30 (2.55)	6.45 (2.70)	6.78 (2.15)	6.22 (2.58)	6.86 (1.89)	6.36 (1.76)

FSCRS – Self-criticism	1.82 (0.95)	1.58 (0.98)	1.62 (1.06)	1.82 (0.89)	1.41 (0.84)	1.51 (0.76)
FSCRS – Reassuring self	2.52 (0.95)	2.71 (1.15)	2.79 (0.83)	2.80 (1.04)	2.80 (0.71)	2.73 (1.07)
Mental well-being	3.47 (0.56)	3.63 (0.52)	3.84 (0.49)	3.71 (0.59)	3.49 (0.42)	3.48 (0.45)
Engagement with practices average	-	3.72 (.88)	-	-	-	-
Post-CMT feedback	-	4.89 (1.23)	-	-	-	-

For Hypotheses 3-5, bivariate correlations from Time 1 data were used. For Hypothesis 5, a multiple linear regression was also conducted. Regarding missing data for cross-sectional analyses, the assumption of missing completely at random (MCAR) was satisfied and a listwise approach was employed, meaning that only complete datasets were used to compute correlations. The listwise approach was chosen to allow for a ‘same sample’ analysis and to avoid bias in the estimation of parameters (Donner, 1982). There is a lack of consensus in literature around missing data management; however, listwise deletion has been described as the most frequently used method in handling missing data (Kang, 2013)<sup>1</sup>.

## Main Analyses<sup>2</sup>

### *Hypothesis 1*

**IH.** Mann-Whitney tests showed that there was no statistically significant difference in IH scores between groups at Time 2 ( $U = 18.00, p = .440$ ) and Time 3 ( $U = 20.50, p = .594$ ). Friedman tests showed there was no significant difference in IH scores over time for CMT participants ( $\chi^2(2) = .84, p = .656$ ) and the control group ( $\chi^2(2) = 1.08, p = .584$ ).

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<sup>1</sup> The baseline analysis was run with and without the incomplete datasets and there was no difference in significance levels (see Appendix U for bivariate correlations table for participants with incomplete datasets).

<sup>2</sup> Tests run with both ITT and PP samples for each of the non-parametric tests did not result in any different effects.

**Shame.** Mann-Whitney tests showed that there was no statistically significant difference in overall shame scores between the CMT and control group at Time 2 ( $U = 17.50$ ,  $p = .371$ ) and Time 3 ( $U = 24.00$ ,  $p = .953$ ). The non-significant difference at both time points was also observed for the external ( $U = 18.50$ ,  $p = .440$  at Time 2;  $U = 21.50$ ,  $p = .679$  at Time 3) and internal shame ( $U = 23.00$ ,  $p = .859$  at Time 2;  $U = 21.50$ ,  $p = .679$  at Time 3) subscales of the EISS. Friedman tests showed there was no significant difference in overall shame scores over time for CMT participants ( $\chi^2(2) = 1.68$ ,  $p = .433$ ) and the control group ( $\chi^2(2) = .93$ ,  $p = .627$ ). The non-significant difference across all time points for both groups was also observed for the external ( $\chi^2(2) = .58$ ,  $p = .748$  for CMT group;  $\chi^2(2) = 1.41$ ,  $p = .494$  for control group) and internal shame ( $\chi^2(2) = 4.92$ ,  $p = .085$  for CMT group;  $\chi^2(2) = 1.78$ ,  $p = .411$  for control group) subscales of the EISS.

**Self-Criticism.** Mann-Whitney tests showed that there was no statistically significant difference in self-criticism scores between the CMT and control group at Time 2 ( $U = 24.50$ ,  $p = .953$ ) and Time 3 ( $U = 23.50$ ,  $p = .859$ ). Friedman tests showed there was no significant difference in self-criticism over time for CMT participants ( $\chi^2(2) = .21$ ,  $p = .900$ ) and the control group ( $\chi^2(2) = 5.78$ ,  $p = .056$ ).

## ***Hypothesis 2***

**Help-Seeking Intentions.** Mann-Whitney tests showed there was no statistically significant difference in help-seeking intentions between the CMT and control group at Time 2 ( $U = 14.50$ ,  $p = .206$ ) and Time 3 ( $U = 23.00$ ,  $p = .859$ ). Within-subjects tests showed there was no significant difference in help-seeking intentions over time for CMT participants ( $\chi^2(2) = .46$ ,  $p = .794$ ) and the control group ( $\chi^2(2) = 5.16$ ,  $p = .076$ ).

**SC and CfO.** Mann-Whitney tests showed that there was no statistically significant difference in SC scores between the CMT and control group at Time 2 ( $U = 25.00$ ,  $p = 1.000$ ) and Time 3 ( $U = 22.00$ ,  $p = .768$ ). In terms of CfO, no statistically significant differences in

scores were observed between the two groups at both Time 2 ( $U = 24.00, p = .953$ ) and Time 3 ( $U = 17.00, p = .371$ ). Friedman tests showed there was no significant difference in SC over time for CMT participants ( $\chi^2(2) = .60, p = .741$ ) and the control group ( $\chi^2(2) = .40, p = .819$ ). There was no significant difference in CfO over time for both the CMT ( $\chi^2(2) = 1.28, p = .527$ ) and control group ( $\chi^2(2) = .95, p = .623$ ).

**Mental Well-Being.** Mann-Whitney tests showed that there was no statistically significant difference in mental well-being scores between the CMT and control group at Time 2 ( $U = 21.00, p = .679$ ) and Time 3 ( $U = 14.00, p = .206$ ). Friedman tests showed that there was no significant difference in mental well-being over time for CMT participants ( $\chi^2(2) = 3.20, p = .202$ ) and the control group ( $\chi^2(2) = 1.71, p = .424$ ).

### ***Dosage Effects***

In order to explore dosage effects of the CMT regarding hypotheses 1 and 2, statistical analyses were re-run comparing the control group to participants in the CMT group who had accessed (1) less than half of the practices, (2) at least half of the practices, and (3) all of the practices. In all of these separate analyses, the non-significance levels of between- and within-group comparisons remained. Appendix W provides a detailed breakdown of how many of the daily practices were accessed by each of the CMT participants as well as which practices these were in terms of participants' continuous engagement. All three participants who accessed all 14 of the CMT daily practices completed both their Time 2 and Time 3 measures.

**Table 6***Bivariate Correlations at Baseline*

Variables	1	2	3	4	5	6	7	8	9	10	11
1. IH	-	.60**	.61**	.64**	-.15	-.18	-.17	-.68**	-.33*	-.30*	.38**
2. External shame	.60**	-	.78**	.94**	.48**	-.42**	-.39**	.66**	-.50**	-.51**	.31**
3. Internal shame	.61**	.78**	-	.94**	-.38**	-.40**	-.41**	.78**	-.47**	-.39**	.30**
4. Overall shame	.64**	.94**	.94**	-	-.46**	-.44**	-.42**	.77**	-.51**	-.48**	.33**
5. Help-seeking intentions	-.15	.48**	-.38**	-.46**	-	.59**	.51**	-.39**	.49**	.58**	-.04
6. SC	-.18	-.42**	-.40**	-.44**	.59**	-	.48**	-.42**	.65**	.58**	-.01
7. CfO	-.17	-.39**	-.41**	-.42**	.51**	.48**	-	-.34**	.50**	.54**	.01
8. Self-criticism	-.68**	.66**	.78**	.77**	-.39**	-.42**	-.34**	-	-.56**	-.32**	.36**
9. Reassuring self	-.33**	-.50**	-.47**	-.51**	.49**	.65**	.50**	-.56**	-	.58**	.06
10. Mental well-being	-.30*	-.51**	-.39**	-.48**	.58**	.58**	.54**	-.32**	.58**	-	.07
11. CMN	.38**	.31**	.30**	.33**	-.04	-.01	.01	.36**	.06	.07	-

Note.  $n = 62$ , \* =  $p < .05$ , \*\* =  $p < .01$

## Outcomes from Baseline Data

### *Hypothesis 3*

Table 6 provides Pearson's  $r$  coefficients for each of the outcome measures. Bivariate analyses showed that CMN was significantly positively correlated with overall IH scores ( $r = .38, p = .001$ ), self-criticism ( $r = .36, p = .002$ ), and overall shame ( $r = .33, p = .005$ ), including with both external ( $r = .31, p = .007$ ) and internal shame ( $r = .30, p = .008$ ).

### *Hypothesis 4*

Bivariate correlations showed that CMN was not significantly correlated with help-seeking intentions ( $r = -.04, p = .379$ ), SC ( $r = -.01, p = .476$ ), CfO ( $r = .01, p = .476$ ), and mental well-being ( $r = .07, p = .287$ ).

### *Hypothesis 5*

Bivariate correlations showed that help-seeking intentions were significantly positively correlated with both SC ( $r = .59, p < .001$ ) and CfO ( $r = .51, p < .001$ ). Conversely, both self-criticism ( $r = -.39, p = .002$ ) and overall shame ( $r = -.46, p < .001$ ; external shame:  $r = -.48, p < .001$ ; internal shame:  $r = -.38, p = .002$ ) were significantly negatively correlated with help-seeking intentions.

Based on these findings, a multiple linear regression was carried out to explore whether the above four compassion-related variables predicted help-seeking intentions (see Table 7). This was a statistically significant model ( $F(4,57) = 11.24, p < .001$ ) and the adjusted  $R^2$  indicated that 44% of the variance in help-seeking intentions could be explained by variances in the predictor variables. SC ( $t = 3.32, p = .002$ ) and CfO ( $t = 2.07, p = .043$ ) were shown to be statistically significant predictors of help-seeking intentions. The analysis suggested that SC ( $\beta = .396$ ) was the most influential predictor in the model.

**Table 7***Regression Model with Help-Seeking Intentions as Criterion Variable*

	Unstandardised Coefficients	Standardised Coefficients	<i>t</i>	Sig.
Constant	1.842		2.60	.012
Shame	-.226	-.187	-1.16	.250
SC*	.274	.396	3.32	.002
CfO*	.128	.243	2.07	.043
Self-criticism	.007	.006	.04	.969
Adjusted $R^2 = 44\%$ , $F(4,57) = .11.24$ , $p < .001$				

*Note.* \* =  $p < .05$ **Post-CMT Feedback Questionnaire**

Full results from the post-CMT feedback questionnaire ( $n = 10$ ) are shown in Appendix V. There were some notable trends observed in CMT participants' scores which are expanded on in the Discussion section.

**Predictors of Dropout**

The current study's sample size at baseline was very underpowered for a logistic regression analysis looking at whether some of the variables (e.g., shame, age) could have predicted dropout, thus such analyses were not performed.

**Discussion****Summary of Findings*****Hypotheses 1-2***

The current study sought to evaluate the effectiveness of a 14-day CMT for adult gay men on different psychological outcomes. Unfortunately, the study was underpowered due to a large dropout rate at time points 2 and 3, meaning that some of the normality assumptions for the intended statistical analyses were violated. Non-parametric tests were conducted and there were no significant differences on all of the measures between the CMT and control group at both Times 2 and 3. The findings do not support existing research on similar CMT



protocols in adult populations (Atuk, 2020; Matos et al., 2017a; Timings, 2022) or other CMT-related literature in non-clinical samples (Halamová et al., 2020; Irons & Heriot-Maitland, 2021). This could be due to the study being underpowered, but it could also be due to the CMT protocol not being effective. There did not appear to be dosage effects from the training as non-significance levels of between- and within-group comparisons remained unchanged when CMT participants with lower levels of engagement were excluded from analyses. Therefore, aspects of the CMT design need to be explored to assess feasibility of protocol, followed by exploration with a larger sample to ascertain reliable answers to research questions and whether this could be a useful intervention for gay men.

### ***Hypotheses 3-5***

CMN was significantly positively correlated with overall IH scores, self-criticism, and shame (including both external and internal shame) at baseline, supporting existing research on the possible relationship between CMN and IH in gay men (Hansen, 2022). Shame and self-criticism are already seen as key components of the threat system in Gilbert's (2009) CFT model (Irons & Lad, 2017) and these findings suggest that both CMN and IH might also be threat-related factors among gay men.

CMN was not significantly correlated with help-seeking intentions, SC, CfO, and mental well-being. This is contrary to what compassion theory would predict and does not support existing research on the significant negative correlation between CMN and positive help-seeking attitudes in men (Wasylikiw & Clairo, 2018). It also suggests that there may be other facets or variables at play which were not assessed in this study.

SC and CfO significantly predicted help-seeking intentions in gay men, with SC as the most significant predictor. This supports meta-analysis results from Pampoulov et al. (2024) and Carvalho and Guiomar (2022), who found that there was a significant positive relationship between SC and mental health indicators (including help-seeking) among men

and the LGBTQ+ population. It also offers support for Gilbert's (2009) three systems model, where SC and CfO could be seen as part of the soothing system (helping to give and receive care, warmth, and empathy), whereas help-seeking intentions could fit with the drive system as a way of pursuing resources. In the case of gay men, the latter might relate to connecting with safe, like-minded communities (Puckett et al., 2015) and accessing services.

### ***Post-CMT Feedback Questionnaire***

Data from the post-CMT feedback questionnaire provided helpful insights in terms of CMT participants' experience and evaluation of the training. Firstly, 70% of CMT participants felt that the psychoeducational video at the beginning of the CMT was helpful, whereas 30% of respondents were either neutral about it or did not find it helpful. This raises questions regarding the suitability of the video and whether it needs to be tailored for different populations in future CMT studies. Another point from the questionnaire is that 30% of respondents did not feel that it was worth their time to go through the CMT practices, whereas 40% did not agree that the CMT practices were helpful and 50% agreed that the CMT practices were unnecessarily complex. The variability in answers for these items suggests that there were mixed experiences of the CMT and raises questions about the effectiveness and accessibility of this particular CMT protocol specifically for the adult gay male population.

CMT participants who accessed fewer CMT practices during the 14-day period evaluated the training more negatively in the post-CMT feedback questionnaire compared to CMT participants who accessed more practices, suggesting a link between level of engagement and overall evaluation of the training. One way of exploring how to reduce dropout rates and improve CMT engagement is by using qualitative research methods in order to get richer and more in-depth accounts of participants' experiences of CMT and what they would recommend. Another way of adapting this further for gay men is by using more

PPI or expert by experience input (e.g., focus groups) when designing the protocol itself rather than focusing purely on the outcome measures.

20% of CMT respondents selected in the post-CMT feedback questionnaire that the length of the CMT audio practices felt too long. Therefore, length and duration of interventions could be further explored to ascertain impact on attrition and effectiveness. For example, Northover et al. (2021) used a five-session CMT protocol for adults from the general public and found that compared to a waitlist control group, participants in the CMT condition had a significant increase in SC and well-being and a significant decrease in shame, self-criticism, depression, and anxiety, suggesting that five-sessions of CMT could be sufficient in leading to effective outcomes.

### **Strengths and Limitations**

To the authors' knowledge, this is the first study to look at the effectiveness of CMT specifically targeting adult gay males, adopting a pre-existing CMT protocol (Matos et al., 2017a; Timings, 2022). By employing a RCT design, the study aimed to reduce bias and ensure a rigorous method to examine relationships, allowing attribution of any differences in outcomes to the training (Hariton & Locascio, 2018).

However, the study also has its limitations. Firstly, the final sample size for the exploration of the CMT meant that the data was underpowered. The high dropout rates indicate difficulties with regard to participants' continuous engagement with CMT. There was a high level of variability between participants in terms of how many of the practices each one of them completed, ranging from 14%-100%. Although there is no consensus in literature about the number of practices needing to be accessed to measure engagement, Matos et al. (2018) mention that 77.6% of their CMT participants reported that they practised the CMT exercises at least once a week. Having different completion rates suggests inconsistent engagement across participants, making it difficult to ascertain an overall dose-

effect (i.e., how much of the training is needed to see an effect), as well as to ascertain how much of the observed effects (or lack thereof) at post-training and follow-up in the CMT condition were due to the training itself. The study's sample size was too underpowered to use logistic regression in order to look at whether certain variables (e.g., shame, age) could have predicted dropout. For instance, it might be anticipated that participants with higher levels of shame at baseline might be more likely to engage in hiding or withdrawing behaviours (Gilbert, 2009), which could manifest as reduced engagement or dropping out from training. Future research could further explore this with a statistically powered sample size as this would then help to understand whether particular variables could be targeted prior to starting CMT (e.g., reducing levels of shame through psychoeducation). Although the study used a PPI focus group to discuss the suitability of the planned outcome measures, the group did not include discussions of the CMT protocol, which could be explored in future research.

The majority of participants were in the 20-40 years age range, making it difficult to generalise the findings to gay men from older age groups, which is important to consider when exploring cohort beliefs across generations (Bitterman & Hess, 2021). Despite the study being open to any nationality, most of the participants at baseline were UK nationals, although there was a better spread of nationalities at time points 2 and 3. This necessitates a degree of caution when interpreting the results from a cross-cultural and intersectional perspective, particularly when considering different international laws around LGBTQ+ rights (Horne, 2020).

All participants had to self-select their gender and sexual orientation when signing up for the study. The self-reporting meant that there was no governance as to whether it was actually gay men who took part. Also, the study was open to transgender men, who may have been exposed to different amounts of masculine norms in their early years (Sánchez, 2016).

Due to the online nature of the study, there was no way to ensure that participants completed their Time 2 and Time 3 questionnaires on time rather than with a delay of several days or weeks. In order to address this, some CMT studies (Irons & Heriot-Maitland, 2021) had a specific time period by which participants had to complete post-training questionnaires (e.g., up to one week after CMT completion). In addition, although there was a question following each CMT practice about how engaged participants were, it is difficult to tell whether this was an accurate way to check their engagement, particularly for participants who did not answer that question but might have still engaged in the practice. To address this, Matos et al. (2018) utilised practice diaries for participants to retrospectively log their reflections about engaging with the CMT practices. Although these diaries were not used in the current study, they could be a possible way of checking participant engagement in future CMT research.

Both of the compassion-related outcome measures used in this study (CEAS and FSCRS) were developed by Gilbert. As such, it is acknowledged that the notion of SC and any observed effects from it in this paper align more with Gilbert's (2009) compassion theory rather than Neff's (2003b), thus creating a potential bias towards one explanation of compassion. This is important to consider in the context of most of the compassion-related literature focusing on the flow of SC specifically and using Neff's (2003a) SCS measure (MacBeth & Gumley, 2012). The current study explored both SC and CfO but it did not measure compassion to others (CtO) as it was felt that CtO was less relevant to help-seeking conceptualisations and thus was removed to reduce participant burden. However, including CtO would have allowed to check whether all three compassion flows would have produced similar outcomes, in line with Gilbert's (2009) compassion theory.

## **Implications and Future Directions**

It is difficult to draw definitive conclusions about the effectiveness of CMT from the current study due to underpowered data and non-significant difference across time in the training condition. However, this paper highlights the potential role of CMN and IH within Gilbert's (2009) threat system through their relationship with both shame (external and internal) and self-criticism. Considering this, it might be helpful for clinicians to explore the extent to which CMN and IH are affecting the well-being of gay males accessing mental health services. As this was the first study to show that both SC and CfO significantly predicted help-seeking intentions in gay men, there is a good argument for helping this population cultivate more compassion in order to improve their engagement with services.

Given that gay men are less likely to access services (Grabski et al., 2022), there could be further work within the community, such as providing education around the benefits of compassion and exploring blocks to compassion in more detail. This is particularly important when considering potentially harmful societal narratives in relation to both masculinity and LGBTQ+ groups (Konopka et al., 2021), and how these may play a role in perpetuating IH and other threat responses in gay men. Further research regarding the direct or indirect relationship between CMN, IH, and compassion-related variables in gay males is needed to better understand their role in this population.

Future research could also qualitatively explore participants' subjective experiences of CMT and could look at feasibility trials on the effectiveness of CMT by focusing more on the method rather than solely the treatment effect. For example, the introduction of practice diaries (Matos et al., 2018) or having a specific cut-off point (e.g., at least half of practices accessed) to ensure consistent level of engagement across participants. Specific cut-off points have not been used in CMT research so far; however, some studies (Atuk, 2020; Halamová et al., 2020) have used automatic email reminders or post-exercise free-text responses (e.g.,

“What aspect of the exercise will you use in your everyday life and how?”) to encourage participants to engage with and use skills from practices.

The high dropout rates, the variability in how many of the CMT practices were accessed, as well as not finding dosage effects raises questions whether research on gay males with this particular CMT protocol is feasible or whether the study methodology is too complex and not palatable for this population. Therefore, future studies could look into changing aspects of the CMT protocol and being more guided by their target population’s preferences and adaptations with regard to the delivery, content, and overall structure of CFT-informed training or interventions. It is worth noting that all three participants who accessed all of the CMT daily practices completed both their Time 2 and Time 3 measures (see Appendix W). In addition, participants who did not drop out at Time 2 were likely to engage for the duration of the study by completing the Time 3 measures. Both of these factors could be a helpful indicator of participant engagement for future CMT research.

## **Conclusion**

The present study did not find evidence to suggest that a 14-day CMT would be effective in improving psychological outcomes for adult gay men. However, the findings need to be considered within the context of high dropout rates and, as a result, underpowered data. Cross-sectional analyses showed a positive relationship between CMN and blocks to compassion, as well as compassion-related variables, namely SC and CfO, predicting help-seeking intentions. This highlights the need to address CMN’s role as part of threat-related factors for gay men, but also to enable gay males to cultivate greater compassion for them to be more likely to seek help. The study sets the scene for future research to further explore psychological processes for gay men, particularly regarding facilitators and barriers to compassion.

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**Appendix A: Additional Characteristics of Studies Included in the Systematic Review**

No.	Author and Year	Study Name	Journal/ Unpublished	Country and Setting	Study Design	Male Only Pts?	Age of Male Pts	Male Pts' Ethnicity
1	Booth et al., 2019	Masculine gender role stress and self-stigma of seeking help: The moderating roles of self-compassion and self-coldness	Journal of Counseling Psychology	USA, University population	Cross-sectional	Yes	18-55 (M=24.1)	White (63.3%), Asian or Asian American (15.5%; including identification as Chinese, Asian Indian, Korean, Southeast Asian, Filipino, or Japanese), Hispanic–Latino (6.4%; including a specific designation for Mexican), Multiracial (5.7%), African American–Black (5.5%), American Indian or Alaskan Native (.1%), and Other or did not respond (3.5%)
2	Hansen, 2022	The effect of masculinity, self-stigma, and self-compassion on help-seeking attitudes in gay men	Unpublished thesis on ProQuest	USA, University population	Cross-sectional	Yes	17-70 (M=28.1, SD=10.9)	58% European American, 19% Asian American (including Pacific Islanders), 13% Latino/a American, and 4% African American. A further 6% identified their race as “other,” including Middle Eastern American and multiracial

3	Heath et al., 2017	Masculinity and barriers to seeking counselling: The buffering role of self-compassion	Journal of Counseling Psychology	USA, University population	Cross-sectional	Yes	18-30 ( <i>M</i> =19.7, <i>SD</i> =1.7)	European American (80.3%), Asian American/Pacific Islander (9.2%), African American (4.2%), Latino (2.8%), multiracial (2.1%), and other (1.4%)
4	Kantar & Yalçın, 2023	Masculine gender role stress and attitudes towards seeking psychological help: Serial mediation by self-stigma and self-compassion	Current Psychology	Turkey, University population	Cross-sectional	Yes	18-38 ( <i>M</i> =21.9, <i>SD</i> =3.1)	Not reported
5	Komlenac et al., 2023	Not always a “buffer”: Self-compassion as moderator of the link between masculinity ideologies and help-seeking intentions after experiences of intimate partner violence	Journal of Interpersonal Violence	Austria, initially University population and later opened up to general population	Cross-sectional	No	Age range not reported ( <i>M</i> =40.5, <i>SD</i> =15.2)	Unknown as ethnicity details include female participants
6	Reis et al., 2019	Exploring self-compassion and versions of masculinity in men athletes	Journal of Sport and Exercise Psychology	Canada, University population	Cross-sectional	Yes	16-35 ( <i>M</i> =22.8, <i>SD</i> =4.7)	78.8% of participants self-identified as White but not clear what the other ethnicities were

7	Wasyliw & Clairo, 2018	Help seeking in men: When masculinity and self-compassion collide	Psychology of Men and Masculinity	Canada, general population	Cross-sectional	Yes	Age range not reported ( $M=19.5$ , $SD=1.4$ )	Of the 165 men who indicated their ethnicity, majority of the sample (74.55%, $n=123$ ) identified as Caucasian with 10.3% ( $n=17$ ) indicating African heritage
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**Appendix B: Quality Assessment of Reviewed Studies Using SQAC Tool (Kmet et al., 2004)**

<b>Table: Quality Assessment</b>				
<b>Study: Booth et al. (2019)</b>				
<b>Criteria</b>	<b>Met – Yes</b>	<b>Met – Partially</b>	<b>Met – No</b>	<b>N/A</b>
1. Question / objective sufficiently described?	Yes – page 757			
2. Study design evident and appropriate?	Yes – page 757			
3. Method of subject/comparison group selection or source of information/input variables described and appropriate?		Partially – participants were selected using convenience sampling from one single university, which likely introduced bias		
4. Subject (and comparison group, if applicable) characteristics sufficiently described?		Partially – demographic data included age, ethnicity, and sexual orientation. However, the authors say that 90.2% of participants identified as heterosexual and do not report how the remaining 9.8% identified.		

5. If interventional and random allocation was possible, was it described?				N/A
6. If interventional and blinding of investigators was possible, was it reported?				N/A
7. If interventional and blinding of subjects was possible, was it reported?				N/A
8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	Yes – validated measures well defined (pages 757-758)			
9. Sample size appropriate?	Yes – sample size assumed appropriate due to statistically significant results; power analysis or sample target not provided			
10. Analytic methods described / justified and appropriate?	Yes – page 758			
11. Some estimate of variance is reported for the main results?		Partially – standard deviation and standard error reported (pages 758-759); however, confidence interval only reported for overall model and not for individual associations		
12. Controlled for confounding?	Yes – the authors controlled for the variables of self-			

	coldness and self-compassion in their moderation analysis			
13. Results reported in sufficient detail?	Yes – pages 758-759			
14. Conclusions supported by the results?	Yes – page 759			
<b>Total summary quality score:</b>	$28 - (N/A \times 2) = 28 - 6 = 22$ <b>19/22 = 0.86 (strong)</b>			

<b>Table: Quality Assessment</b>				
<b>Study: Hansen (2022)</b>				
<b>Criteria</b>	<b>Met – Yes</b>	<b>Met – Partially</b>	<b>Met – No</b>	<b>N/A</b>
1. Question / objective sufficiently described?	Yes – pages 17-18			
2. Study design evident and appropriate?	Yes – pages 20-21			
3. Method of subject/comparison group selection or source of information/input variables described and appropriate?		Partially – sample consisted of higher education population, which likely introduced bias		
4. Subject (and comparison group, if applicable) characteristics sufficiently described?	Yes – demographic data included age, ethnicity, relationship status, and counselling history (pages 29-30)			
5. If interventional and random allocation was possible, was it described?				N/A
6. If interventional and blinding of investigators was possible, was it reported?				N/A

7. If interventional and blinding of subjects was possible, was it reported?				N/A
8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	Yes – validated measures well defined (pages 21-26)			
9. Sample size appropriate?		Partially – power analysis reported. Sample size was smaller than target; however, the author acknowledges this in method and discussion		
10. Analytic methods described / justified and appropriate?	Yes – pages 26-27			
11. Some estimate of variance is reported for the main results?	Yes – standard deviations, standard error and confidence interval reported (pages 30 & 34)			
12. Controlled for confounding?	Yes – the author controlled for the variables of self-compassion and internalised homonegativity in their analysis			
13. Results reported in sufficient detail?	Yes – pages 29-34			
14. Conclusions supported by the results?		Partially – third and fourth hypotheses partially supported (page 37)		



<b>Total summary quality score:</b>	$28 - (N/A \times 2) = 28 - 6 = 22$ <b>19/22 = 0.86 (strong)</b>
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<b>Table: Quality Assessment</b>				
<b>Study: Heath et al. (2017)</b>				
<b>Criteria</b>	<b>Met – Yes</b>	<b>Met – Partially</b>	<b>Met – No</b>	<b>N/A</b>
1. Question / objective sufficiently described?	Yes – pages 95-96			
2. Study design evident and appropriate?	Yes – page 97			
3. Method of subject/comparison group selection or source of information/input variables described and appropriate?		Partially – participants were selected using convenience sampling from one single university, which likely introduced bias		
4. Subject (and comparison group, if applicable) characteristics sufficiently described?	Yes – demographic data included age, year of study, ethnicity, and sexual orientation (page 96)			
5. If interventional and random allocation was possible, was it described?				N/A
6. If interventional and blinding of investigators was possible, was it reported?				N/A
7. If interventional and blinding of subjects was possible, was it reported?				N/A
8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	Yes – validated measures well defined (pages 96-97)			

9. Sample size appropriate?	Yes – sample size bigger than target; power analysis reported (pages 96-97)			
10. Analytic methods described / justified and appropriate?	Yes – pages 97-98			
11. Some estimate of variance is reported for the main results?		Partially – standard deviations and confidence intervals reported (pages 98-99) but not standard error		
12. Controlled for confounding?		Partially – confounding not considered, but not likely to have seriously distorted the results		
13. Results reported in sufficient detail?	Yes – pages 97-100			
14. Conclusions supported by the results?	Yes – page 100			
<b>Total summary quality score:</b>	28 – (N/A x 2) = 28 – 6 = 22 <b>19/22 = 0.86 (strong)</b>			

<b>Table: Quality Assessment</b>				
<b>Study: Kantar &amp; Yalçin (2023)</b>				
<b>Criteria</b>	<b>Met – Yes</b>	<b>Met – Partially</b>	<b>Met – No</b>	<b>N/A</b>
1. Question / objective sufficiently described?	Yes – page 3			
2. Study design evident and appropriate?	Yes – pages 3-4			
3. Method of subject/comparison group selection or source of		Partial – selection		

information/input variables described and appropriate?		methods described but relied on self-selected sample from a specific setting (i.e. university students), potentially introducing bias		
4. Subject (and comparison group, if applicable) characteristics sufficiently described?	Yes – demographic data included age, gender, sexual orientation, level of education, faculty, participant’s family’s monthly income, and whether they or their family had previously sought help from a mental health professional (pages 3-4)			
5. If interventional and random allocation was possible, was it described?				N/A
6. If interventional and blinding of investigators was possible, was it reported?				N/A
7. If interventional and blinding of subjects was possible, was it reported?				N/A
8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	Yes – validated measures well defined (page 4)			
9. Sample size appropriate?	Yes – power analysis			

	reported. Sample size assumed appropriate due to statistically significant results and being above the target of 550 (page 3)			
10. Analytic methods described / justified and appropriate?	Yes – pages 3-4			
11. Some estimate of variance is reported for the main results?	Yes – standard deviations, standard errors and confidence intervals reported (pages 5-6)			
12. Controlled for confounding?		Partially – confounding not considered, but not likely to have seriously distorted the results		
13. Results reported in sufficient detail?	Yes – pages 5-6			
14. Conclusions supported by the results?	Yes – pages 6-8			
<b>Total summary quality score:</b>	28 – (N/A x 2) = 28 – 6 = 22 <b>20/22 = 0.91 (strong)</b>			

<b>Table: Quality Assessment</b>				
<b>Study: Komlenac et al. (2023)</b>				
<b>Criteria</b>	<b>Met – Yes</b>	<b>Met – Partially</b>	<b>Met – No</b>	<b>N/A</b>
1. Question / objective sufficiently described?	Yes – pages 5-6			

2. Study design evident and appropriate?	Yes – page 6			
3. Method of subject/comparison group selection or source of information/input variables described and appropriate?		Partial – participants were selected using convenience sampling, which likely introduced bias; the authors acknowledge this in their discussion		
4. Subject (and comparison group, if applicable) characteristics sufficiently described?	Yes – demographic data included gender, age, sexual orientation, relationship status, highest level of education, employment, and nationality (pages 7-9)			
5. If interventional and random allocation was possible, was it described?				N/A
6. If interventional and blinding of investigators was possible, was it reported?				N/A
7. If interventional and blinding of subjects was possible, was it reported?				N/A
8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	Yes – validated measures well defined (pages 9-11)			
9. Sample size appropriate?	Yes – reasoning behind effect size reported. Sample size assumed			

	appropriate due to number of both male and female participants being above the target of 148 (page 12)			
10. Analytic methods described / justified and appropriate?	Yes – page 12			
11. Some estimate of variance is reported for the main results?		Partially – mean and standard deviation for participants’ age is provided but not for other variables; standard error provided but not confidence intervals		
12. Controlled for confounding?	Yes – controlled for the following variables: age, nationality, relationship status, sexual orientation, education, employment, own past formal help-seeking, and own experiences of interpersonal violence			
13. Results reported in sufficient detail?	Yes – pages 13-17			
14. Conclusions supported by the results?	Yes – page 17			
<b>Total summary quality score:</b>	$28 - (N/A \times 2) = 28 - 6 = 22$			

	<b>20/22 = 0.91 (strong)</b>
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<b>Table: Quality Assessment</b>				
<b>Study: Reis et al. (2019)</b>				
<b>Criteria</b>	<b>Met – Yes</b>	<b>Met – Partially</b>	<b>Met – No</b>	<b>N/A</b>
1. Question / objective sufficiently described?	Yes – page 369			
2. Study design evident and appropriate?	Yes – pages 371-372			
3. Method of subject/comparison group selection or source of information/input variables described and appropriate?		Partially – relied on self-selecting sample		
4. Subject (and comparison group, if applicable) characteristics sufficiently described?		Partially – the authors report that 78.8% of participants identified as White but do not report on the remaining percentage of ethnicities (page 369)		
5. If interventional and random allocation was possible, was it described?				N/A
6. If interventional and blinding of investigators was possible, was it reported?				N/A
7. If interventional and blinding of subjects was possible, was it reported?				N/A
8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	Yes – validated measures well defined (pages 370-371)			
9. Sample size appropriate?	Yes – sample size assumed			

	appropriate due to statistically significant results; however, no power analysis or sample target described			
10. Analytic methods described / justified and appropriate?	Yes – page 372			
11. Some estimate of variance is reported for the main results?		Partially – standard deviations and standard errors reported (pages 373 & 376); however, no confidence intervals reported		
12. Controlled for confounding?		Partially – confounding not considered pre-analysis, but not likely to have seriously distorted the results; the authors acknowledge in their discussion the effect of several potential confounding variables, e.g. type of sport, competitive level and maturation (page 377)		



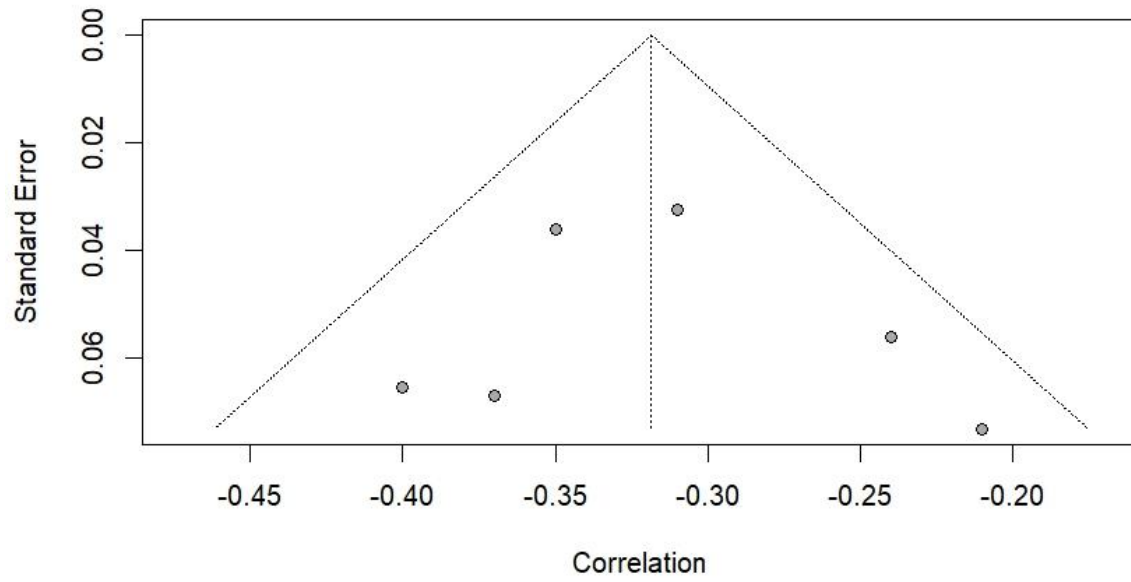
13. Results reported in sufficient detail?	Yes – pages 372-376			
14. Conclusions supported by the results?	Yes – pages 373-376			
<b>Total summary quality score:</b>	$28 - (N/A \times 2) = 28 - 6 = 22$ <b>18/22 = 0.82 (strong)</b>			

<b>Table: Quality Assessment</b>				
<b>Study: Wasyliw &amp; Clairo (2018)</b>				
<b>Criteria</b>	<b>Met – Yes</b>	<b>Met – Partially</b>	<b>Met – No</b>	<b>N/A</b>
1. Question / objective sufficiently described?	Yes – page 236			
2. Study design evident and appropriate?	Yes – page 236			
3. Method of subject/comparison group selection or source of information/input variables described and appropriate?		Partially – participants were selected using convenience sampling, which likely introduced bias; the authors acknowledge this in their discussion		
4. Subject (and comparison group, if applicable) characteristics sufficiently described?	Yes – demographic data included age, ethnicity, sexual orientation and whether participants belonged to a formal sports team (page 236)			
5. If interventional and random allocation was possible, was it described?				N/A

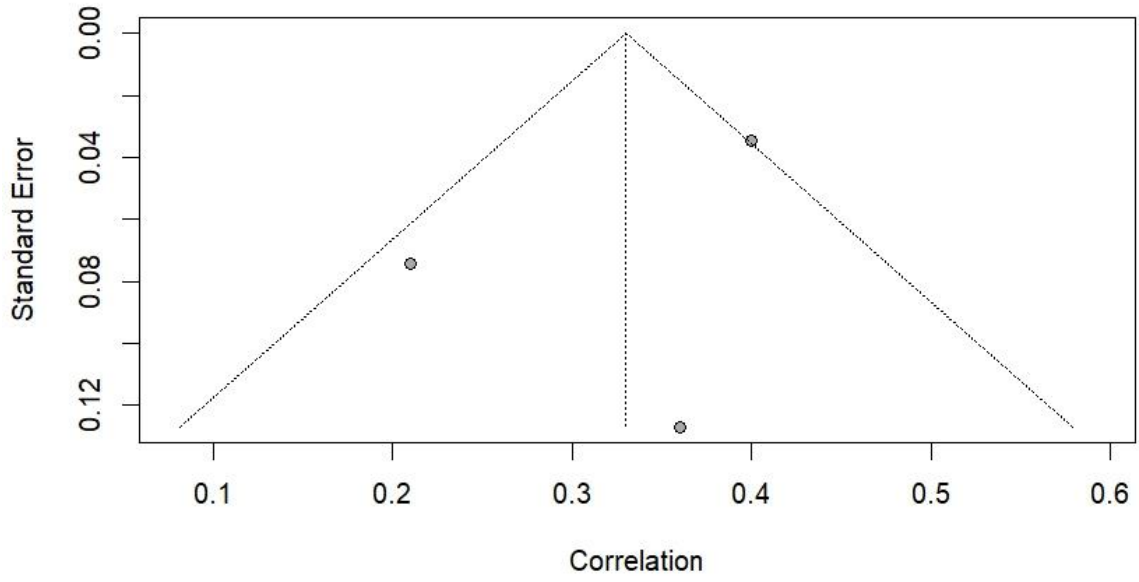
6. If interventional and blinding of investigators was possible, was it reported?				N/A
7. If interventional and blinding of subjects was possible, was it reported?				N/A
8. Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?	Yes – validated measures well defined (pages 236-237)			
9. Sample size appropriate?		Partially – not all results significant so larger sample size might be required for further evidence; also, authors have only given post-hoc power value and no ad-hoc power analysis or sample target		
10. Analytic methods described / justified and appropriate?	Yes – pages 237-238			
11. Some estimate of variance is reported for the main results?	Yes – standard deviations, standard errors, and confidence intervals described for both groups (pages 237-239)			
12. Controlled for confounding?	Yes – controlled for age, ethnicity and			

	depression (page 238)			
13. Results reported in sufficient detail?	Yes – pages 237-239			
14. Conclusions supported by the results?		Partially – at least one of the authors' hypotheses partially supported by the results (pages 239-240)		
<b>Total summary quality score:</b>	$28 - (N/A \times 2) = 28 - 6 = 22$ <b>19/22 = 0.86 (strong)</b>			

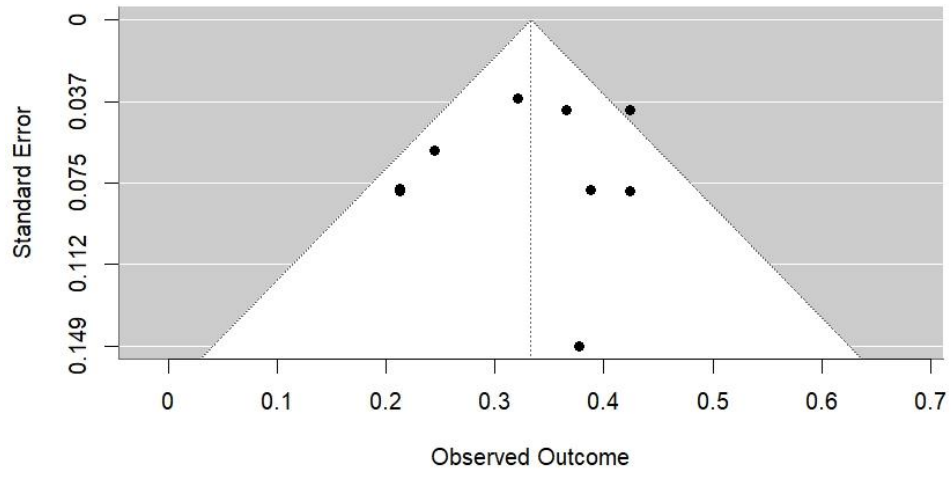
### Appendix C: Funnel Plot for Association Between SC and SSOSH



### Appendix D: Funnel Plot for Association Between SC and PATHS



## Appendix E: Funnel Plot for Association Between SC and Overall Help-Seeking



## Appendix F: ERGO Ethical Approval

Approved by Faculty Ethics Committee - ERGO II 79267.A2 - Message (HTML)

File Message Help Tell me what you want to do

Delete Archive Reply Reply All Forward Share to Teams Move to: Mark Unread Find Zoom Report Message

Approved by Faculty Ethics Committee - ERGO II 79267.A2

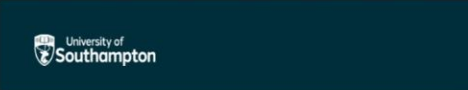
ergo2@soton.ac.uk  
To Philip Pampoulov

Flag for follow up. Completed on 03 May 2023.  
You forwarded this message on 24/05/2023 09:49.

Reply Reply All Forward

Wed 03/05/2023 14:44

Approved by Faculty Ethics Committee - ERGO II 79267.A2



ERGO II – Ethics and Research Governance Online <https://www.ergo2.soton.ac.uk>

Submission ID: 79267.A2  
Submission Title: Evaluating the Effectiveness of a Brief 'Compassionate Mind Training' Intervention on Levels of Internalised Homophobia, Shame, and Help-Seeking Intentions in Gay Men: A Randomised Controlled Trial (Amendment 2)  
Submitter Name: Philip Pampoulov

Your submission has now been approved by the Faculty Ethics Committee. You can begin your research unless you are still awaiting any other reviews or conditions of your approval.

Comments:

-

## Appendix G: Participant Information Sheet and Consent Form

### Participant Information Sheet

**Study Title:** Evaluating the Effectiveness of a Brief 'Compassionate Mind Training' on Levels of Internalised Homophobia, Shame, and Help-Seeking Intentions in Gay Men: A Randomised Controlled Trial

**Researcher:** Philip Pampoulov

**ERGO number:** 79267

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form.

#### What is the research about?

My name is Phil and I am a Trainee Clinical Psychologist completing my Doctorate in Clinical Psychology degree at the University of Southampton in the United Kingdom. As part of my doctoral degree, I am doing a piece of research.

I am inviting you to participate in a study regarding the effect of a brief online training on a range of psychological outcomes in adult gay men.

This study was approved by the Faculty Research Ethics Committee (FREC) at the University of Southampton (Ethics/ERGO Number: 79267).

#### Why have I been asked to participate?

You have been asked to take part because you responded to an advertisement regarding participation in this study and you may meet the full eligibility criteria outlined below.

You are eligible to participate in this study if you are an adult (18+ years of age) and identify as a gay man. You will need to have a good level of English to be able to access the online questionnaires. If you are able to read through this information sheet and understand the consent statements below, your English is probably sufficient.

Unfortunately, you would not be eligible to take part in this study if you under the age of 18, do not identify as a gay man, and/or do not have a good level of English.

I am aiming to recruit around 150 participants for this study.

#### What will happen to me if I take part?



If you decide to take part in this study, you will first be asked to complete a set of online questionnaires, which should take approximately 25-30 minutes to complete. You will be able to save your answers and return to them later if you prefer not to complete all the questionnaires in one sitting.

You will then be asked to provide an email address and will be randomly allocated to either a two-week training group or a waitlist control group. Your email address will be collected to use only for the purposes of this study.

If you are in the training group, you will be emailed a link for online practices to complete each day. After the two-week period, you will be emailed a link to repeat the same set of questionnaires again. After another two weeks, you will receive another email asking you to complete the same measures a third time. You will also be asked to complete some questions about your experiences of the training. You will then be sent a debriefing statement.

If you are in the waitlist control group, you will be emailed an invite to repeat the measures, two weeks and four weeks after the first time you completed them. After you have completed the measures the third time (four weeks after the beginning), you will see a debriefing statement explaining the study, and be emailed a link to access the online training in case you wish to try the practices.

If you complete the questionnaires at all three timepoints, you will be asked if you wish to opt in to enter a prize draw for one of ten £20 Amazon vouchers and the same email address will be used to contact you if you are successful at winning the prize. If you have not heard from us by June 2024, please assume that you have not won a prize.

Please note that you can complete this study only once and any duplicates of your information or further attempts at entering the study will be disregarded but may still be recorded.

### **Are there any benefits in my taking part?**

If you decide to take part in this study, you will be given the option to take part in a prize draw of ten £20 Amazon vouchers. Please note that the prize draw option will only be available to participants **on completion of the study**, i.e. after returning the follow-up questionnaires two weeks after the training. Your participation will also contribute to knowledge in this area of research.

### **Are there any risks involved?**

It is expected that taking part in this study will not cause you any psychological discomfort and/or distress, however, should you feel uncomfortable you can leave the survey at any time or contact the following resources for support:

- Switchboard LGBT: available on 0300 330 0630 and through their website <https://switchboard.lgbt>
- Samaritans: available via phone on 116 123 and email on [jo@samaritans.org](mailto:jo@samaritans.org)
- Your GP

### **What data will be collected?**

The questions in the survey ask for information in relation to a number of psychological outcomes as well as brief demographic information such as age, gender, sexual orientation, and nationality.

You do not have to answer all the questions if you do not wish to do so.

### **Will my participation be confidential?**

Your participation and the information we collect about you during the course of the research will be kept strictly confidential.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential.

If you are happy to take part in this study, you will need to tick (check) the box at the bottom of the consent form to show your consent. You will then be asked to provide your email address – this will be confidential and will only be used for the research process (to send you questionnaires and links, and to match your answers across different time points), and if you opt in to enter the prize draw.

### **Do I have to take part?**

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part.

If you are happy to take part in this study, you will need to tick (check) the box at the bottom of the consent form to show your consent.

### **What happens if I change my mind?**

You have the right to change your mind and withdraw at any time without giving a reason and without your participant rights being affected.

If you withdraw from the study, we will keep the information about you that we have already obtained for the purposes of achieving the objectives of the study only.

### **What will happen to the results of the research?**

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

All information collected for this study will be stored securely on a password protected computer and backed up on a secure server. In addition, all data will be pooled and only compiled into data summaries or summary reports. Only the researcher and their supervisor will have access to this information while it is being analysed. Any de-identified relevant datasets to support research outputs will be deposited in the University of Southampton institutional repository with appropriate levels of access and licences for re-use.

The information collected will be analysed, written up as part of the researcher's dissertation and will likely be published in a journal and presented at conferences.

The University of Southampton conducts research to the highest standards of ethics and research integrity. In accordance with our Research Data Management Policy, data will be held for 10 years after the study has finished when it will be securely destroyed.

### **Where can I get more information?**

If you have any other questions, feel free to contact the researcher, Philip Pampoulov, on [P.D.Pampoulov@soton.ac.uk](mailto:P.D.Pampoulov@soton.ac.uk)

### **What happens if there is a problem?**

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions – please see below for their contact details.

If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, [rgoinfo@soton.ac.uk](mailto:rgoinfo@soton.ac.uk)).

*Main researcher: Philip Pampoulov* [P.D.Pampoulov@soton.ac.uk](mailto:P.D.Pampoulov@soton.ac.uk)

*Primary supervisor: Dr Alison Bennetts* [A.Bennetts@soton.ac.uk](mailto:A.Bennetts@soton.ac.uk)

### **Data Protection Privacy Notice**

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, ‘Personal data’ means any information that relates to and is capable of identifying a living individual. The University’s data protection policy governing the use of personal data by the University can be found on its website (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at <http://www.southampton.ac.uk/assets/sharepoint/intranet/Is/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf>

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University’s policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason (‘lawful basis’) to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the ‘Data Controller’ for this study, which means that we are responsible for looking after your

information and using it properly. The University of Southampton will keep identifiable information about you for 10 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information - may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University’s data protection webpage (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>) where you can make a request using our online form. If you need further assistance, please contact the University’s Data Protection Officer ([data.protection@soton.ac.uk](mailto:data.protection@soton.ac.uk)).

**Thank you for taking the time to read the information sheet and considering taking part in the research.**

## CONSENT FORM

**Study title:** Evaluating the Effectiveness of a Brief ‘Compassionate Mind Training’ on Levels of Internalised Homophobia, Shame, and Help-Seeking Intentions in Gay Men: A Randomised Controlled Trial

**Researcher name:** Philip Pampoulov

**ERGO number:** 79267

***If you wish to participate in this study, please check the consent box below. By checking the box, I am consenting that:***

I have read and understood the information sheet (28 <sup>th</sup> April 2023 /version 2) and have had the opportunity to ask questions about the study.
I agree to take part in this research project and agree for my data to be used for the purpose of this study.
I understand my participation is voluntary and I may withdraw (at any time) for any reason without my participation rights being affected.
I understand that should I withdraw from the study, any partially completed data may still be used for analysis in the study.

I understand I will not be directly identified in any reports of the research.
I understand that I can complete this study only once and any duplicates of my information or further attempts at entering the study will be disregarded but may still be recorded.

Please check this box to indicate that you consent to participating in this study:

I consent to participating in this study

## Appendix H: Demographic Questions

Please select (tick) your gender:

- Male
- Female
- Other (please describe): \_\_\_\_\_

If participants select any option other than 'Male', they will automatically be told to leave the study as they would unfortunately not meet the study's eligibility criteria of identifying as a gay male.

Please select your age: [dropdown options between 18 and 100]

Please select your nationality: [dropdown options of all nationalities in alphabetical order]

Please select your sexual orientation: [dropdown options offering Heterosexual/Straight, Homosexual/Gay, Bisexual, or Not Listed Above] – If participants select any option other than 'Homosexual/Gay', they will automatically be told to leave the study as they would unfortunately not meet the study's eligibility criteria of identifying as a gay male.

# Appendix I: Permission to Use External and Internal Shame Scale (EISS)

Re: EISS outcome measure

Ana Galhardo  
To: Philip Pampoulov  
Cc: Marcela Matos

Follow up. Completed on 05 December 2022.  
You replied to this message on 05/12/2022 12:01.

EISS\_Eng\_final\_version.pdf  
50 KB

2020\_A new measure to assess external and internal shame- development, factor structure and psychometric properties of the External and Internal Shame Scale.pdf  
429 KB

Dear Philip,

Thank you for your email and interest in our measure. You can certainly use the measure in your research but please contact the corresponding author (whom I copying into this email) so we can keep track of its use in research work.

Best of luck with your work, this is such an interesting and important research topic!

Sending warm wishes,

Marcela

---  
Marcela Matos, Ph.D.  
Clinical Psychologist, Faculty Research Fellow  
Universidade de Coimbra | Faculdade de Psicologia e de Ciências da Educação  
Centro de Investigação em Neuropsicologia e Intervenção Cognitivo Comportamental | CINEICC

Re: EISS outcome measure

Ana Galhardo  
To: Philip Pampoulov  
Cc: Marcela Matos

Follow up. Completed on 05 December 2022.  
You replied to this message on 05/12/2022 12:01.

EISS\_Eng\_final\_version.pdf  
50 KB

2020\_A new measure to assess external and internal shame- development, factor structure and psychometric properties of the External and Internal Shame Scale.pdf  
429 KB

**CAUTION:** This e-mail originated outside the University of Southampton.

Dear Philip,

Please find the English version of the EISS and the paper as attachment files.

Kind regards,

Ana Galhardo  
Clinical Psychologist, PhD  
Assistant Professor - ISMT, Coimbra  
Associate Researcher - CINEICC, University of Coimbra, Portugal

[www.ismt.pt](http://www.ismt.pt)  
Largo da Cruz de Celas, nº 1  
3000-132 Coimbra

Philip Pampoulov <P.D.Pampoulov@soton.ac.uk> escreveu no dia segunda, 5/12/2022 à(s) 10:14:

## **Appendix J: Internalised Homonegativity Inventory (IHI; Mayfield, 2012)**

The following statements deal with emotions and thoughts related to being gay. Using the scale below, please give your honest rating about the degree to which you agree or disagree with each statement.

**strongly disagree = 1; moderately disagree = 2; slightly disagree = 3; slightly agree = 4; moderately agree = 5; strongly agree = 6**

- 1.\* I believe being gay is an important part of me.
2. I believe it is OK for men to be attracted to other men in an emotional way, but it's not OK for them to have sex with each other.
3. When I think of my homosexuality, I feel depressed.
4. I believe that it is morally wrong for men to have sex with other men.
5. I feel ashamed of my homosexuality.
- 6.\* I am thankful for my sexual orientation.
7. When I think about my attraction towards men, I feel unhappy.
- 8.\* I believe that more gay men should be shown in TV shows, movies, and commercials.
- 9.\* I see my homosexuality as a gift.
10. When people around me talk about homosexuality, I get nervous.
11. I wish I could control my feelings of attraction toward other men.
- 12.\* In general, I believe that homosexuality is as fulfilling as heterosexuality.
13. I am disturbed when people can tell I'm gay.
14. In general, I believe that gay men are more immoral than straight men.
15. Sometimes I get upset when I think about being attracted to men.



16. In my opinion, homosexuality is harmful to the order of society.
17. Sometimes I feel that I might be better off dead than gay.
18. I sometimes resent my sexual orientation.
19. I believe it is morally wrong for men to be attracted to each other.
20. I sometimes feel that my homosexuality is embarrassing.
- 21.\* I am proud to be gay.
- 22.\* I believe that public schools should teach that homosexuality is normal.
23. I believe it is unfair that I am attracted to men instead of women.

\* = reverse scored items

## Appendix K: General Help-Seeking Questionnaire (GHSQ; Wilson et al., 2005)

If you were having a personal or emotional problem, how likely is it that you would seek help from the following people?

Please indicate your response by putting a line through the number that best describes your intention to seek help from each help source that is listed.

**1 = Extremely Unlikely 3 = Unlikely 5 = Likely 7 = Extremely Likely**

- a. Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto) 1 2 3 4 5 6 7
- b. Friend (not related to you) 1 2 3 4 5 6 7
- c. Parent 1 2 3 4 5 6 7
- d. Other relative/family member 1 2 3 4 5 6 7
- e. Mental health professional (e.g. psychologist, social worker, counsellor) 1 2 3 4 5 6 7
- f. Phone helpline (e.g. Lifeline) 1 2 3 4 5 6 7
- g. Doctor/GP 1 2 3 4 5 6 7
- h. Minister or religious leader (e.g. Priest, Rabbi, Chaplain) 1 2 3 4 5 6 7
- i. I would not seek help from anyone 1 2 3 4 5 6 7
- j. I would seek help from another not listed above (please list in the space provided, (e.g., work colleague. If no, leave blank) \_\_\_\_\_  
1 2 3 4 5 6 7

**Appendix L: Compassionate Engagement and Action Scales (CEAS; Gilbert et al., 2017)**

**Self-compassion**

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, we may cope with these in different ways. We are interested in the degree to which people can be compassionate with themselves. We define compassion as “a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it.” This means there are two aspects to compassion. The first is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or suppress them. The second aspect of compassion is the ability to focus on what is helpful to us. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you if you become distressed. Please rate the items using the following rating scale:

Never										Always
1	2	3	4	5	6	7	8	9	10	

Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it. So:

When I’m distressed or upset by things...

1. I am motivated to engage and work with my distress when it arises.
2. I notice, and am sensitive to my distressed feelings when they arise in me.

(r)3. I avoid thinking about my distress and try to distract myself and put it out of my mind.

4. I am emotionally moved by my distressed feelings or situations.

5. I tolerate the various feelings that are part of my distress.

6. I reflect on and make sense of my feelings of distress.

(r)7. I do not tolerate being distressed.

8. I am accepting, non-critical and non-judgemental of my feelings of distress.

Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you. So:

When I'm distressed or upset by things...

1. I direct my attention to what is likely to be helpful to me.

2. I think about and come up with helpful ways to cope with my distress.

(r)3. I don't know how to help myself.

4. I take the actions and do the things that will be helpful to me.

5. I create inner feelings of support, helpfulness and encouragement.

### **Compassion from Others**

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, others may cope with our distress in different ways. We are interested in the degree to which you feel that important people in your life can be compassionate to your distress. We define compassion as “a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it.” This means there are two aspects to compassion. The first is the ability to be motivated to engage with things/feelings

that are difficult as opposed to trying to avoid or suppress them. The second aspect of compassion is the ability to focus on what is helpful to us or others. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to the important people in your life when you become distressed. Please rate the items using the following rating scale:

Never										Always
1	2	3	4	5	6	7	8	9	10	

Section 1 – These are questions that ask you about how motivated you think others are, and how much they engage with your distress when you experience it. So:

When I'm distressed or upset by things...

1. Other people are actively motivated to engage and work with my distress when it arises.
2. Others notice and are sensitive to my distressed feelings when they arise in me.
- (r)3. Others avoid thinking about my distress, try to distract themselves and put it out of their mind.
4. Others are emotionally moved by my distressed feelings.
5. Others tolerate my various feelings that are part of my distress.
6. Others reflect on and make sense of my feelings of distress.
- (r)7. Others do not tolerate my distress.
8. Others are accepting, non-critical and non-judgemental of my feelings of distress.

Section 2 – These questions relate to how others actively cope in compassionate ways with emotions and situations that distress you. So:

When I'm distressed or upset by things...

1. Others direct their attention to what is likely to be helpful to me.
2. Others think about and come up with helpful ways for me to cope with my distress.
- (r)3. Others don't know how to help me when I am distressed
4. Others take the actions and do the things that will be helpful to me.
5. Others treat me with feelings of support, helpfulness and encouragement.

**NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE  
SCORING**

**© Gilbert et al., 2017**

**Appendix M: Forms of Self-Criticising/Attacking and Self-Reassuring Scale (FSCRS;  
Gilbert et al., 2004)**

When things go wrong in our lives or don't work out as we hoped, and we feel we could have done better, we sometimes have negative and self-critical thoughts and feelings. These may take the form of feeling worthless, useless or inferior etc. However, people can also try to be supportive of themselves. Below are a series of thoughts and feelings that people sometimes have. Read each statement carefully and circle the number that best describes how much each statement is true for you. Please use the scale below:

Not at all	A little bit	Moderately	Quite a bit	Extremely
like me	like me	like me	like me	like me
0	1	2	3	4

When things go wrong for me:

1. I am easily disappointed with myself. (is)
2. There is a part of me that puts me down. (is)
3. I am able to remind myself of positive things about myself. (rs)
4. I find it difficult to control my anger and frustration at myself. (is)
5. I find it easy to forgive myself. (rs)
6. There is a part of me that feels I am not good enough. (is)
7. I feel beaten down by my own self-critical thoughts. (is)
8. I still like being me. (rs)
9. I have become so angry with myself that I want to hurt or injure myself. (hs)
10. I have a sense of disgust with myself. (hs)

11. I can still feel lovable and acceptable. (rs)
12. I stop caring about myself. (hs)
13. I find it easy to like myself. (rs)
14. I remember and dwell on my failings. (is)
15. I call myself names. (hs)
16. I am gentle and supportive with myself. (rs)
17. I can't accept failures and setbacks without feeling inadequate. (is)
18. I think I deserve my self-criticism. (is)
19. I am able to care and look after myself. (rs)
20. There is a part of me that wants to get rid of the bits I don't like. (is)
21. I encourage myself for the future. (rs)
22. I do not like being me. (hs)

KEY FOR SUBSCALES:

is = inadequate self,

rs = reassured self,

hs = hated self



**Appendix N: Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007)**

Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last 2 weeks.

None of the time	Rarely	Some of the time	Often	All of the time
1	2	3	4	5

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 feeling interested in other people 1 2 3 4 5

I've had energy to spare 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 good about myself 1 2 3 4 5

I've been feeling close to other people 1 2 3 4 5

I've been feeling confident 1 2 3 4 5

I've been able to make up my own mind about things 1 2 3 4 5

I've been feeling loved 1 2 3 4 5

I've been interested in new things 1 2 3 4 5

I've been feeling cheerful 1 2 3 4 5

## Appendix O: Conformity to Masculine Norms Inventory (CMNI-22)

The CMNI is a widely used measure that has been used to measure changes across 11 domains and aspects of adhering to traditional western masculine norms and values (Mahalik et al, 2003). CMNI-22 is a reliable tool to predict health behaviour and health outcomes. The CMNI-22 is a short form version of the full inventory and the benefits of using a CMNI short form are that it:

- Uses the strongest questions from the full scale
- Measured in a sample of Australian men
- Less demanding (takes approximately 90 seconds to complete according to peer-reviewed reports)

The CMNI-22 measures scores on a continuous variable, with higher scores indicating a higher conformity to masculine norms. It measures a total score over 11 separate dimensions:

1. Winning
2. Emotional control
3. Risk-taking
4. Pursuit of status
5. Primacy of work
6. Violence
7. Power over women
8. Dominance
9. 'Playboy'
10. Self-reliance
11. Homophobia

The questionnaire is measured on a 4-point Likert scale from “strongly disagree” to “strongly agree”. The CMNI-22 has been used in multiple studies as a continuous variable, with low scores indicating non-conformity and higher scores indicating increasing conformity.

A copy of the questionnaire is available on the next page.

### Reference:

Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003). Development of the Conformity to Masculine Norms Inventory. *Psychology of Men & Masculinity*, 4(1), 3–25. <https://doi.org/10.1037/1524-9220.4.1.3>

Owen, J. (2011). Assessing the Factor Structures of the 55- and 22-item Versions of the Conformity to Masculine Norms Inventory. *American Journal of Men's Health*, 5(2):118-28. DOI: [10.1177/1557988310363817](https://doi.org/10.1177/1557988310363817)

***Thinking about your own actions, feeling and beliefs, please indicate how much you personally agree or disagree with each statement by circling SD for “Strongly Disagree”, D for “Disagree”, A for “Agree” and SA for “Strongly Agree”. There are no right or wrong answers and it is best if you respond with your first impression when answering.***

1. My work is the most important part of my life	SD	D	A	SA
2. I make sure people do as I say	SD	D	A	SA
3. In general, I do not like risky situations*	SD	D	A	SA
4. It would be awful if someone thought I was gay	SD	D	A	SA
5. I love it when men are in charge of women	SD	D	A	SA
6. I like to talk about my feelings*	SD	D	A	SA
7. I would feel good if I had many sexual partners	SD	D	A	SA
8. It is important to me that people think I am heterosexual	SD	D	A	SA
9. I believe that violence is never justified*	SD	D	A	SA
10. I tend to share my feelings*	SD	D	A	SA
11. I should be in charge	SD	D	A	SA
12. I would hate to be important*	SD	D	A	SA
13. Sometimes violent action is necessary	SD	D	A	SA
14. I don't like giving all my attention to work*	SD	D	A	SA
15. More often than not, losing does not bother me*	SD	D	A	SA
16. If I could, I would frequently change sexual partners	SD	D	A	SA
17. I never do things to be an important person*	SD	D	A	SA
18. I never ask for help	SD	D	A	SA
19. I enjoy taking risks	SD	D	A	SA
20. Men and women should respect each other as equals*	SD	D	A	SA
21. Winning isn't everything, it's the only thing	SD	D	A	SA
22. It bothers me when I have to ask for help	SD	D	A	SA

\* = reverse scored items

## Appendix P: Post-CMT Feedback Questionnaire

The following statements will ask you about your views and experiences of the training.

1. The psychoeducational video at the beginning of the study was helpful
2. I found the online CMT practices accessible
3. The CMT practices were feasible to do within the time frame given
4. Going through the CMT practices was worth my time
- 5.\* The length of the audio recordings was too long
6. I would be willing to continue practicing the CMT practices frequently
7. I would recommend the CMT practices to my colleagues
- 8.\* The CMT practices were unnecessarily complex
9. It was easy to adhere to the instructions of the CMT practices
10. I was able to bring my compassionate self to my everyday life
11. The CMT practices were helpful

All items scored on a 7-point likert scale ranging between: Strongly Disagree, Mostly Disagree, Slightly Disagree, Neutral, Slightly Agree, Mostly agree, Strongly Agree

\* = reverse scored items

## Appendix Q: Poster for PPI Focus Group

# Gay Men Needed for Focus Group

---

My name is Phil and I'm a Trainee Clinical Psychologist at the University of Southampton.

As part of my course, I am doing some research on help-seeking and compassion in gay men and would really appreciate your help.



### Do you identify as a gay man?



University of Southampton

### What will the focus group involve?

I'd like to show you some questionnaires that I'm aiming to use in my research study. I'm keen to hear your thoughts about them in a small group of up to six people.

**You will be paid £15 for your contribution.**

### Where and when?

The focus group will be held virtually via Microsoft Teams on:

**Friday 24th March from 10:00am-11:00am (GMT)**

### Interested?

Please get in touch with me at [p.d.pampoulov@soton.ac.uk](mailto:p.d.pampoulov@soton.ac.uk) for more details or if you would like to take part.

## Appendix R: Study Poster

# Participants Needed



Do you identify as a gay man?



Are you aged 18 or over?



Want to take part in research and get the chance to win a £20 Amazon voucher?

### What does the study involve?

This is a randomised controlled trial. You will be asked to fill in a set of online questionnaires over three different time points.

Participants in the training condition will be emailed a link for online practices to complete each day over the course of two weeks.

Participants in the control condition will not be sent any links. However, these will be made available to them once they have completed their final questionnaires.



ERGO number: 79267  
19/03/23, Version 3



My name is Phil and I'm a Trainee Clinical Psychologist at the University of Southampton. I'm recruiting participants for my study which looks at help-seeking and compassion in gay men.

If you're interested in taking part, please scan the QR code or follow the link below.

[https://southampton.qualtrics.com/jfe/form/SV\\_1B5ZAv6AAAzuNzU](https://southampton.qualtrics.com/jfe/form/SV_1B5ZAv6AAAzuNzU)



For more information, please email [P.D.Pampoulov@soton.ac.uk](mailto:P.D.Pampoulov@soton.ac.uk)

## Appendix S: Debriefing Statement

### Debriefing Form

**Study Title:** Evaluating the Effectiveness of a Brief 'Compassionate Mind Training' on Levels of Internalised Homophobia, Shame, and Help-Seeking Intentions in Gay Men: A Randomised Controlled Trial

**Ethics/ERGO number:** 79267

**Researcher(s):** Philip Pampoulov

**University email(s):** [P.D.Pampoulov@soton.ac.uk](mailto:P.D.Pampoulov@soton.ac.uk)

**Version and date:** version 3, April 2023

Thank you for taking part in our research project. Your contribution is very valuable and greatly appreciated.

#### **Purpose of the study**

The aim of this research was to evaluate the effectiveness of a brief, 14-day Compassionate Mind Training (CMT) on experiences of internalised homophobia, shame, and help-seeking intentions in adult gay men. In particular, the focus of the study was to see if the compassion-focused training would lead to a reduction in internalised homophobia, shame, and self-criticism as well as to an increase in help-seeking intentions, self-compassion, and mental well-being.

Internalised homophobia is both a conscious and unconscious reaction to external negative attitudes towards people from a sexual minority, which can lead to higher levels of shame and reduced mental well-being in such groups. Research has shown that developing greater self-compassion is related to positive well-being in gay men.

The reason why all participants were randomised to either a training group or a control group at the beginning of the study was to help reduce bias and to examine a cause-effect relationship between the training and outcome.

It is expected that participants in the CMT condition would show a greater reduction in internalised homophobia, shame, and self-criticism as well as a greater increase in help-seeking intentions and mental well-being compared to participants in the control condition, and that this change would be maintained at a two week follow-up. Your data will help our understanding of the role that compassion-focused training plays for

adult gay men with regard to both internal (i.e. shame, self-criticism, internalised homophobia) and external processes (i.e. help-seeking), and it may be able to inform interventions for gay men in health and social care settings.

## **Confidentiality**

Results of this study will not include your name or any other identifying characteristics.

## **Study results**

If you would like to receive a copy of the final report, please select either Yes or No for the question further down on this page. It is up to you whether you would like to receive study results.

## **Prize draw**

Further down on this page, you will be given the choice to enter a prize draw for one of 10 £20 Amazon vouchers. If you opt in to be entered into the prize draw, we will contact you by the email you provided if you have won. If you have not heard from us by the end of June 2024, please assume that you have not won a prize.

## **Further support**

If taking part in this study has caused you discomfort or distress, you can contact the following organisations for support:

- Switchboard LGBT: available on 0300 330 0630 and through their website <https://switchboard.lgbt>
- Samaritans: available via phone on 116 123 and email on [jo@samaritans.org](mailto:jo@samaritans.org)
- Your GP

## **Further reading**

If you would like to learn more about this area of research, you can refer to the following resources:

<https://self-compassion.org/wp-content/uploads/2018/05/Beard2016.pdf>

<https://link.springer.com/article/10.1007/s12671-017-0745-7>

## **Further information**



If you have any concerns or questions about this study, please contact Philip Pampoulov at [P.D.Pampoulov@soton.ac.uk](mailto:P.D.Pampoulov@soton.ac.uk) who will do their best to help.

If you remain unhappy or would like to make a formal complaint, please contact the Head of Research Integrity and Governance, University of Southampton, by emailing: [rgoinfo@soton.ac.uk](mailto:rgoinfo@soton.ac.uk), or calling: + 44 2380 595058. Please quote the Ethics/ERGO number which can be found at the top of this form. Please note that if you participated in an anonymous survey, by making a complaint, you might be no longer anonymous.

Thank you again for your participation in this research.

**Appendix T: Means and Standard Deviations of Scores at Baseline**

	IH	ES	IS	OS	HSI	SC	CfO	SCr	RS	MW	CMN
Mean	1.87	1.98	1.76	1.87	3.98	6.40	6.15	1.87	2.36	3.41	1.10
SD	.69	.83	.87	.80	.97	1.39	1.83	.86	.86	.63	.29

*Note.*  $n = 62$ , IH = Internalised homophobia, ES = External shame, IS = Internal shame, OS = Overall shame, HSI = Help-seeking intentions, SC = Self-compassion, CfO = Compassion from others, SCr = Self-criticism, RS = Reassuring self, MW = Mental well-being, CMN = Conformity to masculine norms

**Appendix U: Bivariate Correlations Table for Participants with Incomplete Datasets at Baseline**

Variables	1	2	3	4	5	6	7	8	9	10	11
1. IH	-	.49**	.46**	.50**	-.19	-.18	-.17	.64**	-.34**	-.30**	.41**
2. External shame	.49**	-	.77**	.93**	-.46**	-.41**	-.37**	.65**	-.49**	-.49**	.31**
3. Internal shame	.46**	.77**	-	.95**	-.32**	-.41**	-.36**	.77**	-.47**	-.38**	.31**
4. Overall shame	.50**	.93**	.95**	-	-.41**	-.44**	-.39**	.76**	-.51**	-.46**	.33**
5. Help-seeking intentions	-.19	-.46**	-.32**	-.41**	-	.58**	.50**	-.39**	.49**	.57**	-.04
6. SC	-.18	-.41**	-.41**	-.44**	.58**	-	.47**	-.41**	.66**	.58**	-.03
7. Compassion from others	-.17	-.37**	-.36**	-.39**	.50**	.47**	-	-.34**	.50**	.56**	-.01
8. Self-criticism	.64**	.65**	.77**	.76**	-.39**	-.41**	-.34**	-	-.56**	-.32**	.35**
9. Reassuring self	-.34**	-.49**	-.47**	-.51**	.49**	.66**	.50**	-.56**	-	.58**	.04
10. Mental well-being	-.30**	-.49**	-.38**	-.46**	.57**	.58**	.56**	-.32**	.58**	-	.06
11. CMN	.41**	.31**	.31**	.33**	-.04	-.03	-.01	.35**	.04	.06	-

*Note.*  $n = 77$ , \* =  $p < .05$ , \*\* =  $p < .01$

### Appendix V: Responses from Post-CMT Feedback Questionnaire

Item	Strongly Disagree <i>n</i> (%)	Mostly Disagree <i>n</i> (%)	Slightly Disagree <i>n</i> (%)	Neutral <i>n</i> (%)	Slightly Agree <i>n</i> (%)	Mostly Agree <i>n</i> (%)	Strongly Agree <i>n</i> (%)
1. The psychoeducational video at the beginning of the study was helpful.	0 (0%)	0 (0%)	2 (20.0%)	1 (10.0%)	2 (20.0%)	1 (10.0%)	4 (40.0%)
2. I found the online CMT practices accessible.	0 (0%)	0 (0%)	0 (0%)	1 (10.0%)	4 (40.0%)	3 (30.0%)	2 (20.0%)
3. The CMT practices were feasible to do within the time frame given.	0 (0%)	0 (0%)	1 (10.0%)	1 (10.0%)	3 (30.0%)	4 (40.0%)	1 (10.0%)
4. Going through the CMT practices was worth my time.	1 (10.0%)	0 (0%)	2 (20.0%)	0 (0%)	2 (20.0%)	3 (30.0%)	2 (20.0%)
5. The length of the audio recordings was too long.	1 (10.0%)	2 (20.0%)	4 (40.0%)	1 (10.0%)	2 (20.0%)	0 (0%)	0 (0%)
6. I would be willing to	1 (10.0%)	1 (10.0%)	0 (0%)	2 (20.0%)	1 (10.0%)	1 (10.0%)	4 (40.0%)

continue practising the CMT practices frequently.							
7. I would recommend the CMT practices to my colleagues.	0 (0%)	1 (10.0%)	0 (0%)	1 (10.0%)	4 (40.0%)	2 (20.0%)	2 (20.0%)
8. The CMT practices were unnecessarily complex.	1 (10.0%)	0 (0%)	3 (30.0%)	1 (10.0%)	1 (10.0%)	3 (30.0%)	1 (10.0%)
9. It was easy to adhere to the instructions of the CMT practices.	0 (0%)	1 (10.0%)	1 (10.0%)	1 (10.0%)	2 (20.0%)	2 (20.0%)	3 (30.0%)
10. I was able to bring my compassionate self to my everyday life.	0 (0%)	1 (10.0%)	1 (10.0%)	3 (30.0%)	2 (20.0%)	0 (0%)	3 (30.0%)
11. The CMT practices were helpful.	1 (10.0%)	1 (10.0%)	0 (0%)	2 (20.0%)	1 (10.0%)	2 (20.0%)	3 (30.0%)

*Note.*  $n = 10$  completed the post-CMT feedback questionnaire at Time 2.

**Appendix W: Number of Practices Accessed by CMT Participants Ranked by Completion Rate**

Participant number	Number of CMT practices accessed	% of CMT practices accessed	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Time 2 measures completed?	Time 3 measures completed?
1	2	14.3%	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes
2	5	35.7%	No	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Yes
3	6	42.9%	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	No	No	No	No	No	No	Yes
4	7	50%	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	7	50%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes	Yes
6	9	64.3%	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	10	71.4%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes
8	10	71.4%	Yes	No	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	11	78.6%	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
10	13	92.9%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
11	13	92.9%	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	14	100%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	14	100%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	14	100%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes