

**A MIXED METHODS EXPLORATION OF EATING BEHAVIOURS, BODY IMAGE
AND MINDFULNESS-BASED CONSTRUCTS AMONG GAY AND BISEXUAL MEN**

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ABSTRACT

The prevalence of eating and body-related disturbances among gay and bisexual men exceeds those experienced by straight men; with the majority of literature denoting higher rates of eating disorder prevalence and disordered eating. Mindfulness, self-compassion, and mindful eating have been associated negatively with problematic eating behaviours and body-related issues, informing interventions reported as effective at attenuating such issues in the general and more specific populations. The paucity of research exploring problematic eating behaviours and the potential associations of mindfulness-based constructs among gay and bisexual men provides an opportunity to investigate the potential utility of mindfulness-based constructs to attenuate problematic eating and body-related issues. The current thesis aimed to attain insight into the relationships of mindfulness-based constructs to body-related issues and problematic eating, and further gain an understanding as to how these elements are experienced among gay and bisexual men. The thesis comprises of three initial cross-sectional research chapters, followed by three research chapters which adopted a qualitative approach, consisting of an IMR study and two semi-structured interview studies. Overall, the cross-sectional chapters provided insight into the relationships of mindfulness, self-compassion and mindful eating to body image and problematic eating behaviours among queer men. The nuanced role of body acceptance was observed in explaining relationships between mindfulness-based constructs to problematic eating and body-image. Weight- and body-related shame and guilt also explained relationships of mindfulness-based constructs to problematic eating. The proceeding qualitative chapters highlighted the lived experience of participants in relation to their identity, queer culture and self-acceptance, and further, how these elements related to perceptions of body image and engagement in problematic eating. The findings provide an understanding of the potential utility of mindfulness and related

elements in attenuating eating and body-related issues among gay and bisexual men, with consideration for future interventions.

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LIST OF ABBREVIATIONS

ACT: Acceptance and Commitment Therapy

BI-AAQ-5: The Body Image Acceptance and Action Questionnaire – Short form

BMI: Body Mass Index

DBIQ: Dresden Body Image Questionnaire

DEBQ: Dutch Eating Behaviour Questionnaire

FFMQ: Five-Facet Mindfulness Questionnaire

GQ: Grazing Questionnaire

IMR: Internet-Mediated Research

MBCT: Mindfulness-Based Cognitive Therapy

MBSR: Mindfulness-Based Stress Reduction

MEBS: Mindful Eating Behaviour Scale

SCS: Self-Compassion Scale

SD: Standard Deviation

SFT: Self-compassion Focused Therapy

SPSS: Statistical Package for the Social Sciences

WEB-SG: Weight- and Body-Related Shame and Guilt Scale

CHAPTER 1: GENERAL INTRODUCTION

This chapter offers a comprehensive introduction to the topic of eating and body-related disturbances in gay and bisexual men. Emphasis is given to the notable findings that suggest a higher susceptibility to eating and body-related disturbances in this population compared to heterosexual men (Naamani, 2018; Siconolfi et al., 2009; Williamson, 1999). Contributing factors such as homonegativity, body image ideals, and queer culture are discussed, shedding light on the complex dynamics at play (Badenes-Ribera et al., 2018; Blashill, 2010; Griffiths et al., 2017; Matthews-Ewald et al., 2014). The chapter underscores the far-reaching implications of these issues and the imperative need for research that delves into the nuanced individual differences within the gay and bisexual male community. Of primary importance is the recognition of the scarcity of interventions specifically tailored to address these concerns within this population.

Furthermore, this chapter introduces key concepts such as mindfulness, self-compassion, and mindful eating as potential protective factors against eating and body-related issues. The emerging evidence on the effectiveness of mindfulness-based interventions in mitigating problematic eating behaviours and ameliorating body dissatisfaction across diverse populations is presented (Egan et al., 2021; Germer & Neff, 2013; Mantzios & Wilson, 2015; Rahimi-Ardabili et al., 2018). In closing, this chapter outlines the research objectives and provides an overview of the thesis structure. The following chapters encompass a blend of quantitative and qualitative studies aimed at exploring the relationships between mindfulness-based constructs and the multifaceted difficulties in eating and body image within the gay and bisexual male community.

1.1. Introduction to Eating and Body-related Disturbances in Gay and Bisexual Men

Gay and bisexual men experience disproportionate eating and body-related issues comparatively to straight men (Naamani, 2018; Siconolfi et al., 2009; Williamson, 1999).

Several contributing factors have been attributed to this prevalence, including homonegativity, the importance of slim body ideals and queer culture (Badenes-Ribera et al., 2018; Blashill, 2010). The implications for gay men are significant, as there may be a lack of appropriate interventions that are tailored to the population and consider the unique experiences (e.g., coming out; William & Hartley, 1998) and the significant individual differences within the population (e.g., slim and muscular body aspirations – see Regan et al., 2021). Research pertaining to eating disturbances in gay men predominantly focuses on an eating disorder pathology and relations to body image (Bell, 2018; Fussner & Smith, 2015; Parker & Harriger, 2020). Little has been discussed regarding specific eating behaviours and the relationship between personality traits and eating behaviours in gay men (Pullmer et al., 2019), which may provide an overall understanding of supporting the population and for disordered and non-disordered eating.

1.2. Eating and Body Ideals in Gay and Bisexual Men

Early studies investigating eating behaviours in gay and bisexual men focused on the pathological differences between heterosexual and gay men (Beren, 1997; Brand et al., 1992; Yelland & Tiggemann, 2003). Beren (1997) examined interpersonal experiences in gay and heterosexual men to investigate the relationship between stigmatisation and eating disturbances. Gay men reported higher levels of shame, lower levels of self-worth and higher levels of negative attention specific to the self and appearance when compared to heterosexual men (Beren, 1997). Interpersonal experiences specific to gay men such as ‘coming out’ were also determinants of subclinical eating disorder pathology, linking to higher levels of shame (Beren, 1997). Similarly, Yean et al. (2013), supported these findings by linking elements of shame and low self-esteem to disordered eating among gay and bisexual men. This research provides a basis of insight into the interpersonal experiences of

gay men, how they influence their perceptions of themselves and their relations to eating disturbances (Williamson, 1999).

The experiences specific to gay men such as ‘coming out’ have been linked to homonegativity, dissatisfaction with sexual orientation and low self-esteem, which in turn, contributes to eating disturbances (Salvati et al., 2019). Homonegativity is defined as a prejudicial attitude focused inwardly on any person who identifies as homosexual (Lottes & Grollman, 2010). Literature examining eating disturbances has applied this construct to conceptualise internalised homophobia and its impact on eating disorder aetiology (Reilly & Rudd, 2006; Williamson, 2000). Research conducted by Hanley (2013) investigated the relationship between homonegativity, body esteem and disordered eating in gay men. Significant associations were found between increased levels of internalized homophobia and disordered eating (Hanley, 2013). Participants who scored higher on measures assessing homonegativity also were more likely to exhibit negative attitudes towards eating and scored lower on the body esteem measures (Hanley, 2013). These findings suggest there is a relationship between homonegativity and maladaptive eating behaviours in gay men, and further how these elements link to body esteem.

Similar findings were reported by Williamson and Spence (2001) who investigated maladaptive eating pathology in a sample of 202 gay men aged 14-72. The importance of slimness and attractiveness was reported as the most influential predictor of problematic eating-related attitudes (Williamson & Spence, 2001). Internalised homonegativity, self-esteem, and satisfaction with sexual orientation also had a significant effect on problematic eating (Williamson & Spence, 2001). This research highlights the impact of experiences unique to the population on homonegativity, low self-esteem and increased risk of maladaptive eating behaviours (Beren, 1997; Hanley, 2013; Williamson & Spence, 2001)

which presents a basis for interest when considering eating and eating disorder pathology in gay and bisexual men.

Cumulatively, research exploring body image and evaluation reports the importance of attaining and/or maintaining a slim or muscular body aesthetic among gay and bisexual men (Blashill, 2010; Griffiths et al., 2017; Matthews-Ewald et al., 2014; Yelland & Tiggemann 2003). Qualitative explorations of queer culture and representations of body aesthetic ideals within the community provided insight into perceptions and experiences of identity and being within gay spaces (Morgan & Arcelus, 2009; Regan et al., 2021). Participants overall felt pressure to conform to a slim or muscular body type, with perceptions of judgement from other gay men within the community if they did not conform to their aesthetic ideal (Morgan & Arcelus, 2009). Regan et al. (2021) further highlighted the lack of representation of larger body types within gay spaces, exploring how gay and bisexual men who did not feel they met the slim ideal to feel further isolated from the community. This research provides insight into community-based pressures to attain or maintain a slim or muscular body type, and how this pressure links to identity and perceived lack of acceptance for those who do not conform.

Explorations of body disturbances have provided insight into body fat and muscle dissatisfaction within the community, further highlighting the importance of focused body ideals. Blashill (2010) investigated body fat and muscle dissatisfaction and relationships to social sensitivity among gay men. Findings reported associations between muscle dissatisfaction and social sensitivity, supporting the notion that gay men feel conscious about their bodies in social settings (Morgan & Arcelus, 2009; Regan et al., 2021; Williamson & Spence, 2001). Similarly, Schmidt et al. (2022) reported that gay men showed a greater discrepancy between self-reported current body fat and ideal body fat, greater drive for thinness, appearance fixing and overall body-image disturbance compared to straight men.

This research highlights the importance of focused slim or muscular body ideals among gay and bisexual men, and the potential harmful implications for body image disturbance of being in gay spaces.

Gay men are at greater risk of subclinical eating disorder symptomology in part due to community-based pressure placed on them to attain a slim or muscular body type (Beren, 1997; Griffiths et al., 2017; Salvati et al., 2019; Yelland & Tiggemann, 2003). Recent research has demonstrated that these findings may not relate to all gay men inclusively and that subcultures within the gay community may not adhere to these body ideals and eating behaviours (Unsain et al., 2020). Gay men who identified as ‘bears’ were interviewed on topics that explored their food preferences, eating practices, masculinity, and group belonging (Unsain et al., 2020). Participants reported that their diet consisted of a high meat content as this was linked to ‘eating like a man’ and achieving a ‘macho body’ (Unsain et al., 2020). Their conceptualisation of masculinity was representative of their diet and achieving their desired body type. These findings are relevant, as they contrast with the narrative outlined in the literature in this topic area, highlighting that not all gay men inclusively adhere to achieving or maintaining a slim or muscular body type (Griffiths et al., 2017; Unsain et al., 2020; Yelland & Tiggemann, 2003). Future research should consider gay male subgroups, and especially gay men who identify as ‘bears’ when concluding the gay population's health behaviours and potential methods to intervene.

The self-objectification theory (SOT) has traditionally been used to explain the sexual objectification of the female body in the Western media, by denoting how the media presents sexually explicit representations of women in advertisements, films and magazines (Frederick et al., 2016; Schaefer et al., 2018). Researchers have found a significant relationship between self-objectification and disordered eating in the female population (Veldhuis, 2020). SOT can also be applied to gay men, the portrayal of gay men in media aimed at the LGBTQIA+

community often depicts them as sexual entities with slim and muscular body types (Lanzieri & Hildebrandt, 2016). Self-objectification and shame-proneness were found to be predicting factors for disordered eating in gay and bisexual men in the Middle East and Lebanon (Naamani, 2018). Taylor and Goodfriend (2008) present similar findings, gay men displayed greater restrictions on food intake when presented with greater exposure to LGBTQ-orientated media, explained by depictions of slim or muscular body types within LGBTQ media. This research highlights the media's influence on body image issues and problematic eating among gay men, supporting the application of SOT among the population.

1.3. Body Image and Problematic Eating Behaviours

Body image is a multifaceted construct, encompassing thoughts, perceptions, evaluations, behaviours and attitudes towards one's body and appearance (Gardner, 1996; Garner & Garfinkel, 1982). The body image development process is dynamic, involving not only physical processes (e.g., body shape, size, weight), but additionally, psychological processes (e.g., positive and negative affect, personality traits), directly influenced by sociocultural factors (e.g., cultural ideals of beauty, media narratives and contextual influences) (Afful & Ricciardelli, 2015; Allen & Walter, 2016; Selensky & Carels, 2021). A multitude of research has explored relationships and potential risk factors for body image and problematic eating showing the impact of problematic eating on body image, and the impact of lower body image on problematic eating behaviours among clinical and non-clinical populations (e.g., Linardon et al., 2019; Rodgers et al., 2020; Rounsefell et al., 2020).

A component of body image, body acceptance has been described as the acknowledgement of aspects of the body one is dissatisfied with and accepting them without judgment (Tylka & Wood-Barcalow, 2015). Acceptance derives conceptually from Buddhist traditions, application of such phenomena to body image developed positive rational

acceptance and body image flexibility, which are described as an adaptive response when posed with threats to body image (Sandoz et al., 2013). Such adaptive coping strategies have been reported as adversely related to self-objectification, disordered eating and negative body image, particularly among female populations (Rogers et al., 2018; Hughes & Gullone, 2011). Body image flexibility stems from the broader construct of psychological flexibility which is the central mechanism for change and flourishing in Acceptance and Commitment Therapy (Hayes, 2004). The paucity of research focusing on body acceptance and body image flexibility among gay and bisexual men presents an opportunity to explore its utility in addressing body and eating disturbances within the population.

Problematic eating refers to engagement in behaviours that are deemed potentially harmful or associated with ill health but are not considered disordered (Atkins & Michie, 2015; Casey et al., 2021). For example, restrained eating has been described as the restricted intake of food to achieve or maintain weight loss or to prevent weight gain (Herman and Mack, 1975; Polivy et al., 2020). Restrained eating has been associated with excessive weight loss and is deemed a weight management behaviour (Jonker et al., 2021; Kontinen et al., 2009). Research has shown that restrained eating contrastingly, is also associated with weight gain in the future, and related to future engagement in binge eating (Boswell & Kober, 2016; Burton & Abbott, 2019; Dong et al., 2015). Research has discussed the prevalence of restrained eating among gay and bisexual men (Knight et al., 2022) with motivations underpinned by the desire to meet community-based slim and muscular body aesthetic ideals (Ching et al., 2021; Convertino et al., 2021). These findings provide insight into how restrained eating is experienced among gay and bisexual men. Other problematic eating behaviours (e.g., external, emotional eating and grazing) have not been extensively explored in gay and bisexual men, providing an opportunity to consider such eating behaviours within the population.

Eating behaviours considered problematic also include emotional eating, which is predominantly investigated among general and more specific populations which are traditionally seen as more at risk of eating disturbances (e.g., adolescent females and individuals living with certain long-term health conditions such as Cystic Fibrosis) (Al-Musharaf, 2020; Egan et al., 2021; Reichenberger et al., 2020; Shen et al., 2020). Macht and Simons (2011) define emotional eating as the use of food to regulate emotions, often considered a coping strategy manifested by over- or under-eating. Konttinen et al. (2010) investigated the link between depressive symptoms and emotional eating in a sample of 25–64-year-olds. Emotional eating related to higher depressive symptoms, with participants who scored higher in depressive symptoms and emotional eating measures also reported eating foods high in sugar and fat (Konttinen et al., 2010). This research presents a clear depiction of the role of emotional eating in coping with negative emotions, however emotional eating has not yet been explored exclusively in the gay population. The unique experiences of gay and bisexual men relating to homonegativity, coming out and non-acceptance present a population at greater risk of using emotional eating as a method of coping (Beren, 1997; Williamson & Spence, 2001; Hanley, 2013).

Explorations of other eating behaviours deemed problematic have been investigated in general and more specific populations. External eating has been defined as eating in response to exposure to food-related stimuli, irrespective of hunger or satiety, such as the sight or aroma of appealing food (Schachter et al., 1968). Grazing is described as the uninhibited repetitive eating of small portions of food (Heriseanu et al., 2019). External eating and grazing have also been shown to be problematic, leading to negative health implications e.g., higher BMI, lower body esteem and negative affect (Heriseanu et al., 2019; Kalkan Uğurlu et al., 2021; van Strien et al., 2020). This research provides insight into the impact of engaging in problematic eating behaviours, among general and more specific populations. Considering

the unique and potentially negative experiences of gay and bisexual men and the prevalence of more disordered eating behaviours, further investigation is needed into how problematic eating behaviours are experienced among gay and bisexual men.

1.4. Mindfulness-based Constructs and Associations to Eating and Body-related Issues

Mindfulness can be described as an umbrella term, encompassing, or relating to constructs which pertain to aligning theoretical elements, such as self-compassion and mindful eating. Mindfulness derives in origin from Buddhist teaching, but secular mindfulness is universal and can be described as an inherent human capacity (i.e., a trait) and as a practice to cultivate such a trait (Brown & Ryan, 2003; Kabat-Zinn, 2003). Brown and Ryan (2003) further discuss how mindfulness can be considered a personality trait, conceptualising one's predisposition to be mindful in daily life, or a state that can be achieved through meditation and guided intervention (Lau et al., 2006). A concurrent definition of mindfulness is construed within the literature, although some consensus remains on two main aspects (Quaglia et al., 2015). Firstly, paying purposeful attention to the present moment, often experienced through bodily perceptual sensations (e.g., sound and touch), although it can manifest through emotional reactions, mental dialogue, imagery and importantly, mindfulness practices (Creswell, 2017). The second, adopting an open, non-judgmental stance in accepting one's present experience, includes a non-reactive and curious approach to one's experience, even those perceived as negative (Creswell, 2017). Kabat-Zinn (1990) synthesized this definition, which is widely accepted in health sciences, as paying purposeful, moment-by-moment attention to present experiences, non-judgmentally. Gunaratana (2011) states that the experience of mindfulness or being mindful can be cultivated through guided intervention and enhanced by intentional mindfulness training.

Exploration of mindfulness with problematic eating and body-related issues has provided insight into how elements of mindfulness act as a protective factor in attenuating eating and body-related issues. Research has indicated that mindfulness negatively relates to problematic eating and body-image-related issues in the general and more specific populations (Egan & Mantzios, 2018; Egan et al., 2022; Hussain et al., 2021; Mantzios et al., 2018a; b). Wilson et al. (2021) highlighted the protective role of trait mindfulness in interrupting pathways to binge eating and grazing, showing the potential usefulness of mindfulness when considering future interventions to attenuate problematic eating. Similarly, mindfulness interventions have been found to attenuate emotional (Tavoulari, 2023), restrained (Atkinson & Wade, 2016) and external eating (Alberts et al., 2012), providing overall support for the utility of mindfulness in addressing problematic eating. A focused exploration of mindfulness among gay and bisexual men would offer specific insight into the potential usefulness of mindfulness in addressing eating disturbances within the population.

The development of mindfulness-based modalities in eating to address obesity and weight gain led to the conceptualisation of mindful eating (Kristeller et al., 2014; Warren et al., 2017). Mantzios (2021) defines mindful eating as a moment-by-moment awareness of one's eating, aiming to address automatic or inattentive eating, which is associated with weight gain and obesity (Jordan et al., 2014; Kristeller & Epel, 2014). By adopting a mindful state when eating, one can achieve enhanced awareness of the present moment, the sensory experience of eating (Mantzios & Wilson, 2015) and awareness of hunger and satiety (Monroe, 2015; Winkens et al., 2018). According to Winkens et al. (2018), mindful eating comprises four main elements, eating while focusing attention on the food, eating while paying attention to hunger and satiety cues, eating with awareness and eating without distraction. These elements combined, enhance overall awareness of hunger and satiety cues, and deter eating due to psychological, social or external influences (e.g., affect). Kerin et al.

(2019) found that mindful eating negatively relates to restrained, emotional and external eating, suggesting that participants who reported higher mindful eating, reported lower scores in measures assessing problematic eating. The limited body of research that has explored these elements among gay and bisexual men, taking into account the distinctive experiences of this population, presents a valuable opportunity for further research.

Mindfulness-based interventions encompass other constructs such as self-compassion, which are interrelated with the theory and practices of mindfulness (Rahimi-Ardabili et al., 2018). Self-compassion has been described as adopting an openness to one's own suffering, without avoiding or disconnecting from it, cultivating a desire to heal oneself with kindness (Germer & Neff, 2013). Three characteristics and enabling elements of self-compassion include self-kindness, common humanity and mindfulness. Self-kindness has been described as offering oneself a kind and non-critical understanding of suffering, often linked to associated thoughts, attitudes and behaviours (Neff, 2003). Common humanity has been described as viewing one's experiences as a part of the wider human experience, and not isolating individual suffering (Neff, 2003). Mindfulness, in this context, is viewed as holding one's experience in a balance of awareness, and avoiding overidentifying with one's own suffering (Neff, 2003). Self-compassion is deemed a trait that can be cultivated, describing one's tendency to respond to personal suffering and failure with compassion (Neff, 2003).

Research has highlighted the role of self-compassion in disordered eating, emotional eating and restricted eating (Egan et al., 2021; Hsu & Forestell, 2021; Mantzios et al., 2018a; Spinosa et al., 2019). The theoretical basis for self-compassion and its role within problematic eating literature suggests that the higher the levels of self-compassion displayed in participants, the lower the rates of eating disturbances (Breines, et al., 2014). Lower rates of body dissatisfaction and emotional eating have also been reported in participants who score higher on self-compassion measures (Albertson, et al., 2015). Similarly, Stutts and

Blomquist (2018) investigated the role of self-compassion in relationships of weight concerns on the development of disordered eating among female college students. Self-compassion moderated the relationship between weight concerns, eating pathology and stress during their first year of study. Students with higher levels of self-compassion were less likely to experience severe weight concerns, high-stress levels and engage in disordered eating behaviours (Stutts & Blomquist, 2018). This research demonstrates the significance that higher levels of self-compassion have on the reduction of eating and body-related disturbances, stress and weight concerns.

It is important to note that the exploration of self-compassion in eating behaviour literature generally investigates this concept in female participants, as traditionally, they have been identified as a demographic most at risk of eating disturbances (Buchanan et al., 2013). However, research conducted by Bell et al. (2019) did consider the impact of self-compassion in their study, which compared eating disorder attitudes and behaviours with eating disorder proneness among gay men, lesbian women, transgender and non-conforming adults. Eating disorder proneness was found to be highest in lesbian women; however, gay men scored the lowest comparatively in the weight-based self-worth measures (Bell et al., 2019). Perceived stigma, depression and low levels of self-compassion were found to be predictor variables of eating disorder proneness in gay men (Bell et al., 2019). This research demonstrates the importance of self-compassion in eating disorder pathology in gay men.

1.5. Mindfulness-based Interventions

Intervention-based research has explored the efficacy of cultivating a state of mindfulness, self-compassion and mindful eating in attenuating eating and body-related issues (Khoshkerdar & Raeisi, 2020; Kristeller et al., 2014; Linardon et al., 2019; Rahimi-Ardabili et al., 2018; Salvo et al., 2022). Research conducted by Adams and Leary (2007)

investigated the impact mindful and self-compassionate thinking may have on the tendency for restrictive eaters to overeat following eating unhealthy foods. Participants were assigned to two measures of restrained eating, then were encouraged to think self-compassionately or mindfully about their eating, compared with a control group (Adams & Leary, 2007). Results showed that the mindful intervention significantly reduced overeating following unhealthy eating in highly restrictive eaters (Adams & Leary, 2007). The findings from this research demonstrate the efficacy of mindful interventions in the reduction of problematic eating behaviours in populations prone to eating disturbances.

Further efficacy of mindfulness-based interventions has been shown in attenuating body dissatisfaction and poor body image (Mantzios & Wilson, 2015). Research conducted by Albertson, et al. (2015) investigated the effectiveness of listening to a self-compassion meditation podcast on reducing body dissatisfaction in a sample of women. Participants would listen to the podcast once per day over three weeks, completing measures on body shape, body appreciation and body image before and after the intervention (Albertson et al., 2015). The intervention group were reported to experience higher levels of self-compassion, higher levels of body satisfaction and body image (Albertson et al., 2015). This research highlights the importance of exploring the usefulness of self-compassion in attenuating body dissatisfaction and the efficacy of mindfulness-based interventions in reducing body-related issues. Investigating the efficacy of mindfulness-based interventions in the reduction of body dissatisfaction and maladaptive eating behaviours in gay men may provide an adequate tool for clinicians to use in reducing these issues in the population.

Mindfulness and related constructs have been increasingly incorporated into clinical and non-clinical therapeutic interventions, including Mindfulness-based Stress Reduction (MBSR; Kabat-Zinn, 2003), Mindfulness-Based Cognitive Therapy (MBCT; e.g., Baer et al., 2005) and Acceptance and Commitment Therapy (ACT; Hayes, 2004). Harnessing key

elements of theoretical underpinnings of mindfulness has shown to be effective at attenuating eating and body-related issues among general and specific populations (Ersöz Alan et al., 2022; Finger et al., 2020; Fogelkvist et al., 2020; Khoshkerdar & Raeisi, 2020). Incorporating mindful and compassion-based interventions further guides clients in promoting psychological wellness in relation to their distress. Common to each therapeutic approach is cultivating awareness, acceptance and openness towards present experience aiming to attenuate automatic negative thoughts, self-perception and behaviour (Alberts et al., 2012; Walloch, 2014; Woodfin et al., 2021). Exploration of mindfulness and related constructs in relation to eating and body-related issues among gay and bisexual men may provide insight into considering the usefulness of MBSR, MBCT and ACT in attenuating these issues in the population (Walloch, 2014).

Mindfulness-based interventions have been effective in supporting many populations with aspects of difficulty, but the following limitations should also be considered in their current application. Mindfulness is a state of awareness which is harnessed through systematic practice, whereby, sustained engagement in the practice will increase the effectiveness and usefulness of mindfulness-based interventions (Kabat-Zinn, 2015). It is also argued that deeper spiritual awareness of oneself is cultivated through journeyed practice, and shorter lengths of engagement, encourages a ‘spiritual bypass’, of one’s difficulty, limiting the scope of the intervention(s) (Kelly, 2023; Picciotto & Fox, 2018). Therefore, the cost of continual engagement in mindfulness practices should be considered, including the cost of time and potential lack of a suitable environment to facilitate a mindful state. Secondly, research has revealed that specific populations struggle with the sustained attention facet of mindfulness practices, suggesting mindfulness-based interventions can also result in adverse effects and exacerbate symptoms (e.g., individuals with attention deficit disorders) (Janssen et al., 2020; Smalley et al., 2009). Lastly, the majority of research supporting the

effectiveness of mindfulness-based interventions lack ethnically diverse samples, meaning the application of such interventions is limited to largely white or western populations (DeLuca et al., 2018). The current consideration of mindfulness in relation to gay and bisexual men, is contextual to these limitations, with further research needed to understand the utility of mindfulness among more specific queer populations.

1.6. Summary Aims and Outline

Gay and bisexual men experience disproportional eating and body-related issues compared to straight men. The literature outlines a higher prevalence of disordered eating and eating disorders among the population, with a paucity of research on eating behaviours considered problematic. Mindfulness and related constructs (self-compassion and mindful eating) have been explored with eating and body-related issues among general and more specific populations (e.g., adolescent females). Relationships of mindfulness, self-compassion and mindful eating to problematic eating and body-related issues have provided a basis for which the efficacy of mindful- or compassion-based intervention has been shown to attenuate. Exploring relationships of mindfulness-based constructs to problematic eating and body-related issues among gay and bisexual men would provide insight into how these elements are experienced within the population. Such research would provide a basis of understanding to inform future mindful or compassion-based interventions to address eating and body-related issues among gay and bisexual men.

The current thesis presents a series of mixed methods research studies, aiming to explore relationships of mindfulness, self-compassion and mindful eating to both body-related constructs and problematic eating among gay and bisexual men. Understanding such relationships will facilitate a basis of understanding, aligning with the unique experiences of this population. The thesis aims to further provide a depth of understanding of how

mindfulness and related constructs are experienced, in relation to identity and sexuality, within the context of eating, body-related constructs and overall wellbeing.

The next chapter (Chapter 2) will outline the overall methodological approach taken to address the overarching research aims, including a reflexive element detailing the researchers' assumptions underpinning the research. Within the research chapters, the initial chapters utilise cross-sectional data and quantitative methods (Studies 1-3), and later chapters utilise a qualitative approach to methods and analysis (Study 4-6). Chapter 3 (Study 1) will explore the relationships of mindfulness, self-compassion and mindful eating to body image, utilising cross-sectional data and quantitative methods. Chapter 4 (Study 2) explores the relationships of mindfulness and related constructs to problematic eating behaviours and links to body acceptance. Chapter 5 (Study 3) focuses on the potential of weight and body-related shame and guilt in explaining the relationships of mindfulness-based constructs to problematic eating. Chapter 6 (Study 4) explored online forum data, providing insight into problematic eating, body evaluation and further insight into self-compassion and self-criticism. Chapter 7 (Study 5) entails explorations of participants' experiences of body image, body acceptance, identity and self-compassion. Chapter 8 (Study 6) provides insight into experiences of eating behaviours, body acceptance, identity, and self-compassion. Chapter 9 provides an overview and synthesis of the overall findings of each research chapter, elaborating on relational aspects of conclusions drawn, links to previous literature and considers implications, future research, and interventions.

CHAPTER 2: METHODOLOGICAL APPROACH

2.1. Mixed Methodology

Mixed methods approaches encompass blending both quantitative and qualitative methods, this approach has been utilised within health research paradigms to draw on valued elements of each approach, guided by the overall research aims (Bryman, 2006; Creswell et al., 2011; Fetters et al., 2013). Employing a mixed methodological framework has been described as ‘the third paradigm’ (Mayoh & Onwuegbuzie, 2015), promoting the development of design and research questions within the context and parameters of the overall field (Bowen et al., 2017). This further allows for broader issues to be addressed, providing a more expansive and creative approach to research (Johnson & Onwuegbuzie, 2004). Health science investigators are increasingly supporting mixed methods models, valuing the diversification of investigatory models, and reflecting the nature of disparities among specific populations (age groups, culture, sexuality, adherence and treatment) (Akinade et al., 2023; Creswell et al., 2011; Klassen et al., 2012).

The overall rationale for utilising a mixed methods design in the current project was supported by the reduction of potential methodological limitations by combining methodological approaches (Tashakkori & Teddlie, 2021). This allows for the expansion and exploration of findings, the qualitative findings can add context and paint a more ‘complete’ picture of the phenomenon investigated, providing triangulation of overall findings (Creswell et al., 2008; Doyle et al., 2016). However, it has been debated, that the difference in epistemological and ontological assumptions of the converging approaches create difficulties in deciphering and interpreting knowledge (Howe, 1988; Morgan, 2007). Most health researchers utilise a ‘pragmatism’ an alternative philosophical paradigm which aims to find the middle ground between the contrasting assumptions of quantitative and qualitative methodologies (Feilzer., 2010; Johnson & Onwuegbuzie, 2004). The current project adopts

pragmatism as the underlying approach, allowing for freedom in choosing and changing the research question(s), and balancing subjectivity and objectivity throughout the overall research process (Johnson & Onwuegbuzie, 2004).

There are multiple mixed methods frameworks, encompassing different sequential steps for employing quantitative and qualitative methods (e.g., Exploratory, Convergent and Multistage) (Miller et al., 2013; Nastasi et al., 2007; Onwuegbuzie et al., 2010). The current project adopted an explanatory sequential framework, whereby, quantitative methods were employed initially, followed by qualitative (Ivankova et al., 2006). The explanatory sequential approach allowed for relevant constructs to be explored through cross-sectional methods first, followed by a series of semi-structured interviews, allowing a greater depth of insight to be attained, providing discernment of context of the initial findings (Draucker et al., 2020). This approach has been valued within other sequential explanatory projects, whereby, findings and overall conclusions drawn were enriched by exploring elements provided by initial quantitative study, by sequential qualitative analysis (Murphy, 2021; Shahhosseini & Hamzehgardeshi, 2015; Yam et al., 2020). The choice of using a sequential explanatory approach was made due to the lack of conclusive empirical investigation of mindfulness in relation to eating behaviours and body image within the target population. The initial cross-sectional research developed a foundational understanding of these relationships among gay and bisexual men, providing a knowledgebase which informed further qualitative exploration.

In the current project, Chapter's 3, 4 and 5, adopt cross-sectional methods to explore the relationships and potential utility of mindfulness-based constructs to body image and problematic eating. Cross-sectional research provides understanding of phenomena in a given context, within the timeframe of data collection (Spector, 2019). Using a cross-sectional research paradigm enabled an overview of understanding of the constructs explored, this was particularly useful in this project, as there is a paucity of research exploring associations of

mindfulness-based constructs to eating behaviour and body image among gay and bisexual men. However, cross-sectional designs present limited scope in terms of understanding the application of findings to populations over longer periods of time (Wang & Cheng, 2020). A further limitation of the findings presented from these chapters, is the lack of causal insight into the relationships explored (Mann, 2003). Therefore, the findings from these chapters should be considered in relation to the discussed limitations. Future research should consider longitudinal and experimental methods to establish long term and causal insights into the relationships of mindfulness-based constructs to body image and eating, to further support the utility of mindfulness (and related constructs) in supporting gay and bisexual men.

In the current project, Chapters 6, 7 and 8, adopt qualitative methods, utilizing IMR and semi-structured interviews. Qualitative designs offer a deeper understanding of constructs explored, enabling insight into lived experience, providing greater context to the phenomena explored. This was particularly useful for this project, in understanding the deeper lived experiences of gay and bisexual men in relation to queer identity and social context in relation to body image, eating and self-compassion. Limitations of qualitative designs include the lack of consensus/clarity around sampling methods, with non-diverse samples providing insight into selective individual experiences, which may not reflect experiences of others (e.g., white-centric samples, not offering insight into the unique experiences of ethnically diverse individuals) (Oppong, 2013).

The methods employed within each phase of study formulation and data collection evolved following collaborations between the researcher, the supervisory team (Professor Helen Egan, Professor Michael Mantzios, and Dr Rebecca Keyte). The primary researcher shared an identity with the population of focus (as further explored within the reflexivity section); this, combined with the extensive experience in the supervisory team in investigating mindfulness, eating and health behaviours among other specific populations

guided the overall project design. For example, previous knowledge of queer culture and elements of self-compassion aided in the formulation of questions included within the interview schedules of the semi-structured interview studies. The culmination of previous knowledge, along with findings from the preceding studies developed the overall formulation of the proceeding research study(s), helping to shape the overall project. Utilizing qualitative methods provided a deeper understanding of participants' lived experiences, perceptions, and opinions, enhancing the comprehensiveness and contextual richness of the cross-sectional research. This approach aligns with the explanatory sequential paradigm and facilitated a more profound insight into the subject matter.

2.2. Reflexivity

Reflexive practice has been described by Eby (2000) as a synthesis of reflection, critical thinking, and self-awareness. The philosophical origins of this reflective framework derive from phenomenology and critical theory, considering one's experiences and personal consciousness (Quinton & Smallbone, 2010). This framework enhances reflective practice by encouraging development and understanding of the self, enabling a cohesive method for evaluation and therefore growth (Thompson & Pascal, 2012). Applied reflexivity enhances the research process by considering the role and position of the researcher in guiding the overall project, and further help to contextualise the results and conclusions drawn (Cain et al., 2019).

I identify as a gay cis male, an identity which reflected that of the majority of participants who took part in the overall project. I, therefore, shared similar experiences of queer culture and of existing in a heteronormative society, including the nuanced congruence of realising one's own identity. My own experiences of queer culture, and being within queer spaces and events, helped me to synthesise these experiences and attribute elements of health and

positive psychology which may relate to the population. This was of particular use when developing the cross-sectional questionnaires, to explore elements which may be associated with the population. Further consideration of previous literature provided support to these insights, enabling the research team to solidify which chosen elements to include.

Understanding and valuing my own experiences in relation to my identity became of particular importance when formulating the qualitative phases of the overall project. This also was deemed essential within the reflexive thematic analysis approach to the data upon analysis, valuing the position, assumptions and experiences of the researcher (Braun & Clarke, 2019; 2022). Within data collection, it was felt that participants had an awareness of my queerness, even though this wasn't explicitly stated or shared. I felt this created a relational forum within the context of the researcher and participant relationship, allowing for participants to respond to questions in a more congruent manner, without fear of judgement. I sensed this further allowed for a greater depth of exploration of participant's queer experiences, and how this related to elements of self-compassion and self-acceptance. Through data analysis, this also enabled me to fully connect with aspects of the transcripts and adopt a more latent approach to analysis, identifying codes and later themes, through reviewing deeper meanings from participants' responses. I was also aware of my own mirrored experiences in some cases, and acknowledged the process and impact that had of the interpretation of meaning and synthesising conclusions. This process was perceived to enrich the analytic process under the reflexive thematic paradigm.

The supervisory team and I shared an interpretivist and constructivist epistemological position underpinning the qualitative and overall project, while understanding the post-positivist aspects which underpinned the initial quantitative work. The constructivism approach adopts the position of knowledge being developed through the researcher's interaction with participants and the phenomena explored. This approach largely underpins

qualitative work, specifically relating to thematic analysis (Braun & Clarke, 2006). The Interpretivist approach further acknowledges the social parameters and culture influencing the methods and norms utilised to interpret the phenomena, placing participants within their social world. This approach was adopted due to the intersectional aspect of the population of focus, acknowledging the participants' nuanced beliefs, norms and experiences, as aligned with the reflexive thematic analytic approach adopted within the qualitative work (Braun et al., 2023; Thompson Burdine et al., 2021).

Positivism describes an objective measurement of a phenomenon (Park, 2020), with post-positivism refined as the acknowledgement of the researcher's influence on research outcomes but holds objective knowledge as the ideal. Valuing the post positivist element of the overall project was necessary in attaining base knowledge and understanding through empirical data in the quantitative work undertaken. While we (the research team) acknowledge and value the importance of post-positivism in research, pertaining to understanding constructs from an objective position; we cumulatively position ourselves in interpretivism and constructivism in this project, allowing for greater depth of insight into participants' beliefs and experiences situated within their own social sphere. This position further aligns with the explanatory sequential process undertaken, whereby, qualitative data collection and analysis provided context and depth of understanding, informed by findings provided by the quantitative study. For example, study one provided insight into associations of self-compassion to body image in Chapter 3 (cross-sectional study), while participants understanding of self-compassion in relation to how they perceived their body was explored within Chapter 7 (semi-structured interview study). Further discussions of how findings from the cross-sectional work link and draw parallels with the depth of insight explored within the qualitative chapters will be provided within the General Discussion chapter (Chapter 9);

further embedding and contextualising knowledge from an interpretivist perspective and further aligning with the explanatory sequential paradigm.

2.3. Reflexive Thematic Analysis

Reflexive thematic analysis (RTA) was used within chapters six, seven and eight to analyse data, following a reflexive, interpretive and inductive approach to the data (Braun & Clarke, 2021a). RTA has been described as a family of approaches, and not a set analytic strategy; Braun and Clarke (2021b) have categorised variations of RTA processes into three main categories: Coding reliability, codebook and reflexive approaches. The current research undertook a reflexive approach to analysis, whereby, the coding process was organic and latent in nature, leading to the later development of overall themes (Braun & Clarke, 2021b). Under a reflective approach, the researcher's role and subjectivity in coding the data and in theme development is valued and integrated into the overall analysis (Braun & Clarke, 2021b).

Six overall phases were followed in each qualitative chapter: familiarisation, coding, generating initial themes, reviewing and developing themes, refining, defining and naming themes, and writing up (Braun & Clarke, 2021a; b; 2006). The first step pertained to reading and transcribing transcripts (for Chapters 7 and 8) and reading online form data (for Chapter 6). Initial thoughts and quotes of potential importance and further consideration were highlighted within the data, this enabled the researcher to explore these significant elements further when re-reading and coding the data in the next step.

The second step of coding was completed in an unstructured and organic fashion, comprising of highlighting elements of the data which 'spoke' to the researcher. This was completed through the comment function of Microsoft Word, allowing room for evaluation and interpretation from the researcher. A more latent approach was undertaken in the coding

process, although at times, semantic observations were made. This organic and fluid approach to coding aligns with the reflexive approach to RTA employed, and fully cultivated the incorporation of the researchers' subjectivity and interpretation. The primary researcher coded all data, with support and frequent discussions with the wider research team, allowing for codes of interest to be explored in relation to the research aims.

The third step of generating initial themes consisted of grouping codes and associated data by identifying patterns of shared meaning or underlying consistencies across the data sets. An overall document was created with initial theme groupings with organised codes and associated data combined, this aided the researcher in re-reading aspects of the data and relaying thoughts around patterns with the wider research team. This step was completed when consensus was reached among the research team, as to the distinction between themes and how these fit within the overall narrative told within each theme.

The fourth step and fifth step, reviewing and developing themes and defining and naming themes, was blended in process, whereby, the researcher spent time with the data and analytic process thus far. This is viewed as important within RTA, by taking a step back from data, and then reengaging; the researcher was able to fully immerse themselves in the data, code, and conceptualise overall finalised themes. The researcher at this point also reflected on their own assumptions and role in interpreting the data and identifying patterns within the data and developing initial themes. This process led to the refinement and final conceptualisation of each theme, with continual input and discussions with the wider research team. Theme definition and naming came largely derived from participants' responses themselves, with quotations from participants' responses acting as theme names, which summarised the overall narrative of the relevant theme.

The sixth and final step, writing up, involved selecting appropriate quotes which helped to relay the overall story evident within each theme. The researcher would complement each quote with interpretation, providing elaboration on participants' responses with the researcher's insight, and building an overall narrative. Quotes represented a shared feeling, opinion or experience of the related sample, or in some instances, an important element which stood out to the researcher, or which warranted attention and added to the overall development of the theme. Each theme within the relevant qualitative chapters was interconnected, this is highlighted within each theme and further explored within the discussion section of the corresponding chapter. This step was completed by the primary researcher, and discussed, reviewed and later finalised by the wider research team.

2.4. Quantitative Measures

The following section includes a description of measures used within the cross-sectional chapters (Chapters 3, 4 and 5) to avoid repetition within individual chapters. Each method section will reference these descriptions and present the Cronbach's alpha observed for each scale within the relevant chapter.

- (a) The *Sussex-Oxford Compassion for the Self* (SOCS-S; Gu et al., 2020) is a 20-item scale containing five sub-scales (*Recognising suffering; Understanding the universality of suffering; Feeling for the person suffering; Tolerating uncomfortable feelings; Acting or being motivated to act to alleviate suffering*). Total scores were calculated and used within the analysis; with the higher the score meaning higher levels of self-compassion. Responses were recorded using a 5-point Likert scale (1 = Not at all true, 2 = Rarely true, 3 = Sometimes true, 4 = Often true, 5 = Always true), sample items include: '*I notice when I'm feeling distressed*' and '*I connect with my own suffering without judging myself*'.

- (b) The Self-compassion Scale (SCS; Neff, 2003) is a 26-item scale containing 6 subscales (*Self-Kindness, Self-Judgment Items, Common Humanity, Isolation, Mindfulness, Over-identified*). Responses are recorded on a 5-point Likert scale (1 = Almost Never and 5 = Almost Always) whereby higher scores relate to higher levels of self-compassion. Sample items include: “*When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people*” and “*I try to be loving towards myself when I’m feeling emotional pain*”.
- (c) The *Body Image Acceptance and Action Questionnaire -5* (BI-AAQ-5; Basarkod et al., 2018) is a short form of the *Body Image – Acceptance and Action Questionnaire* (BI-AAQ-5) which aims to assess body image acceptance. Total scores were calculated and used within the analysis; with a higher score meaning lower levels of body-acceptance (*or higher levels of body non-acceptance*). The BI-AAQ-5 is a 5-item scale where responses are recorded using a 7-point Likert scale (1 = Always true and 7 = Never true). Sample items include: ‘*Worrying about my weight makes it difficult for me to live a life that I value*’ and ‘*I shut down when I feel bad about my body shape or weight*’.
- (d) The *Dresden Body Image Questionnaire* (DBIQ; Scheffers et al., 2017) is a 35-item questionnaire with positively and negatively worded statements comprising of five subscales (*Body Acceptance, Vitality, Physical Contact, Sexual Fulfilment and Self-aggrandizement*). The DBIQ aims to assess body image, with higher scores meaning higher levels of a more positive perception of body image; total scores were calculated and used within the analysis. Responses were recorded using a 5-point Likert scale (1 = Not at all true, 2 = Rarely true, 3 = Sometimes true, 4 = Often true, 5 = Always true), sample items include: ‘*I wish I had a different body*’ and ‘*I use my body to attract attention*’.

- (e) The *Mindful Eating Behaviour Scale* (MEBS; Winkens et al., 2018) is a 20-item scale, and has five subscales (*Focused Eating, Eating with Awareness, Eating without Distraction, Hunger and Satiety Cues*). Total scores were calculated and used within the analysis; with a higher score meaning higher levels of mindful eating. Responses were recorded using a 4-point Likert scale (1 = Never to 4 = Usually), sample items include: '*I wish I could control my eating more easily*' and '*I trust my body to tell me when to eat*'.
- (f) The *Five Facet Mindfulness Questionnaire* (FFMQ-15; Gu et al., 2016) is a 15-item scale, and comprises of five subscales (*Observing items, Describe items, Acting with awareness items, Non-judging items, Non-reactivity items*). Total scores were calculated and used within the analysis; with the higher the score meaning higher levels of mindfulness. Responses were recorded using a 5-point Likert scale (1 = Never or Very Rarely True to 5 = Very Often or Always True), sample items include: '*I'm good at finding words to describe my feelings*' and '*I find myself doing things without paying attention*'.
- (g) The *Dutch Eating Behaviour Questionnaire* (DEBQ; Van Strien et al., 1986) is a 33-item scale containing 3 sub-scales (*External Eating, Restrained Eating and Emotional Eating*). Responses are recorded on a 5-point Likert scale (1 = Never and 5 = Very Often) whereby, higher scores relate to higher rates of external restrained and emotional eating. Sub-scales were used within the analysis; the restrained eating subscale contains 10 items, for example: "*Do you watch exactly what you eat?*" and "*Do you deliberately eat foods that are slimming?*". The emotional eating subscale contains 12 items, for example: "*Do you have a desire to eat when you are depressed or discouraged?*" and "*Do you have a desire to eat when you are feeling lonely?*". The external eating subscale contains 9 items, for

example: “*If you walk past the baker do you have the desire to buy something delicious?*” and “*If you walk past a snackbar or a cafe, do you have the desire to buy something delicious?*”.

- (h) *The Grazing Questionnaire* (GQ; Lane & Szabo., 2013) is an 8-item scale aiming to assess grazing behaviours. Responses are recorded on a 5-point Likert scale (0 = Never and 4 = All of the time) whereby, higher scores relate to higher rates of grazing eating behaviour. Sample items include: “*Do you find yourself taking extra helpings or picking at extra food once you’ve finished your main meal?*” and “*Do you find yourself picking at or nibbling food continuously?*”.
- (i) *The Weight- and Body-Related Shame and Guilt Scale* (WEB-SG; Conradt et al., 2007) is a 12-item scale used to measure feelings of guilt and shame in relation to perceptions of one’s body and weight. Responses were scored on a 5-point scale (from 0 = never to 4 = always) and consisted of two subscales (*Shame, Guilt*) whereby higher scores relate to higher levels of Shame and Guilt. Sample items include: “*When I have eaten more than I want, I experience feelings of guilt*” and “*The appearance of my body is embarrassing for me in front of others*”.

2.5. Ethical Approval

All five studies (Chapter 3 – Chapter 8) were granted ethical approval by the Business, Law and Social Sciences Ethical Review Committee at Birmingham City University. The ethical approval code is included within each ‘Ethical considerations’ subsection of the ‘Method’ section within each chapter.

CHAPTER 3: THE MEDIATING ROLE OF BODY ACCEPTANCE IN EXPLAINING THE RELATIONSHIP OF MINDFULNESS, SELF-COMPASSION AND MINDFUL EATING TO BODY IMAGE IN GAY AND BISEXUAL MEN

3.1. Abstract

Background: Mindfulness and mindfulness-based constructs, such as self-compassion and mindful eating, have been positively associated with healthier eating and body related perceptions. Exploration of mindfulness and related concepts have not been investigated extensively in gay and bisexual men, a population where eating and body related concerns have been found to be widespread.

Methods: Participants completed an online questionnaire, assessing mindfulness, self-compassion, mindful eating, body image and body acceptance. Correlation analysis and further mediation analysis were conducted to explore the relationships of these constructs within the present sample ($n = 163$).

Results: A community sample showed a positive association of body image to mindfulness-based concepts, and negative to body non-acceptance, within the target population. Mediation analysis showed the role of body acceptance in explaining the relationship between mindfulness, self-compassion and mindful eating to body image.

Conclusion: Findings highlight the importance of body acceptance when considering the development of a mindfulness or compassion-based intervention to attenuate body related issues among gay and bisexual men.

3.2. Background

Mindfulness and mindfulness-based concepts, such as self-compassion and mindful eating, have been utilised in research throughout health psychology, especially in assisting

populations engaging with problematic eating behaviours and experiencing body image concerns (Jordan et al., 2014; Mantzios, & Wilson, 2015; Tihanyi et al., 2016; Wasylkiw et al., 2012). Mindfulness has been described as paying attention to the present moment, with a non-judgemental attitude (Kabat-Zinn, 2015). Exploration of mindfulness has promoted the development and efficacy of mindfulness (Balciuniene et al., 2021) and compassion-based interventions (Albertson et al., 2015) to aiming to attenuate body image and eating-related issues in the general population, but also in more specific populations where these issues are prevalent (e.g., adolescent females; individuals with a diagnosis of Cystic Fibrosis) (Egan et al., 2021; Hussein et al., 2017). Exploration of mindfulness and related concepts have not been investigated extensively in gay and bisexual men although evidence shows that this is a population who are also at higher risk of developing eating and body image-related issues (e.g., Fussner & Smith, 2015; McClain & Peebles, 2016; Tran et al., 2020). The development of interventions which consider the specific experiences of different populations increases the efficacy of such interventions, hence the need for increased knowledge of experiences of body issues in gay and bisexual men.

Within Western culture presentation of ‘thin’ or ‘slim’ female body types have contributed to poor body image perception among younger female populations (Bombak et al., 2019). Those who do not meet this ideal expectation often display lower body image and dissatisfaction (Bombak et al., 2019) and perceive a lack of acceptance of their body shape from peers, family, and friends (Tylka & Homan, 2015). Body acceptance has been defined as an acknowledgement of feeling unsatisfied with some aspects of the body but accepting these non-judgementally (Tylka & Wood-Barcalow, 2015); it is often aligned with ‘fat acceptance’ though there are many facets to body acceptance amongst different populations (Ruggiero et al., 2000). The perceived ‘body acceptance by others’ (Swami et al., 2020) in relation to those who are close to the individual (*family and friends*) has also been linked to

body image and mental health outcomes (Layman et al., 2021). Evidence shows that higher rates of body acceptance relate to positive body image (Swami et al., 2021). A higher prevalence for body related issues has been found in female populations including a lack of body acceptance, leading to poor body image and body dissatisfaction (Santonastaso, 1995). A large collection of research has attributed this to women internalizing the ‘thin’ body ideals portrayed by the media (Pidgeon & Appleby, 2014). While findings generally indicate a thin “ideal body” proposition, further explorations of body acceptance and how this relates to body image and mindfulness constructs is needed.

Research that explores body image in men does not often depict the sexuality of participants and therefore does not consider the specific experiences of gay and bisexual men (Fussner & Smith, 2015). This omission is important, as recent literature has highlighted gay and bisexual men as experiencing a higher prevalence of eating and body related issues when compared with heterosexual men (Blashill, 2010). Brewster et al. (2017) suggest that the pressure upon gay men to conform to the high standards of bodily appearance in the gay community could result in disordered eating and body dissatisfaction. Yelland and Tiggemann (2003) compared measures assessing disordered eating and desire for muscularity in gay men, using heterosexual men and women as control groups. Gay men scored higher in the disordered eating and desire for muscularity measures than both the control groups (Yelland & Tiggemann, 2003). This suggests that the aspirational male gay body type is both lean and muscular. This body ideal can be difficult to achieve and maintain and may help to explain the higher rates of disordered eating. A perceived failure to achieve such body ideals may also negatively affect wellbeing in gay men (Brewster et al., 2017; Regan et al., 2021; Yelland & Tiggemann, 2003).

Qualitative explorations of body ideals in relation to social perceptions and the impact on the individual have reflected similar findings (Morgan, & Arcelus, 2009). Regan et al.

(2021) highlighted the appearance-based judgement experienced by gay men who visited ‘gay spaces’, and how this related to a lack of body acceptance within gay men. Further findings showed that participants were judgemental of themselves when they had eaten unhealthy food, particularly when consumption was unplanned or eaten without attention (i.e., mindless eating). This research highlights the lack of body acceptance experienced and the perceived importance of attaining or maintaining a slim or muscular body type to be ‘accepted’ within this community (Regan et al., 2021). The potential of mindfulness and self-compassion to improve body acceptance and body image is proposed (Brewster et al., 2017; Regan et al., 2021; Yelland & Tiggemann, 2003).

The literature presents several explorations of mindfulness-based interventions and their effectiveness at attenuating body related issues within the general and more specific populations. Balciuniene et al. (2021) tested an eight-week intervention programme utilising mindfulness-based physical exercise and educational sessions with a sample of female college students who showed an increase in body image scores post intervention. Similarly, Zamzami et al. (2015) demonstrated that mindfulness-based exercise attenuated lower body image in female students. This provides evidence of the effectiveness of mindfulness-based interventions when addressing body-related issues in specific populations (Balciuniene et al., 2021; Zamzami et al., 2015).

Self-compassion is a mindfulness-based construct which describes compassion directed towards oneself, comprising of three main elements, kindness, a sense of common humanity and mindfulness (Germer & Neff, 2013). This concept has been explored within body image and eating literature, where higher levels of self-compassion relate to higher levels of body satisfaction and lower reports of disordered or maladaptive eating (Egan et al., 2018; Mantzios & Egan, 2017; Rahimi-Ardabili et al., 2018; Regan et al., 2021). Wasylikiw, et al. (2012) explored self-compassion and self-kindness in relation to body image in a sample

of female university students. Higher levels of self-compassion and self-kindness were found to be predictors of higher levels of body image. Self-compassion-based interventions have also shown efficacy in reducing body dissatisfaction in female populations, Albertson et al. (2015) tested a daily audio-guided self-compassion based-meditation intervention over three weeks, and results showed higher levels of self-compassion which were associated with higher levels of body image.

Emerging research has looked at the potential influence mindful eating may have on reducing not only maladaptive eating behaviours, but also body dissatisfaction (Olvera-Ruvalcaba & Gómez-Peresmitré, 2021). Mindful eating encompasses non-judgment, eating with awareness and engaging with the physical and emotional sensations associated with eating (Mantzios, 2021). Ponde Nejadan et al. (2018) explored mindful eating, body image and quality of life in a sample of married Iranian women, showing increases of mindful eating related to increases in body image and quality of life. This research suggests that mindful eating may also play a role in promoting positive body image. Further links between mindful eating and body image are presented by Webb et al. (2018) who investigated the impact of family talk around mealtimes. Results showed that self-denigrating talk was inversely linked with mindful eating while increases in mindful eating behaviours increased positive body image and appreciation. Research proposes the importance of mindful eating (Mantzios et al., 2018), and by extension, of mindful-eating-based interventions (Hussain et al., 2017; Mantzios et al., 2019; Mantzios et al., 2020), when considering its potential impact on positive body image.

The links between body image and mindfulness-based concepts have been discussed (Jordan et al., 2014; Tihanyi et al., 2016; Wasylkiw et al., 2012); however, the potential link of body acceptance to mindfulness has not been extensively explored. Exploration of these concepts within gay and bisexual men would highlight elements that may be important when

considering a mindful or compassion-based intervention to attenuate body and eating-related issues in gay and bisexual men. The aim of this study was to explore body image and the potential relationships to mindfulness, self-compassion, and mindful eating in gay and bisexual men to inform future mindful and/or compassion-based intervention to attenuate body-related issues. Importantly, the present research assumes the close association of body acceptance to body-image, and the congruent nature of acceptance to mindfulness, self-compassion, and mindful eating to be a significant indicator of promoting healthier changes towards body perceptions.

3.3. Method

Participants

All participants ($n = 163$, $M_{age} = 37.29$, $SD = 12.07$; $M_{BMI} = 26.37$, $SD = 4.94$) were English-speaking, from the UK and self-identified as either *gay* (89%, $n = 145$), bi-sexual (7.4%, $n = 12$), or heteroflexible (1.2%, $n = 2$) with 2.4 % ($n = 4$) not disclosing any information regarding sexuality. Demographic information is presented in Table 3.1. Eligibility criteria included individuals who were over the age of 18 years old and those who has not received a diagnosis of an eating or body-related disorder within the past 2 years, this was screened for within the Participant information sheet and the Informed consent form. According to Fritz and MacKinnon (2007), a sample size of 163 participants would enable observations of an indirect effect of a medium-sized alpha pathway coefficient (i.e., *predictor to mediator*) and a medium-sized beta pathway coefficient (i.e., *mediator to criterion*) at 80% power using bias-corrected bootstrapping estimating procedures.

Table 3.1. Participant demographic information.

Variable	Participants (<i>n</i> = 163)
Sexuality	
Gay	145
Bisexual	12
Heteroflexible	2
Non-disclosure	4
Gender	
Trans-male	1
Non-binary	1
Cis male	130
Gender fluid	4
Gender non-conforming	5
Non-disclosure	22
Ethnicity	
White British	115
White Irish	5
White and black Caribbean	4
African	3
Caribbean	4
White and Black African	2
South Asian	6
Non-disclosure	24

Procedure

Participants were recruited through volunteer sampling; an advert for the study outlining its nature, target population and link to the questionnaire was used for recruitment. This poster was disseminated by the research team through social media platforms, highlighting the study information and linking to the questionnaire platform to potential participants. The online survey platform ‘Qualtrics’ was used to contain the questionnaire. Upon clicking the link, participants were presented with an online version of the Information sheet and Consent form which had to be viewed and agreed to before the questionnaire could be accessed. Once all measures were completed, participants were presented with the Debrief form. This included information regarding the contact details of the researcher, further support, and details of their right to withdraw their data from the study should they wish to do so at a later date. Data was collected from March until August 2021. Ethical approval was received from The Business Law and Social Sciences Ethics Committee at Birmingham City University (Regan /#7972 /sub3 /R(B) /2021 /Jan /BLSS FAEC).

Measures

Participant information sheet. Participants were asked to report their age, gender, height, weight, ethnicity, smoking and exercise engagement.

The *Sussex-Oxford Compassion for the Self* (SOCS-S; Gu et al., 2020) (please see 2.4., a) Cronbach’s alpha was used to assess the scale reliability for the SOCS-S in the present research ($\alpha = 0.95$).

The *Body Image Acceptance and Action Questionnaire -5* (BI-AAQ-5; Basarkod et al., 2018) (please see 2.4., c) Cronbach’s alpha was used to assess the scale reliability for the BI-AAQ-5 in the present research ($\alpha = 0.92$).

The *Dresden Body Image Questionnaire* (DBIQ; Scheffers et al., 2017) (please see 2.4., d) Cronbach's alpha was used to assess the scale reliability for the DBIQ in the present research ($\alpha = 0.91$).

The *Mindful Eating Behaviour Scale* (MEBS; Winkens et al., 2018) (please see 2.4., e), Cronbach's alpha was used to assess the scale reliability for the MEBS in the present research ($\alpha = 0.95$).

The *Five Facet Mindfulness Questionnaire* (FFMQ-15; Gu et al., 2016) (please see 2.4., f), Cronbach's alpha was used to assess the scale reliability for the FFMQ in the present research ($\alpha = .67$).

Data Analyses

All statistical analyses were conducted using IBM SPSS 25. A total of 44 participants were excluded from the study due to incomplete or missing data, which took place within the initial screening process, leaving a total of 163 participants completing all measures described within this study. A significance value of '.05' was used to determine significant relationships between variables. Bivariate correlation analysis was used to determine the relationship between variables explored within the questionnaire. Mediation analyses were conducted using Hayes' (2017) PROCESS macro (Model 4) with a bootstrap sample of 5000. Confidence intervals (CI) do not cross zero and are considered significant when upper and lower boundaries are corrected to 95%. Body acceptance was used as a mediator to explore the effect on the relationship between Mindfulness, Self-compassion, and Mindful Eating on Body Image.

3.4. Results

Correlation Analyses

Pearson's Bivariate correlation coefficient was employed using significant values between variables (Body acceptance, Body image, Mindfulness, Self-compassion, and Mindful eating), as well as means and standard deviations as presented in Table 3.2. Significant negative associations were observed between body non-acceptance and body image ($r = -0.63, p < 0.001$), suggesting that with higher body image there is a decrease of non-body acceptance (*essentially meaning the higher body image, the higher the scores on measures assessing body acceptance*). Significant negative associations were observed between body non-acceptance, mindfulness ($r = -0.42, p < 0.001$), self-compassion ($r = -0.50, p < 0.001$) and mindful eating ($r = -0.43, p < 0.001$). The higher the body non-acceptance, the lower the scores in mindfulness, self-compassion and mindful eating (*essentially meaning the higher body acceptance the higher scores in mindfulness, self-compassion and mindful eating*). Significant positive associations were observed between body image, mindfulness ($r = 0.32, p < 0.001$), self-compassion ($r = 0.50, p < 0.001$) and mindful eating ($r = 0.48, p < 0.001$). As body image increased, scores on measures assessing mindfulness, self-compassion and mindful eating also increased.

Table 3.2. Means and standard deviations of variables, and bivariate correlations between body image, body acceptance, mindfulness, self-compassion and mindful eating.

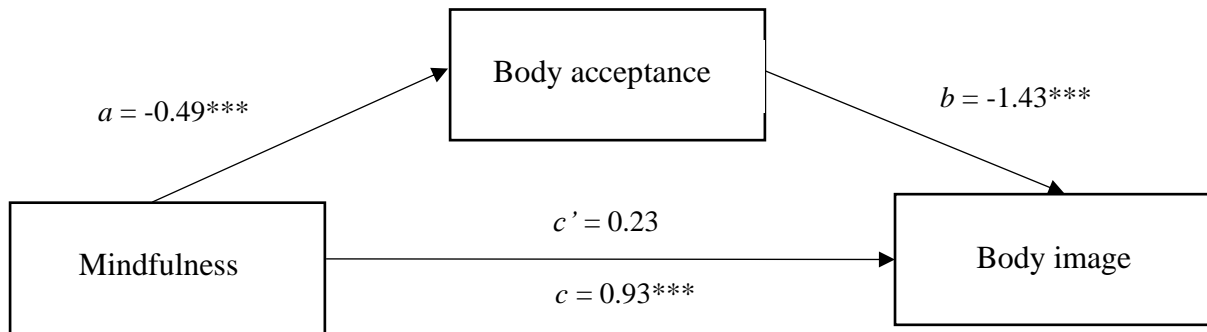
Scales	1	2	3	4	5	<i>M</i>	<i>SD</i>
(1) BIAAQ						18.82	8.21
(2) DBIQ	-0.63**					106.75	20.25
(3) FFMQ	-0.41**	0.32**				46.26	7.29
(4) SOCS-S	-0.50**	0.50**	0.65**			66.69	14.71
(5) MEBS	-0.43**	0.48**	0.41**	0.52**		67.85	10.01

*Note: BI-AAQ-5 – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance); DBIQ – Dresden Body Image Questionnaire; FFMQ – Five Facet Mindfulness Questionnaire; SOCS-O - The Sussex-Oxford Compassion for Others; MEBS – Mindful Eating Behaviour Questionnaire. **. Correlation is significant at the 0.01 level (2-tailed).*

Mediation Analyses

Further analysis explored the mediating effect of body acceptance on the relationships of mindfulness, self-compassion and mindful eating to body image. First, mindfulness was entered as the predictor variable and body image was entered as the outcome variable. Body acceptance was entered as the potential mediating variable. Findings indicated that mindfulness indirectly relate to body image, through its relationship with body acceptance. Mindfulness significantly predicted body acceptance ($b = -0.49, t = 5.47, p < 0.001$), as scores on mindfulness increased, scores on body acceptance decreased which related to body acceptance significantly predicting body image ($b = 1.43, t = 7.77, p < 0.001$). A 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect ($b = 0.70$) which was above zero ($CI = .4121, 1.0037$).

Fig.3.1. The mediating effect of body acceptance in the relationship between mindfulness and body image.

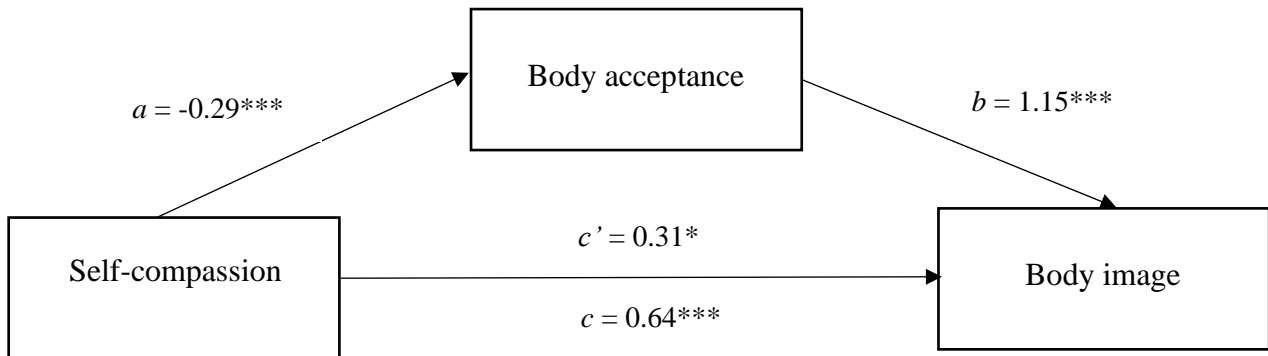


Note: All presented effects are unstandardised; a is the effect of Mindfulness on body acceptance; b is the effect of body acceptance on body image; c' is the direct effect of mindfulness on body image; c is the total effect of mindfulness on body image.

* = $p < .05$, ** = $p < .01$, *** = $p < .001$. Further note: *B-IAAQ-5 – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance)*.

Secondly, self-compassion was entered as the predictor variable, body image as the outcome variable and body acceptance as the potential mediator. Findings indicated that self-compassion indirectly related to body image, through its relationship with body acceptance. Self-compassion significantly predicted body acceptance ($b = -.29, t = 5.41, p < 0.001$), as scores of self-compassion increased, scores on body acceptance decreased which related to body acceptance significantly predicting body image ($b = 1.15, t = 6.60, p < 0.001$). A 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that the indirect effect ($b = 0.33$) was above zero ($CI = .1797, .5357$).

Fig.3.2. The mediating effect of body acceptance in the relationship between self-compassion and body image.

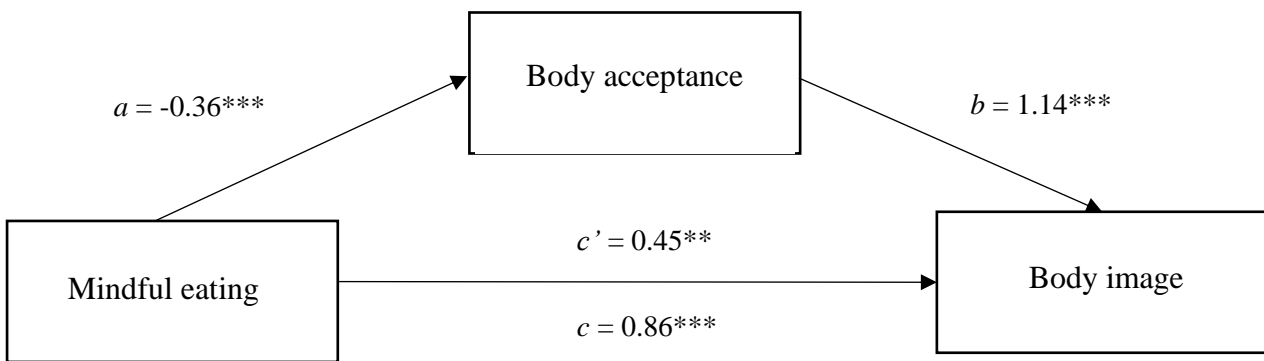


Note: All presented effects are unstandardised; *a* is the effect of self-compassion on body acceptance; *b* is the effect of body acceptance on body image; *c'* is the direct effect of self-compassion on body image; *c* is the total effect of self-compassion on body image.

* = $p < .05$, ** = $p < .01$, *** = $p < .001$. Further note: BI-AAQ-5 – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance).

Lastly, mindful eating was entered as the predictor variable, body image as the outcome variable and body acceptance as the potential mediator. Findings indicated that mindful eating indirectly related to body image, through its relationship with body acceptance. Mindful eating significantly predicted body acceptance ($b = -0.36$, $t = 5.30$, $p < 0.001$), as scores of mindful eating increased, scores on body acceptance decreased which related to body acceptance significantly predicting body image ($b = 1.14$, $t = 5.70$, $p < 0.001$). A 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that the indirect effect ($b = -0.42$) was above zero ($CI = .2333, .6191$).

Fig.3.3. The mediating effect of body acceptance in the relationship between mindful eating and body image.



Note: All presented effects are unstandardised; a is the effect of mindful eating on body acceptance; b is the effect of body acceptance on body image; c' is the direct effect of mindful eating on body image; c is the total effect of mindful eating on body image.

** = $p < .05$, ** = $p < .01$, *** = $p < .001$. Further note: BI-AAQ-5 – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance).*

3.5. Discussion

The aim of this research was to explore body image, body acceptance and their relationship to mindfulness, self-compassion, and mindful eating among gay and bisexual men. Exploring these concepts among the current population provides novel insight into body image and their relationships to mindfulness and related concepts (i.e., self-compassion and mindful eating) among a previously underrepresented community. Furthermore, the potential relationship between mindfulness, mindful eating and self-compassion to body-image, and the potential of explaining such relationships through body acceptance was also explored. Findings indicated that body acceptance mediated the relationship between mindfulness, self-compassion and body image, and mindful eating and body image. This corresponds with previous literature that outlines the link between mindfulness (Zamzami, et al., 2015), self-compassion (Mantzios & Egan, 2017, 2018) and mindful eating (Ponde Nejudan et al., 2018) to body image. These findings presented within a gay population reflect the outcomes of

research within general and more specific populations (Albertson et al., 2015). This research also shows the potential association of body acceptance to mindfulness and body image within this population. The indication of the relationships between mindfulness, self-compassion and mindful eating to body image can be explained through body acceptance, highlighting its importance within this community.

Correlation analysis also provided some novel and interesting findings. Within this population, body image related positively to self-compassion, mindfulness and mindful eating. Research exploring mindfulness-based concepts and body image in female populations are similar to the current findings presented (Balciuniene et al., 2021; Zamzami et al., 2015); suggesting that an increase in body image relates to a more mindful and compassion view of the self. Higher body acceptance also related positively to mindfulness, self-compassion and mindful eating, suggesting that this construct relates similarly to body image in its relationship to mindfulness-based constructs.

It is important to consider the demographic of participants included within this sample. The average BMI of participants (26.37) falls into the category deemed as ‘overweight’; meaning the conclusions drawn from this sample can only be attributed to an overweight population. The majority of participants also identified themselves as ‘White British’ ($n = 115$). Future research should endeavour to capture the experiences of queer people of colour within their research, helping to provide insight into body- and mindfulness-related constructs among diverse samples.

The findings from the present study should inform future research and practice in aiming to attenuate body related issues in this population. The role of body acceptance here also provides a clear link that this construct is related to mindfulness, self-compassion,

mindful-eating, and body image. Future research exploring these concepts or investigating the efficacy of interventions should consider this construct in relation to body image.

Limitations and Future Research Directions

This research concedes the following limitations which are significant to consider for future research. First, the cross-sectional nature of this study does provide limited insight, and qualitative explorations should gather more in-depth data from gay men. Second, conclusions can only be drawn from the period that data was collected. Consideration should be given to data being collected during the Covid-19 pandemic (March to August 2021) where variations of restrictions were in place across the United Kingdom. This could have played some role in altering participants' perceptions of body image and body acceptance, specifically in relation to mindfulness-based constructs. This could be specifically prominent within this community; whereby the social influence of perceived body ideals is compounded by perceptions of other gay men, particularly when in 'gay spaces' which negatively impacts on body self-acceptance (Regan et al., 2021).

All scales and corresponding items included in this study were completed at one time by participants, the anticipated completion time was around 15-20 minutes. It is also important to consider the potential risk of survey fatigue experienced by participants in completing a questionnaire with many items and the implications this may have had on the results. Common methods bias (or variance) is a well-documented phenomenon observed in research based on self-reported measures. Multiple constructs are measured on multiple-item scales presented within the same questionnaire which can lead to spurious effects due to the measurement instruments rather than to the constructs being measured. For example, participants are asked to report their own perceptions on two or more constructs in the same questionnaire; this is likely to produce spurious correlations among the items measuring these

constructs owing to response styles, social desirability, priming effects which are independent from the true relationships presented among the constructs being measured (Podsakoff et al., 2012). It is also important to consider the impact of the reliability score (Cronbach Alpha) for the FFMQ, as this was below the widely accepted 0.7 (0.67).

The disproportionate number of gay men who took part in this study when compared to bisexual men, highlights a lack of balance when considering the conclusions drawn from this research. The office for National Statistics stated that in 2019, the ratio of gay men to bisexual men within the UK accounted for 1.9% (*gay men*) and 0.6 (*bisexual men*) (Sanders, 2020); meaning the data from this research does not reflect the representation of bisexual men within the wider population. Future research should endeavour to include a more diverse sample, to produce a balanced approach to drawing conclusions around the body image and related concepts of gay and bisexual men. The author also considers the complexity of defining 'gay men' or 'bisexual men'. Non-binary, non-conforming and gender fluid individuals were included within this sample, the author fully recognises that these individuals may or may not be comfortable with the 'label', 'men'. The inclusion of gender minorities within this sample are to strive to provide a greater inclusion of queer experiences within research, and not to label or make assumptions about participants' gender.

Further research is needed to develop the understanding of mindfulness and related concepts within this community to aid in the development of an appropriate intervention. The necessity for a suitable intervention to attenuate eating and body related issues experienced by gay and bisexual men is clear. Mindful and compassion-based interventions have been effective in reducing body related issues within other populations (Balciuniene et al., 2021; Zamzami et al., 2015), therefore, evaluating the efficacy of such interventions within the gay population may provide novel research. This research shows the unique role of body acceptance to mindfulness, self-compassion and mindful eating when relating these concepts

to body image. This provides insight into the potential addition of body acceptance and mindfulness-based concepts when considering potential avenues in overcoming body-related issues experienced by gay and bisexual men.

CHAPTER 4: THE IMPORTANCE OF BODY ACCEPTANCE IN EXPLORING RELATIONSHIPS OF MINDFULNESS-BASED CONSTRUCTS TO EATING BEHAVIOURS AMONG GAY AND BISEXUAL MEN

4.1. Abstract

Background: Mindfulness and mindfulness-based constructs (*e.g., self-compassion and mindful eating*), have been negatively associated with problematic eating and body related issues in general and other specific populations. Exploration of mindfulness-based concepts in relation to problematic eating would provide novel insight into the relationships of these elements among gay and bisexual men.

Method: Participants completed an online questionnaire, comprising of measures assessing mindfulness, self-compassion, mindful eating, body acceptance, grazing, emotional eating, restrained eating and external eating (data collection occurred in 2022). Correlation and further mediation analysis was employed to assess the relationships of these constructs within the present sample ($n = 164$).

Results: Positive associations between body acceptance and mindfulness-based concepts, and negative associations to problematic eating (*grazing; emotional, restrained, and external eating*) were found within a sample of self-identified gay and bisexual men. Mediation analysis showed the importance of body acceptance in exploring relationships between mindfulness, self-compassion, and mindful eating to grazing, emotional, restrained and external eating.

Conclusions: Findings highlight the importance of body acceptance when considering the development of mindfulness and/or compassion-based interventions to attenuate problematic eating among gay and bisexual men.

4.2. Background

Gay and bisexual men have been found to experience eating and body related issues disproportionately compared to heterosexual men (Williamson, 1999). A growing body of literature denotes several attributing factors relating to the increased eating and body related issues including social influences (Blashill, 2010) and homonegativity (Badenes-Ribera et al., 2018). Research within this community is predominantly focused on clinical disordered eating and eating disorder prevalence (Parker & Harriger, 2020), with a lack of exploration of other problematic eating behaviours which could also be prevalent. Mindfulness and related concepts (i.e., self-compassion and mindful eating) have been shown to be negatively associated with unhealthy eating behaviours (Egan & Mantzios, 2018; Mantzios & Egan, 2017; Mantzios et al., 2018a; b). Mindfulness and compassion-based interventions have shown to reduce problematic eating within the general population and more specific population groups with specialised needs (Atkinson & Wade, 2016; Egan et al., 2021; Mantzios & Wilson, 2015a; b; Marchiori & Papies, 2014; Smith et al., 2006), but again, similar examinations are scarce for gay and bisexual men. Explorations of the relationships of mindfulness and related concepts to problematic eating behaviours in gay and bisexual men may provide novel insight and suggestions for future interventions to attenuate eating and body related disturbances.

Eating and Body-related Issues Among Gay and Bisexual men

Recent research has shown the disproportionately adverse eating and body related issues experienced by gay men when compared with straight men (Joy & Numer, 2018). Gay and bisexual men experience higher prevalence of eating disorders and disordered eating, compared to straight men (Naamani, 2018; Siconolfi et al., 2009; Williamson & Hartley, 1998). Research attributes homonegativity and body dissatisfaction to predicting eating

disturbances within this population (Smith et al., 2011). Williamson and Spence (2001) investigated maladaptive eating in a sample of 202 gay men aged 14-72, where the importance of slimness and attractiveness was reported as the most influential predictor of problematic eating-related attitudes presenting a basis when considering problematic eating in gay men.

Further explorations of eating and body concerns highlight how gay men are subject to social pressures presented by the community to conform to weight and body ideals (Joy & Numer, 2018; Regan et al., 2021). The strong focus on social capital gained from attracting potential romantic partners leads to self-objectification (Martins et al., 2007), and further fosters a critical aspect of the community, which focuses on body shape (Peplau et al., 2009; Regan et al., 2021). Foster-Gimbel and Engeln (2016) reported that gay men experienced romantic rejection in more instances than straight men due to the anti-fat bias. This negative projection of critical perspectives around body image has produced a community which idolises a 'slim' or 'muscular' body shape; with those who do not attain or maintain these attributions potentially experiencing low self-esteem (Yelland & Tiggemann, 2003). Overall, the non-acceptance of the community, and the potential implications of self-non-acceptance of one's body, support the utility and effectiveness of mindfulness-based interventions, and previous relationships observed in gay and bisexual populations.

Body Acceptance and Associations to Problematic Eating

Body acceptance has been described as the acknowledgement of aspects of the body and accepting them without judgement (Tylka & Wood-Barcalow, 2015). Perceived 'body acceptance by others' (Swami et al., 2020) relating to those who are close to the individual (*family and friends*) has also been linked to body image and wellbeing outcomes (Layman et al., 2021). An exploration of how mindfulness, self-compassion and mindful eating relate to

body image and body acceptance in gay and bisexual men was conducted by Regan et al. (2023) found that body acceptance mediated the relationship between mindfulness, self-compassion and mindful eating to body image. This research presents the importance of body acceptance in explaining the relationship between mindfulness-based constructs and body image providing considerations of acceptance and mindfulness within future interventions to attenuate body concerns within gay and bisexual men. Considering the association between body concerns and problematic eating behaviours, the potential implications for eating behaviours through the association with body acceptance pose another interest in developing health amongst gay and bisexual men and has not been explored in previous literature.

The strong focus on slim and/or muscular body ideals within this community leads to a high prevalence of restrained eating (Conner et al., 2004). Restrained eating relates to the restricted consumption of foods to achieve weight loss or to prevent weight gain (Herman & Mack, 1975). Research has shown that this behaviour is counterproductive and may eventually be followed by weight gain (e.g., Lowe et al., 2013). External eating and grazing have both been presented as behaviours associated with weight outcomes in the general population and not extensively explored among gay and bisexual men (Carter & Jansen, 2012; Wardle, 2007). Grazing is defined as the uninhibited repetitive eating of small portions of food (Heriseanu et al., 2019); external eating relates to eating due to food-related stimuli, regardless of hunger or satiety (Schachter et al., 1968). Greater attention has been given to grazing as a problematic behaviour, due to its greater prevalence through the changing social parameters instigated by the pandemic and the greater amounts of time spent at home (Ramalho et al., 2022).

Further exploration of eating behaviours relating to adverse health outcomes revealed that emotional eating has been found to contribute to weight increase, higher BMI and obesity in the general population (Van Strien, 2018) but also, in more specific populations

with specialised needs in nutritional intake (Egan et al., 2021; Spinosa et al., 2019).

Emotional eating refers to overeating in response to experiencing negative emotions (Frayn & Knäuper, 2018). While literature focusing on relationships of problematic eating and body acceptance is limited, previous associations of body image to problematic eating propose a potential of associations to body acceptance (Brytek-Matera et al., 2021; Duarte & Pinto-Gouveia, 2015).

Mindfulness and Self-compassion in relation to Eating and the Body

Mindfulness has been described as paying attention to the present moment on purpose, non-judgementally (Kabat-Zinn, 2015). Trait mindfulness has been included in research that explores the prevalence of eating behaviours and body image (e.g., Mantzios & Wilson, 2015; Prowse et al., 2013). Self-compassion links closely with mindfulness; a construct described as the awareness of one's own suffering, with a desire to alleviate it, comprising of three elements, kindness, common humanity and mindfulness (Germer & Neff, 2013). Mindfulness and self-compassion generally relate positively to healthy eating, and negatively to 'unhealthy' or problematic eating (Dutt et al., 2018; Hussein et al., 2017; Mantzios & Egan, 2017; Mantzios et al., 2018a; Rahimi-Ardabili et al., 2018). This finding has been reflected in research within the general population, but also in more specific populations (e.g., *adolescent/student females; health care professionals; individuals with a diagnosis of cystic fibrosis*) (Egan et al., 2021; Kauser et al., 2022).

Mindfulness and compassion-based interventions have been found as effective in attenuating body and eating-related disturbances (Minot, 2016). Considering the critical nature of the gay community and the tendency to experience romantic rejection when not adhering to idolized body ideals, engagement with community norms could lead to lower self-esteem, self-criticism and potentially lower levels of self-compassion (Williamson &

Spence, 2001). Mindfulness and self-compassion have been found to relate negatively to grazing, suggesting that greater levels of mindfulness and self-compassion may lead to fewer instances of engaging in grazing behaviours (Mantzios et al., 2018b). Mindful eating is related negatively to grazing, further highlighting the importance of mindfulness in relation to grazing (Mantzios et al., 2018a). Mindful eating behaviour is defined as an awareness of eating, moment by moment, non-judgmentally (Mantzios, 2021; Mantzios, 2023). These findings provide interesting insight into the potential efficacy of mindful and/or compassion-based interventions at attenuating grazing behaviours. Exploration of grazing behaviours, mindfulness and self-compassion among gay and bisexual men has not been explored in past literature and would provide novel insight into potential problems and solutions for this population. Previous studies have reported that mindfulness (Verrier & Day, 2021) and self-compassion (Gouveia et al., 2019) negatively relate to emotional eating, suggesting that higher levels of trait mindfulness and self-compassion relate to lower scores of emotional eating. These findings are consistently presented within eating literature within general and more specific populations (e.g., *adolescent females, individuals with a diagnosis of Cystic Fibrosis*) (see, Egan et al., 2021; Hsu & Forestell, 2021).

Furthermore, Alberts et al. (2012) investigated the efficacy of a mindfulness-based intervention programme for eating aimed at reducing emotional, external and restrained eating, and body image concerns. Participants scored significantly lower on all measures of eating and body image concern in the mindfulness condition when compared with the control group. Previous experimental research has indicated how mindfulness-based interventions are responsible for changes in body- and eating-measurements, while the interrelation between mindfulness-based constructs, body-image and eating behaviours has been a common theme of understanding the utility and rationale behind mindfulness-based constructs (Breines et al.,

2014; Kelly & Stephen, 2016; Mantzios et al., 2020a; b; Prowse et al., 2013; Webb et al., 2018).

Collectively, these findings present interesting insights when considering the role of mindfulness-based constructs in problematic eating, and outline the potential effectiveness of reducing body image issues and problematic eating behaviours within more general populations, however similar research focusing on gay and bisexual men is scarce. There is a clear justification for exploring eating-related behaviours, body image and mindfulness-based concepts among gay and bisexual men. The disproportionate prevalence of eating and body disturbances in this population when compared with straight men highlights the need to explore problematic eating within this community. Exploring the potential of body acceptance in explaining relationships of mindfulness-based constructs to problematic eating would provide a basis for investigating the efficacy of a body acceptance, mindful and/or compassion-based intervention to attenuate eating-related issues among gay and bisexual men.

4.3. Method

Participants

All participants ($n = 164$, $M_{age} = 34.5$, $SD = 10.4$; $M_{BMI} = 26.23$, $SD = 4.6$) were English-speaking, from the UK, and self-identified as gay, bisexual or heteroflexible men (see *Table 4.1.* for participant demographic information). Participants were recruited through the research program ‘Prolific’; a short advertisement denoting the aims, nature of the study and eligibility criteria was published on the site. Only participants with no diagnosis of an eating disorder within the past two years and were over the age of 18 were eligible to take part. Participants who met these criteria and who were interested could follow the link to the online questionnaire. According to Fritz and MacKinnon (2007), a sample size of 164 would

allow observations of an indirect effect of a medium-sized alpha pathway coefficient (i.e., *predictor to mediator*) and a medium-sized beta pathway coefficient (i.e., *mediator to criterion*) at 80% power using bias-corrected bootstrapping estimating procedures.

Table 4.1. Participant demographic information.

Variable	Participants (<i>n</i> = 164)
Sexuality	
Gay	102
Bi-sexual	55
Heteroflexible	5
Non-disclosure	2
Gender	
Trans-male	9
Cis male	136
Gender fluid	2
Gender non-conforming	3
Non-disclosure	12
Ethnicity	
White British	134
White Irish	3
Pakistani	2
Chinese	2
African	3
Caribbean	1
Non-disclosure	19

Materials

Participant information sheet. Participants were asked to report their age, gender, height, weight, ethnicity, smoking and exercise engagement.

The *Body Image Acceptance and Action Questionnaire -5* (BI-AAQ-5; Basarkod et al., 2018) (please see 2.4., c), Cronbach's alpha was used to assess the scale reliability for the BI-AAQ-5 in the present research ($\alpha = 0.94$).

The *Mindful Eating Behaviour Scale* (MEBS; Winkens et al., 2018) (please see 2.4., e), Cronbach's alpha was used to assess the scale reliability for the MEBS in the present research ($\alpha = 0.84$).

The *Self-compassion Scale* (SCS; Neff, 2003) (please see 2.4., b), Cronbach's alpha was used to assess the scale reliability for the SCS in the present research ($\alpha = 0.94$).

The *Dutch Eating Behaviour Questionnaire* (DEBQ; Van Strien et al., 1986) (please see 2.4., g), sub-scales were used within the analysis. Cronbach alpha for the restrained eating subscale in the present research is $\alpha = 0.87$. Cronbach alpha for the emotional eating subscale in the present research is $\alpha = 0.81$. Cronbach alpha for the external eating subscale in the present research is $\alpha = 0.85$.

The *Grazing Questionnaire* (GQ; Lane & Szabo., 2013) (please see 2.4., h), Cronbach's alpha was used to assess the scale reliability for the GQ in the present research ($\alpha = 0.94$).

The *Five Facet Mindfulness Questionnaire* (FFMQ-15; Gu et al., 2016) (please see 2.4., f), Cronbach's alpha was used to assess the scale reliability for the FFMQ in the present research ($\alpha = 0.76$).

Procedure

Participants were recruited via the online research platform ‘Prolific’ and were paid for their time in line with the national minimum wage, as outlined within the referenced ethics application. Upon following the link to the questionnaire, participants were presented with an online version of the Information Sheet and Consent form which had to be viewed and responded to before the questionnaire could be accessed. Upon the questionnaire’s completion, participants were presented with the online Debrief form. This included information regarding the contact details of the researcher, further support and details of their right to withdraw their data from the study should they wish to do so at a later date. Data was collected in March 2022. Ethical approval was received from The Business Law and Social Sciences Ethics Committee at a West Midlands University in the United Kingdom (Regan/#10149/sub2/R(B)/2022/Feb/BLSSFAEC)

Analyses

All statistical analyses were conducted using IBM SPSS 25. Bivariate correlation analysis (*Pearson’s*) was used to assess the relationship between measures explored within the questionnaire. Mediation analyses were conducted using Hayes’s (2017) PROCESS (Model 4) with a bootstrap sample of 5000. Confidence intervals (CI) do not cross zero and are considered significant when upper and lower boundaries are corrected to 95%. Body acceptance was used as a mediator to explore the effect on the relationship between Mindfulness, Self-compassion and Mindful Eating on Grazing, External, Restrained and Emotional eating.

4.3. Results

Correlation Analyses

Pearson's Bivariate correlation coefficient was employed using significant values between variables (*Body acceptance, Mindfulness, Self-compassion and Mindful eating, Grazing, External, Emotional and Restrained eating*), including means and standard deviations as shown in Table 4.2.

Significant positive associations were observed between (non) body acceptance to grazing ($r = .551, p < .001$), external ($r = .558, p < .001$), emotional ($r = .567, p < .001$), and restrained eating ($r = .569, p < .001$), suggesting that with higher body acceptance there is a decrease of problematic eating (*grazing, external, emotional and restrained eating*).

Significant negative associations were observed between (non) body acceptance, mindfulness ($r = -.452, p < .001$), self-compassion ($r = -.536, p < .001$) and mindful eating ($r = -.526, p < .001$). The higher the scores body acceptance, the higher the scores in mindfulness, self-compassion, and mindful eating. Significant negative associations were observed between mindfulness to grazing ($r = -.260, p < .001$) and restrained eating ($r = -.164, p < .05$), suggesting that higher scores on measures assessing mindfulness relate to a decrease in grazing and restrained eating. Significant negative associations were observed between self-compassion to grazing ($r = -.300, p < .001$), restrained eating ($r = -.376, p < .001$), emotional eating ($r = -.237, p < .05$) and external eating ($r = -.317, p < .001$). The higher the scores of self-compassion, the lower the scores in grazing, restrained, emotional and external eating. Significant negative associations were observed between mindful eating to grazing ($r = -.575, p < .001$), restrained eating ($r = -.376, p < .001$), emotional eating ($r = -.342, p < .001$) and external eating ($r = -.329, p < .001$). The higher the scores in mindful eating, the lower the scores in grazing, restrained, emotional and external eating.

Table 4.2. Means and standard deviations of variables, and bivariate correlations between body acceptance, mindfulness, self-compassion, mindful eating, grazing, restrained, external and emotional eating with all associated.

Scales	1	2	3	4	5	6	7	8	M	SD
(1) BIAAQ									21.51	8.41
(2) FFMQ	-.452**								45.78	7.44
(3) SCS	-.536**	.616**							72.72	16.97
(4) MEBS	-.528**	.488**	.420**						66.29	10.88
(5) GQ	.551**	-.260**	-.300**	-.575**					21.81	6.74
(6) DEBQ-RE	.569**	-.164*	-.376**	-.376**	.590**				31.57	7.34
(7) DEBQ-EX	.558**	-.133	-.317**	-.329**	.569**	.787**			27.23	7.76
(8) DEBQ-EM	.567**	-.122	-.237**	-.342**	.561**	.758**	.862**		35.57	8.21

Note: Body acceptance - BIAAQ (Body image Acceptance and Action scale); Mindfulness - FFMQ (Five Facet Mindfulness Questionnaire); Self-compassion – SCS (The Self-compassion scale); Mindful eating – MEBS (Mindful Eating Behaviour Questionnaire); Grazing – GQ (The Grazing Questionnaire); Restrained eating – DEBQ-RE (Dresden Eating Behaviour Questionnaire, Restrained eating sub-scale); Emotional eating – DEBQ-EM (Emotional eating sub-scale); External eating – DEBQ-EX (External eating sub-scale) – Total scores. **. Correlation is significant at the 0.01 level (2-tailed).

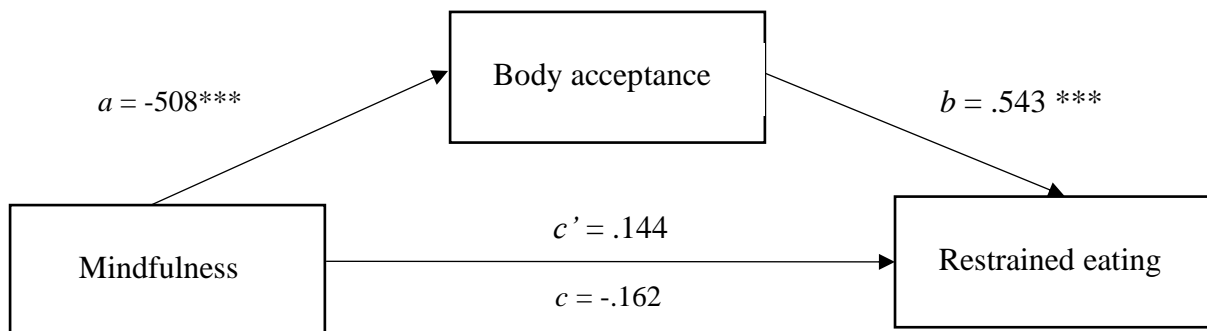
Mediation Analyses

Twelve mediation analyses are reported and presented in Table 4.3. These comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to problematic eating behaviours (restrained eating; emotional eating; external eating; grazing) through their relationships to body acceptance.

Model 1

Model one comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to restrained eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as the predictor variables and restrained eating as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 1:

Fig.4.1. The mediating effect of body acceptance in the relationship between mindfulness and restrained eating.



Note: All presented effects are unstandardised; *a* is the effect of Mindfulness on body acceptance; *b* is the effect of body acceptance on restrained eating; *c'* is the direct effect of mindfulness on restrained eating; *c* is the total effect of mindfulness on restrained eating.

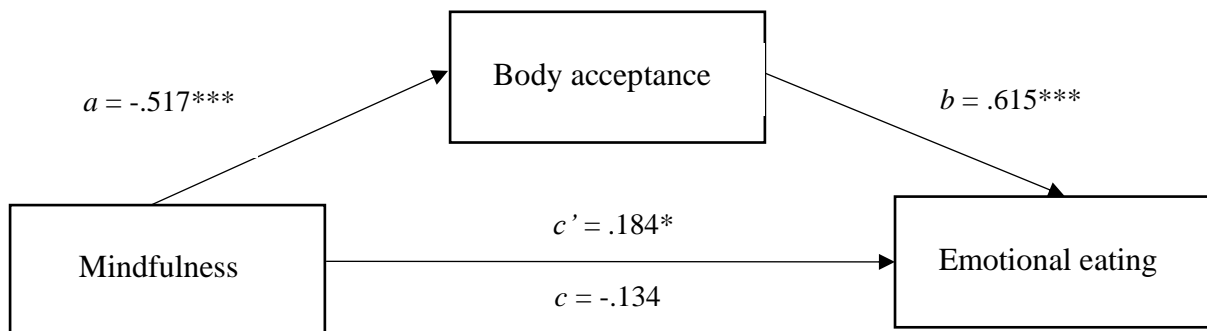
* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Model 2

Model two comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to emotional eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as the predictor variables and emotional eating as the

outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 2:

Fig.4.2. The mediating effect of body acceptance in the relationship between mindfulness and emotional eating.



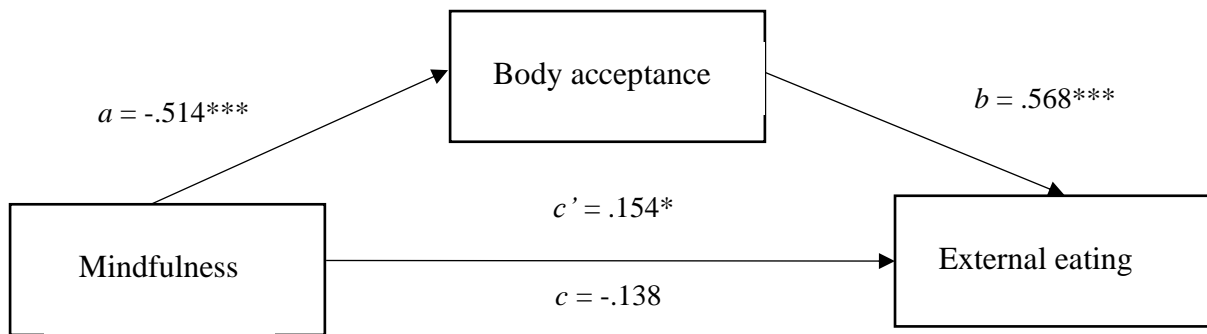
Note: All presented effects are unstandardised; *a* is the effect of Mindfulness on body acceptance; *b* is the effect of body acceptance on emotional eating; *c'* is the direct effect of mindfulness on emotional eating; *c* is the total effect of mindfulness on emotional eating.

* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Model 3

Model three comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to external eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as the predictor variables and external eating as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 3:

Fig.4.3. The mediating effect of body acceptance in the relationship between mindfulness and external eating.



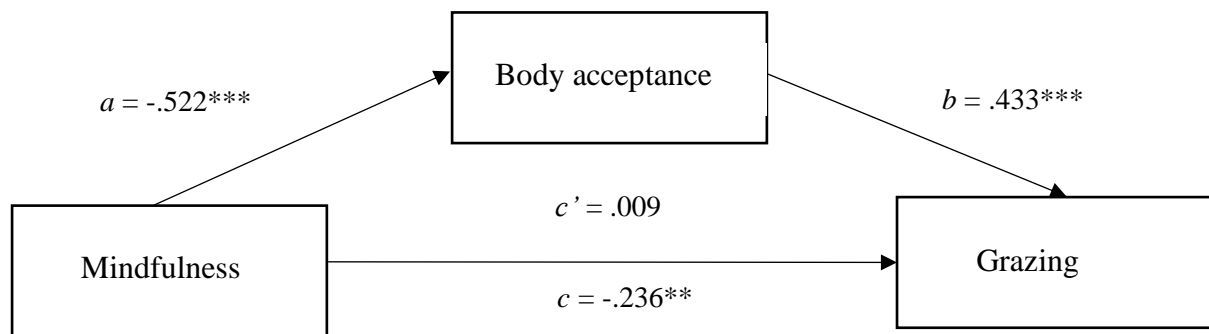
Note: All presented effects are unstandardised; a is the effect of Mindfulness on body acceptance; b is the effect of body acceptance on external eating; c' is the direct effect of mindfulness on external eating; c is the total effect of mindfulness on external eating.

* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Model 4

Model four comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to grazing through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as the predictor variables and grazing as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 4:

Fig.4.4. The mediating effect of body acceptance in the relationship between mindfulness and grazing.



Note: All presented effects are unstandardised; a is the effect of Mindfulness on body acceptance; b is the effect of body acceptance on grazing; c' is the direct effect of mindfulness on grazing; c is the total effect of mindfulness on grazing.

* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Detailed results of each mediation for models 1, 2, 3 and 4 concerning each dependent variable showing the indirect effects are summarized in Table 4.3.

Table 4.3. Total, Direct, and Indirect Effects of Mindfulness, Self-compassion and Mindful Eating on Grazing, Restrained Eating, Emotional Eating and External Eating Using Body Acceptance as Mediators.

y	x	m	a path coefficient	b path coefficient	Total effect	Direct effect	Effect (SE)	Indirect effect	
								LCI	UCI
Model 1									
RE	MI	BA	-.508**	.543**	-.162	.114	-.275	-.3838	-.1781
RE	SC	BA	-.263**	.455**	-.151**	-.031	-.120	-.1746	-.0745
RE	ME	BA	-.404**	.447**	-.256**	-.075	-.181	-.2516	-.1171
Model 2									
EME	MI	BA	-.517**	.615**	-.134	.184	-.318	-.4366	-.2123
EME	SC	BA	-.266**	.574**	-.113*	.039	-.153	-.2132	-.1004
EME	ME	BA	-.408**	.517**	-.256**	-.045	-.211	-.2991	-.1353
Model 3									
EXE	MI	BA	-.514**	.568**	-.138	.154	-.292	-.4088	-.1886
EXE	SC	BA	-.268**	.463**	-.141**	.017	-.124	-.1786	-.0776
EXE	ME	BA	-.407**	.488**	-.233**	-.034	-.198	-.2781	-.1223
Model 4									
GR	MI	BA	-.522**	.433**	-.236**	-.009	-.226	-.3286	-.1374
GR	SC	BA	-.268**	.417**	-.118**	-.006	-.112	-.1660	-.0686
GR	ME	BA	-.411**	.273**	-.355**	-.243**	-.112	-.1743	-.0558

Note: ‘RE’ represents Restrained Eating (DEBQ, Restrained eating sub-scale); ‘EME’ represents Emotional eating (DEBQ, Emotional eating sub-scale); ‘EXE’ represents External eating (DEBQ, External eating sub-scale); ‘MI’ represents Mindfulness (FFMQ); ‘GR’ represents Grazing (GQ) ‘SC’ represents Self-compassion (SCS); ‘ME’ represents Mindful eating (MEBQ); ‘BA’ represents Body Non-Acceptance (BIAAQ-5) – Total scores. LCI = Lower Confidence Interval; UCI = Upper Confidence Interval. * $p < .05$. ** $p < .001$.

4.4. Discussion

The aim of this research was to explore the relationship between body acceptance, mindfulness, self-compassion, mindful eating and their relationship to grazing, restrained, external and emotional eating among gay and bisexual men. The potential mediating relationship of body acceptance on the relationship between mindfulness-based constructs to eating behaviours was also explored. Findings showed that body acceptance mediated the relationship between mindfulness to both grazing and restrained eating; self-compassion to grazing, restrained, emotional and external eating; mindful eating to grazing, restrained emotional and external eating. This relates to previous research that has highlighted the link between mindfulness (Egan et al., 2018; Mantzios & Egan, 2017), self-compassion (Rahimi-Ardabili et al., 2018), and mindful eating (Mantzios et al., 2018) to problematic eating. These findings also align with previous research highlighting the importance of considering body acceptance when exploring body-related issues and mindfulness-based concepts among gay and bisexual men (Regan et al., 2023). This research shows the importance of body acceptance and the prominence of this construct when considering problematic eating among gay and bisexual men. A higher acceptance of one's body, including aspects one views to be 'unsatisfactory', relates to lower levels of problematic eating. Body acceptance also related positively to mindfulness-based constructs, which additionally relate to lower levels of problematic eating; reflecting the linearity of relationships within gay and bisexual men, when compared with more traditional literature exploring general and other specific populations (Dutt et al., 2018; Egan & Mantzios, 2018; Hussein et al., 2017; Mantzios & Egan, 2017; Mantzios et al., 2015; Rahimi-Ardabili et al., 2018). It is important to note that following correction for multiple comparisons, two direct effect pathways were deemed non-significant (mindfulness to emotional eating and mindfulness to external eating). Future

research should focus on exploring the potential relationship of mindfulness to emotional and external eating specifically to replicate the findings.

Correlation analysis showed that body acceptance related negatively to grazing, external, emotional and restrained eating, and positively to mindfulness, self-compassion and mindful eating. This aligns with previous research exploring relationships between body acceptance and mindfulness-based constructs (Regan et al., 2023). Findings also showed significant positive associations of body-acceptance to mindfulness, self-compassion and mindful eating. Significant negative associations were observed between mindfulness to grazing and restrictive eating, further negative associations were observed between self-compassion and mindful eating to grazing, emotional, external and restrained eating. Generally, these findings correspond with previous literature suggesting the negative association between mindfulness-based constructs and problematic eating within general and more specific samples who have been found to experience problematic eating (*adolescent females; health care professionals; individuals with a diagnosis of Cystic Fibrosis*) (Egan et al., 2021; Hsu & Forestell, 2021; Spinoza et al., 2019). These findings, therefore, confirm the mirrored relationships of mindfulness-based constructs to problematic eating in gay and bisexual men, as highlighted in other populations. Future research should consider the relationship between mindfulness to emotional and external eating among gay and bisexual men as non-significant associations were observed.

Limitations and Future Research Directions

The author acknowledges the following limitations of this research. The cross-sectional nature of this study does provide some insight, although the greater depth of qualitative data should be explored to gain further insight into these constructs within gay and bisexual men. The representativeness of the sample should also be considered, the proportion

of participants who took part who identified as ‘White British’ shows a significant lack of representation of minority ethnicities within this sample when compared with the UK population. Future research should endeavour to include greater representation of minority ethnic backgrounds within their samples to provide a more inclusive overview of insight into the eating of gay and bisexual men. The author also considers the complexity of defining ‘gay men’ or ‘bisexual men’. Non-binary, non-conforming and gender fluid individuals were included within this sample, the author fully acknowledges that these individuals may or may not be comfortable with the ‘label’, ‘men’. The inclusion of gender minorities within this sample were to endeavour to provide a greater inclusion of queer experiences within psychological research, and not to label or make assumptions about participants’ gender.

Further research is needed to explore the nuanced role of body acceptance in explaining the relationship between mindfulness-based constructs and problematic eating among gay and bisexual men. Mindful and compassion-based interventions have been shown to be effective at reducing eating and body-related issues in the general and more specific populations. This research consolidates findings on the importance of mindfulness and related constructs when considering problematic eating, which should be reflected in policy aiming to attenuate unhealthy eating in specific populations. Future policymakers should consider these findings when developing clinical practice guidelines or recommendations, indicating the potential usefulness of mindfulness and self-compassion-based interventions and/or incorporation of body acceptance (e.g., Mindfulness-based Cognitive therapy, Compassion Focused therapy and Acceptance and Commitment therapy) in attenuating problematic eating among gay and bisexual men.

CHAPTER 5: EXPLORING THE MEDIATING ROLE OF WEIGHT- BODY-RELATED SHAME AND GUILT IN THE RELATIONSHIPS BETWEEN MINDFULNESS-BASED CONSTRUCTS AND EATING BEHAVIOURS AMONG GAY AND BISEXUAL MEN

5.1. Abstract

Background: The aim of this study was to explore the relationships of eating behaviours and weight- and body related constructs to mindfulness, self-compassion and mindful eating among gay and bisexual men.

Methods: Measures assess levels of problematic eating (*emotional, restrained, and external*) weight- and body- related shame and guilt and mindfulness-based constructs (*mindfulness, self-compassion and mindful eating*). A sample of self-identified gay and bisexual men ($n = 159$) completed all measures included in the self-report questionnaire.

Results: Positive associations of problematic eating behaviours to shame and guilt were observed. Problematic eating behaviours and weight and body- related shame and guilt negatively related to mindfulness-based constructs. Further mediation analysis indicated the nuanced role of shame and guilt when explaining the relationships of mindfulness and related constructs to problematic eating.

Conclusion: Findings highlight the importance of shame and guilt when exploring the potential effectiveness of mindfulness and/or compassion-based interventions to attenuate problematic eating among sexual minority men.

5.2. Background

Mindfulness and associated constructs (i.e., *self-compassion; mindful eating*) have been explored in relation to problematic eating behaviours among the general and more specific

clinical populations (Egan et al., 2021; Hussain et al., 2021; Mantzios et al., 2018a). Gay and bisexual men have been found to experience eating- and body- related issues disproportionately to straight men (Bell et al., 2019; Nagata et al., 2022; Williamson, 1999). Many studies have investigated the potential causations of eating disturbances among gay and bisexual men, attributing homonegativity (Reilly & Rudd, 2006), objectification (Martins et al., 2007) and minority stress (Grunewald et al., 2021). Such experiences of gay and bisexual men link directly to weight- and body- related shame and guilt (Strübel, & Petrie, 2020), further alluding to the social comparative nature of this community (Levesque & Vichesky, 2006).

Considerations of eating disturbances and body related issues among gay and bisexual men have been shown to derive from specific body ideals desired by the population (Drummond, 2005; Morgan & Arcelus, 2009; Tiggemann et al., 2007). The desire to attain or maintain a slim or muscular body type seems to underly these issues, cultivated by the social capital granted to those who conform within this community (Martins et al., 2007; Tiggemann et al., 2007). Foster-Gimbel and Engeln (2016) reported that gay men experienced weight-based prejudice when approaching potential romantic partners, which was also reported for participants with a healthy BMI. The weight-based prejudice and negative judgments of individuals who experience romantic rejection further cultivate body-related shame and dissatisfaction, potentially leading to problematic eating among gay men (Davids et al., 2015; Foster-Gimbel & Engeln, 2016). This highlights the perceived importance of 'leanness' within the gay community and weight-based prejudice that individuals experience when deviating from this body type.

In other populations, weight-based prejudice and shame and guilt are inter-related and encourage problematic eating, proposing the importance for the present study to consider the potential impact of weight- and body- related shame experienced by gay and bisexual men

who do not 'fit' within the body types idolized within this community. Regan et al. (2021) reported that gay men who consider themselves to be 'big' experience negative judgement from other gay men when in queer spaces; encouraging them to experience guilt for eating high calorific foods and/or gaining weight. Similarly, Blashill (2010) suggests that gay men who experienced body fat and muscle dissatisfaction were more likely to experience psychological distress and eating restraint. This presents the importance of body ideals within this community, and how not adhering to these body standards can lead to gay men experiencing weight- and body- related shame and guilt; further leading to negative mental health related outcomes and engagement in several problematic eating behaviours.

The present research explored different problematic eating behaviours that are seen across different populations, but are understudied in gay and bisexual men. For example, restrained eating has been defined as the restricted intake of food to achieve or maintain weight loss or to prevent weight gain (Herman & Mack, 1975). Recent research has associated this behaviour with contrasting problematic eating behaviours such as binge eating, which relate to weight gain and obesity (McCuen-Wurst et al., 2018; Sonnevile et al., 2012). Gay men have been found to experience a higher prevalence of dietary restraint, purging and binge eating comparatively to straight men (French et al., 1996). Considering the negative impact of weight gain on the well-being of gay and bisexual men (Blashill, 2010); research pertaining to the prevalence of behaviours associated with binge eating and weight gain presents a clear issue to address. Further explorations of problematic eating behaviours may provide novel insight into these constructs among gay and bisexual men.

Emotional eating and external eating have also been shown to be problematic, leading to negative health implications (Kalkan Uğurlu et al., 2021; Kerin et al., 2019; van Strien et al., 2020). Emotional eating relates to overeating as a response to experiencing negative (and positive) emotions (Frayn & Knäuper, 2018); external eating relates to eating due to exposure

to food-related stimuli, regardless of hunger or satiety, such as the smell or sight of appetising food (Schachter et al., 1968). Higher prevalence of these problematic eating behaviours have been reported within populations traditionally considered more at risk of eating disturbances (i.e., *heterosexual cis female populations*) (Izydorczyk et al., 2019; Muharrani et al., 2018; van Strien et al., 2020). Research has explored the prevalence of problematic eating (including external and emotional eating) within gay and heterosexual men and women (Kaminski et al., 2005). Findings indicated that gay men scored higher in measures assessing emotional and external eating comparatively to straight men (Kaminski et al., 2005). The analyses also showed that body dissatisfaction among gay men was also significantly higher than in straight men, with gay men presenting a preference for a ‘smaller’ body type (Kaminski et al., 2005). This research highlights the prevalence of problematic eating among gay men, and the clear links to body ideals as supported by previous research exploring weight- and body- related shame and guilt and the impact on eating behaviours.

Mindfulness and self-compassion have previously been negatively associated with problematic eating and body-image related issues in the general and more specific populations (Egan & Mantzios, 2018; Egan et al., 2022; Hussain et al., 2021; Mantzios et al., 2018a; b). Mindfulness has been defined as drawing attention to the present moment on purpose, non-judgementally (Kabat-Zinn, 2015). Self-compassion is inclusive of mindfulness; a construct described as the awareness of one’s suffering, with a desire to alleviate it, encompassing three characteristic and enabling elements, kindness, common humanity and mindfulness (Germer & Neff, 2013). Negative relationships of mindfulness and self-compassion to problematic eating behaviours have been reported, providing a basis for insight into how these constructs may be utilised to enhance wellbeing (Egan et al., 2021; Hsu & Forestell, 2021; Mantzios et al., 2018; Spinoso et al., 2019). These associations

present clear relationships to inform the potential of mindfulness and self-compassion when considering problematic eating.

Mindful eating has been defined as an awareness of eating, moment by moment (Mantzios, 2021). Overall, significant negative associations of mindful eating to restrained, emotional and external eating, suggesting that participants who scored higher in mindful eating, scored lower in measures assessing problematic eating (Kerin et al., 2019). Such research provides a basis for understanding the potential of mindful eating and related interventions when addressing problematic eating within the general and specific populations.

Mindfulness has been increasingly incorporated into clinical and non-clinical therapeutic contexts; including Mindfulness-based Stress Reduction (MBSR; Kabat-Zinn, 2003) and Mindfulness-based Cognitive Therapy (MBCT; MacKenzie et al., 2018). Alberts et al. (2012) investigated the effectiveness of an MBCT-based intervention programme aiming to attenuate emotional, external, and restrained eating. Significantly lower scores on measures assessing problematic eating were reported post-intervention compared to a control group (Alberts et al., 2012). This provides clear evidence for the efficacy of mindfulness-based interventions in attenuating problematic eating within general populations.

Chapter 3 results showed a positive association between body image and mindfulness-based constructs, while revealing a negative correlation with body non-acceptance. Mediation analysis emphasizes the significance of body acceptance in understanding the links between mindfulness, self-compassion, mindful eating, and body image. Chapter 4 results revealed positive connections between body acceptance and mindfulness-based elements, as well as negative associations with problematic eating behaviours. Mediation analysis emphasizes the significance of body acceptance in understanding the relationships between mindfulness, self-compassion, mindful eating, and various forms of problematic eating. The present research

aimed to address whether exploring the relationships of mindfulness and related constructs, weight- and body- related shame and guilt and problematic eating may provide insight into potential avenues to explore when to consider potential mindful and/or compassionate-based interventions to attenuate problematic eating among gay and bisexual men. Body- related shame and guilt appear relevant factors to both the specific population and eating.

5.3. Method

Participants

All participants ($n = 159$, $M_{age} = 35.1$, $SD = 11.4$; $M_{BMI} = 26.3$ $SD = 5.2$) were English speaking, from the UK, see Table 5.1. for participant demographic information. Participants were recruited through the research recruitment program ‘Prolific’; a short advertisement denoting nature and aims of the study and eligibility criteria was distributed on the website. Only participants with no diagnosis of an eating disorder within the past two years, were over the age of 18 and identified as gay, bisexual or heteroflexible men (including non-binary, gender non-conforming and fluid individuals) were eligible to take part. Participants who met the eligibility criteria and who were interested could click the link to the online questionnaire.

Table 5.1. Participant demographic information.

Variable	Participants (<i>n</i> = 159)
Sexuality	
Gay	93
Bi-sexual	59
Heteroflexible	4
Non-disclosure	3
Gender	
Trans-male	7
Non-binary	9
Cis male	116
Gender fluid	5
Gender non-conforming	5
Non-disclosure	17
Ethnicity	
White British	129
White Irish	3
Chinese	2
Caribbean	3
White and Black Carribean	3
South Asian	9
Non-disclosure	10

Materials

Participant information sheet. Participants were asked to report their age, sexuality, gender, height, weight, ethnicity, smoking and exercise engagement.

The *Mindful Eating Behaviour Scale* (MEBS; Winkens et al., 2018) (please see 2.4., e), Cronbach's alpha was used to assess the scale reliability for the MEBS in the present research ($\alpha = 0.82$).

The *Self-compassion Scale* (SCS; Neff, 2003) (please see 2.4., b), Cronbach's alpha was used to assess the scale reliability for the SCS in the present research ($\alpha = 0.94$).

The *Dutch Eating Behaviour Questionnaire* (DEBQ; Van Strien et al., 1986) (please see 2.4., g), sub-scales were used within the analysis. Cronbach alpha for the restrained eating subscale in the present research is $\alpha = 0.88$. Cronbach alpha for the emotional eating subscale in the present research is $\alpha = 0.82$. Cronbach alpha for the external eating subscale in the present research is $\alpha = 0.86$.

The *Grazing Questionnaire* (GQ; Lane & Szabo., 2013) (please see 2.4., h), Cronbach's alpha was used to assess the scale reliability for the GQ in the present research ($\alpha = 0.94$).

The *Five Facet Mindfulness Questionnaire* (FFMQ-15; Gu et al., 2016) (please see 2.4., f), Cronbach's alpha was used to assess the scale reliability for the FFMQ in the present research ($\alpha = 0.73$).

The *Weight- and Body-Related Shame and Guilt Scale* (WEB-SG; Conradt et al., 2007) (please see 2.4., i), sub-scales were used within the analysis. Cronbach's alpha for the guilt sub-scale in the present study is $\alpha = 0.73$ and for the shame subscale is $\alpha = 0.91$.

Procedure

Participants were recruited via the online research platform ‘Prolific’ and were paid for their time in line with the national minimum wage, as outlined within the referenced ethics application. Upon following the link to the questionnaire, participants were presented with an online version of the Information Sheet and Consent form which had to be viewed and responded to before the questionnaire could be accessed. Upon the questionnaire’s completion, participants were presented with the online Debrief form. This included information regarding the contact details of the researcher, further support and details of their right to withdraw their data from the study should they wish to do so at a later date. Data was collected in March 2022. Ethical approval was received from The Business Law and Social Sciences Ethics Committee at a West Midlands University in the United Kingdom (xxxx/#10149/sub2/R(B)/2022/Feb/BLSSFAEC)

Analyses

All statistical analyses were conducted using IBM SPSS 25. Bivariate correlation analysis (*Pearson’s*) was used to measure the relationship between measures investigated within the questionnaire. Mediation analyses were conducted using Hayes’s (2017) PROCESS (Model 4) with a bootstrap sample of 5000. Confidence intervals (CI) do not cross zero and are considered significant when upper and lower boundaries are corrected to 95%. WB-R Guilt and WB-R Shame were used as a mediators to explore the effect of the relationship between mindfulness, self-compassion and mindful eating on, external, restrained and emotional eating.

5.4. Results

Correlation Analyses

Pearson’s Bivariate correlation coefficient was used detailing significant values between variables (*WB-R Shame, WB-R Guilt, Mindfulness, Self-compassion and Mindful*

eating, External, Emotional and Restrained eating), including means and standard deviations as shown in Table 5.2.

Significant negative associations were observed through relationships of mindfulness to restrained eating ($r = -.292, p > .001$), emotional eating ($r = -.202, p < .05$) and external eating ($r = -.274, p < .001$); self-compassion to restrained eating ($r = -.399, p < .001$), emotional eating ($r = -.328, p < .001$) and external eating ($r = -.328, p < .001$) and mindful eating to restrained eating ($r = -.519, p < .001$), emotional eating ($r = -.457, p < .001$) and external eating ($r = -.527, p < .001$). Essentially meaning that the lower the scores assessing mindfulness, self-compassion and mindful eating the higher the scores on measures assessing restrained, emotional, and external eating.

Significant positive associations were observed between relationships of weight- and body- related guilt to restrained eating ($r = .687, p < .001$), emotional eating ($r = .654, p < .001$) and external eating ($r = .682, p < .001$). Positive associations were also observed between relationships of weight- and body- related shame to restrained eating ($r = .544, p < .001$), emotional eating ($r = .510, p < .001$) and external eating ($r = .551, p < .001$). Essentially meaning that as scores of measures assessing shame and guilt increased, so did scores on measures assessing restrained, emotional, and external eating.

Significant negative associations were observed through relationships of weight- and body- related guilt to mindfulness ($r = -.360, p < .001$), self-compassion ($r = -.568, p < .001$) and mindful eating ($r = -.539, p > .001$). Significant negative associations were observed through relationships of weight- and body- related shame to mindfulness ($r = -.387, p < .05$), self-compassion ($r = -.608, p < .001$) and mindful eating ($r = -.559, p < .001$). Essentially meaning that as scores of measures assessing shame and guilt increased, scores on measures assessing mindfulness, self-compassion and mindful eating decreased.

Detailed results of each correlation concerning each dependent variable are summarized in Table 2.

Table 5.2. Means and standard deviations of variables, and bivariate correlations between weight- and body- related guilt, weight- and body- related shame, restrained, external and emotional eating, mindfulness, self-compassion and mindful eating with all associated.

Scales	1	2	3	4	5	6	7	8	M	SD
(1) Guilt									17.32	6.45
(2) Shame	.758**								16.71	6.91
(3) DEBQ-RE	.687**	.544**							31.24	8.26
(4) DEBQ-EM	.654**	.510**	.787**						35.10	8.84
(5) DEBQ-EX	.682**	.551**	-.810**	.880**					26.79	8.09
(6) FFMQ	-.360**	-.387*	-.292**	-.202*	-.274**				45.97	7.48
(7) SCS	-.568**	-.608	-.399**	-.268**	-.328**	.625**			72.96	18.06
(8) MEBS	-.539**	-.559	-.519**	-.457**	-.527**	.440**	.434**		66.66	10.34

*Note: Guilt – Weight- and body- related guilt (The Weight- and Body-Related Shame and Guilt Scale, WEB-SG); Shame – Weight- and body- related shame (WEB-SG); Restrained eating – DEBQ-RE (Dresden Eating Behaviour Questionnaire, Restrained eating sub-scale); Emotional eating – DEBQ-EM (Emotional eating sub-scale); External eating – DEBQ-EX (External eating sub-scale); Mindfulness - FFMQ (Five Facet Mindfulness Questionnaire); Self-compassion – SCS (The Self-compassion scale); Mindful eating – MEBS (Mindful Eating Behaviour Questionnaire) – Total scores. * Correlation is significant at the .05 level (2-tailed) **. Correlation is significant at the .001 level (2-tailed).*

Mediation Analyses

Eighteen mediation analyses are reported and presented in Table 5.3. These comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to problematic eating behaviours (restrained eating; emotional eating; external eating) through their relationships to weight- and body-related shame and guilt.

Model 1

Model one comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to problematic eating behaviours (restrained eating; emotional eating; external eating) through their relationships to weight- and body- related guilt. Weight- and body- related guilt was entered as the mediator, mindfulness-based constructs as the predictor variables and problematic eating behaviours as the outcome variables. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. Detailed results of each mediation concerning each dependent variable showing the indirect effects are summarized in Table 5.3.

Model 2

Model two comprised of assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to problematic eating behaviours (restrained eating; emotional eating; external eating) through their relationships to weight- and body- related shame. Weight- and body- related shame was entered as the mediator, mindfulness-based constructs as the predictor variables and problematic eating behaviours as the outcome variables. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated

that there was an indirect effect which was above zero. Detailed results of each mediation concerning each dependent variable showing the indirect effects are summarized in Table 5.3.

Table 5.3. Total, Direct, and Indirect Effects of Mindfulness, Self-compassion and Mindful Eating on Restrained Eating, Emotional Eating and External Eating Using Weight- and Body-related Shame and Guilt as Mediators.

y	x	m	a path coefficient	b path coefficient	Total effect	Direct effect	Effect (SE)	Indirect effect	
								LCI	UCI
Model 1									
RE	MI	WB-G	-.308**	.844**	-.328*	-.069	-.259	-.3787	-.1512
RE	SC	WB-G	-.201**	.856**	-.831**	-.011	-.172	-.2262	-.1220
RE	ME	WB-G	-.333**	.734**	-.412**	-.167	-.244	-.3422	-.1557
EME	MI	WB-G	-.305**	.872**	-.239*	.027	-.266	-.3807	-.1553
EME	SC	WB-G	-.204**	.994**	-.132**	.070*	-.203	-.2645	-.1505
EME	ME	WB-G	-.339**	.780**	-.389**	-.124	-.265	-.3816	-.1686
EXE	MI	WB-G	-.296**	.851**	-.306**	-.054	-.252	-.3698	-.1432
EXE	SC	WB-G	-.203**	.923**	-.148**	.041	-.189	-.2472	-.1365
EXE	ME	WB-G	-.344**	.712**	-.409**	-.164**	-.246	-.3531	-.1599
Model 2									
RE	MI	WB-S	-.347**	.580**	-.323**	-.122	-.201	-.3083	-.1086
RE	SC	WB-S	-.231**	.523**	-.196**	-.075	-.121	-.1886	-.0621
RE	ME	WB-S	-.370**	.437**	-.406**	-.244**	-.162	-.2594	-.0760
EME	MI	WB-S	-.344**	-.607**	-.241	-.033	-.209	-.3228	-.1155
EME	SC	WB-S	-.233**	.647**	-.142**	.001	-.150	-.2246	-.0896
EME	ME	WB-S	-.371**	.481**	-.377**	-.198**	-.178	-.2824	-.1006
EXE	MI	WB-S	-.350**	.604**	-.308**	-.096	-.212	-.3230	-.1161
EXE	SC	WB-S	-.235**	.616**	-.160**	-.015	-.144	-.2149	-.0879
EXE	ME	WB-S	-.374**	.439**	-.399**	-.234**	-.165	-.2495	-.0976

Note: ‘RE’ is Restrained Eating (DEBQ, Restrained eating sub-scale); ‘EME’ is Emotional eating (DEBQ, Emotional eating sub-scale); ‘EXE’ is External eating (DEBQ, External eating sub-scale); ‘MI’ is Mindfulness (Five Facet Mindfulness Questionnaire); ‘SC’ is Self-compassion (The Self-compassion scale); ‘ME’ is Mindful eating (Mindful Eating Behaviour

Questionnaire) – Total scores. LCI = Lower Confidence Interval; UCI = Upper Confidence Interval.* $p < .05$. ** $p < .001$.

5.5. Discussion

The overall aim of this research was to explore the relationships between problematic eating behaviours (*restrained, emotional and external eating*), mindfulness and related constructs (*self-compassion and mindful eating*) and weight- and body- related shame and guilt within gay and bisexual men. Correlation analysis showed negative associations between mindfulness and related constructs (*self-compassion; mindful eating*) to problematic eating behaviours (*restrained eating; emotional eating; external eating*). Weight- and body-related shame and guilt related positively to problematic eating behaviours (*restrained eating; emotional eating; external eating*), and negatively to mindfulness and related constructs (*self-compassion; mindful eating*). Negative associations between mindfulness-based constructs and problematic eating are reported in previous literature exploring these relationships within general and more specific populations (Egan et al., 2021; Hsu & Forestell, 2021; Mantzios et al., 2018; Spinosa et al., 2019). The positive relationships between weight- and body- related shame and guilt and problematic eating behaviours are also indicative of previous research highlighting clear links of weight- and body-discriminations to maladaptive eating within the gay community (Blashill, 2010; Davids et al., 2015; Foster-Gimbel & Engeln, 2016). The associations of mindfulness-based constructs to guilt, shame and problematic eating behaviours provides novel insight into these constructs among gay and bisexual men.

The potential mediating roles of guilt and shame with mindfulness-based constructs and problematic eating were explored. Findings indicated that guilt and shame mediated all relationships of mindfulness, self-compassion, and mindful eating to restrained, emotional and external eating. This presents the importance of considering weight- and body- related

shame and guilt and how these constructs relate to mindfulness and eating among gay and bisexual men. Previous literature explains the unique experiences of gay men in terms of body ideals and the critical judgements perceived by other sexual minority men when individuals do not adhere to 'slim' or 'muscular' body ideals (Martins et al., 2007; Regan et al; Tiggemann et al., 2007). The relation of these elements to mindfulness and related constructs provides novel insight into mechanisms to be further explored within this population. Consideration of weight- and body- related shame and guilt when exploring the potential of mindful and/or compassion-based interventions to attenuate problematic eating among gay and bisexual men is clearly presented.

Limitations and Future Research Directions

The author recognises the proceeding limitations of this research. First, greater insight into the experiences relating to the constructs explored within this study of individuals from ethnically diverse individuals could have been included if a more diverse sample was recruited. Future research should endeavour to recruit more diverse samples to capture the experiences of the queer global majority within psychological research. Second, the cross-sectional nature of this research should also be considered, and the explorations of mindfulness-based constructs, eating behaviours and relations to shame and guilt could be explored in more depth by using qualitative methods. This would provide greater insight into these constructs and their relation to the experiences of sexual minority men. Third, contemplating the difficulty of defining 'gay men' or 'bisexual men', where individuals who self-identified as non-binary, non-conforming and gender fluid were included in this sample. The author fully acknowledges these individuals may or may not be comfortable with the term 'men', and the inclusion of gender minorities within the current sample was an endeavour to provide a greater inclusion and representation of queer experiences within psychological research, and not to label or create assumptions around participants' gender.

Acknowledging the limitations in identity and self-identification propose limitations, but also potential for further research.

The current research provides a greater understanding of these constructs within this population and a basis of knowledge in which to inform future interventions. Mindful and compassion-based interventions have been reported as effective in attenuating eating and body related issues within general and more specific populations. This research reflects the importance of weight- and body- related shame and guilt and their relation to problematic eating among gay and bisexual men. Exploration of mindfulness and related constructs provides potential mindful and/or compassion-based interventions aiming to address problematic eating among sexual minority men.

CHAPTER 6: UTILISING INTERNET MEDIATED RESEARCH METHODOLOGY TO EXPLORE DIETING BEHAVIOURS BODY IMAGE IDEALS AND SELF- CRITICISM AMONG QUEER MEN THROUGH ONLINE FORUMS

6.1. Abstract

Background: Emerging research has highlighted gay men as a population who experience disproportionate eating and body-related issues comparatively to straight men. Exploring attitudes and experiences of eating and body-related issues by gay men in relation to self-compassion and criticism may provide insight into how these elements are experienced within this population.

Method: Internet-mediated research (IMR) was used to explore attitudes, beliefs, and experiences of eating, body image and dieting among gay men. Data were analysed using Reflexive Thematic analysis, utilising the reflexivity and subjectivity of the researcher to produce the overall themes.

Results: Three overall themes were conceptualised, the first theme ‘Perfection or rejection’ reflected pressures to conform to a ‘fit’ body type by the queer community, and how this translated to a lack of body acceptance. The second theme ‘Hate your current body, but not yourself’ explored how participants perceived self-criticism as a positive experience in relation to their body, to lose weight. The third theme ‘Better to be hungry than overeat’, demonstrated how participants had engaged in problematic dieting behaviours and how participants suggested these practices to others, despite discussing the physical and psychological impact on their own wellbeing.

Conclusion: The findings provide insight into gay men’s experiences and attitudes towards their bodies, body ideals and weight loss practices through the lens of self-compassion and self-criticism.

6.2. Background

Emerging research has highlighted gay men as a population who experience disproportionate eating and body-related issues compared to straight men (Hospers & Jansen, 2005; Williamson, 1999). Aspects of homonegativity (Reilly, 2004), objectification (Martins et al. 2007), and queer culture (Duncan, 2010) have been explored as potential contributing factors. Self-compassion and other mindfulness-based constructs have been investigated in relation to eating and body-related issues among other populations (e.g., female populations, individuals living with Cystic Fibrosis) (Breines et al., 2014; Egan et al., 2021; Kelly & Stephen, 2016; Pullmer et al., 2019). Self-criticism has been viewed as an ‘opposite’ construct of self-compassion which has been found to positively relate to eating and body-related issues (Perkins et al., 2020; Seekiset al., 2017). Exploring attitudes and experiences of eating and body-related issues by gay men in relation to self-compassion and criticism may provide insight into how these elements are experienced within this population.

Eating and body-related issues experienced by gay men have been shown to share contributing factors. Considerations have been discussed in relation to body ideals perceived as attractive within the community, whereby internalisations of attitudes towards desired body ideals are predictive of eating and body-related issues (Duggan & McCreary, 2013; Tiggemann et al., 2007). Attaining or maintaining a slim or muscular body type have been associated with eating disturbances within the population (Yelland & Tiggemann, 2003), with lower levels of body satisfaction, body image and acceptance experienced by those who do not adhere to such body ideals (Foster-Gimbel & Engeln, 2016; McArdle & Hill, 2009). Eating and body-related disturbances have also been reported to align with a feeling of not belonging within the gay community, which is important considering the necessity for queer accepting spaces within the current heteronormative society.

Problematic behaviours around dieting have been discussed within literature exploring gay men, denoting elements of restrictive eating and exercise practices linked to attaining the body ideals desired by gay men. Restrained eating has been described as the restricted consumption of food volume or type(s) to achieve or maintain weight loss or to prevent weight gain (Herman & Mack, 1975). Research conducted by Duggan and McCreary (2013) showed that gay men compared to straight men were more likely to engage in dieting practices with greater fear experienced of 'becoming fat'. These findings are supported by Regan et al. (2021) whereby participants reported a specific focus on food, with restrictive behaviours and engagement in exercise. These practices were also employed with a view to attaining or maintaining a slim or muscular physique. This research highlights the prevalence of dieting behaviours and the clear links to body ideals among gay men.

Self-compassion has been shown to negatively associate with problematic eating and body image-related issues in the general and more specific populations (Egan & Mantzios, 2018; Egan et al., 2022; Homan & Tylka, 2015; Mantzios et al., 2018a, b). Self-compassion has been conceptualised as the awareness of one's own suffering, with a desire to alleviate it, encompassing three enabling elements, kindness, common humanity and mindfulness (Germer & Neff, 2013). Self-criticism could be perceived as the 'opposite' of self-compassion and has been described as engaging in a constant and harsh evaluation of oneself (Blatt & Zuroff, 1992). Evaluations of the oneself have been discussed as a direct reflection of perceived, observations of the self, regarding how one would wish others to perceive or evaluate them (Gilbert & Irons, 2009). Findings have suggested that higher levels of self-criticism and self-judgement relate to greater levels of eating and body-related issues among general and more specific populations (Ferreira et al., 2019; Geller et al., 2021; Matos & Ferreira, 2023; Seekis et al., 2017). This provides insight into the potential role of self-compassion, self-criticism and self-judgement in experiences of eating and body-related

issues; exploring these elements among gay and bisexual men may provide nuanced insight into this population.

Investigation into the effectiveness of self-compassion-based interventions has been explored in relation to attenuating eating and body-related issues (Turk & Waller, 2020). Breines et al. (2014) found that individuals who presented higher appearance-based self-compassion reported lower levels of disordered eating. Similarly, Kelly and Carter's (2015) research supported these findings, whereby participants who partook in a self-compassion intervention reported reduced eating disorder pathology, eating and weight concerns. This research highlights the potential of self-compassion-based interventions in attenuating eating disturbances, body-related issues and weight concerns.

The importance of body ideals among gay and bisexual men is clear. The potential of these elements leading to engagement in problematic dieting behaviours to moderate undesired weight or body shapes has been discussed. Exploring how gay and bisexual men experience self-compassion and self-criticism in relation to dieting behaviours may provide insight into considering potential self-compassion-based interventions to attenuate problematic eating and body-related issues among gay and bisexual men.

6.3. Method

Procedure

Qualitative data was collected through an Internet Mediated Research (IMR) methodology, by exploring two publicly accessible (open access) online forums. This allowed for unintrusive naturalistic observations of data generated by participants engaging in topics and conversations of their choosing. Comparatively to other qualitative data collection methods, topics and conversations were chosen by participants and not generated by a pre-conceived schedule of questions.

Data collection

Online data was collected from two open-access forum websites. For anonymity purposes, these will not be named in line with BPS guidelines for conducting IMR (British Psychological Society, 2021). Data was collected through the medium of creating a corpus using the program SketchEngine. Data collection occurred from 10/05/2023 to 10/06/23; the search was conducted four times over this period to ensure that any new threads were incorporated into the final data set, in line with previous literature utilising IMR and ensuring collection of data was consistent. Search terms included “gay men”, “diet/ing”, “eat/ing” and “body image”. Key words were formulated from existing literature around eating disturbances within the population of focus. Search terms were generated from observing previous qualitative literature exploring discussions of queer culture, eating and body image (Morgan & Arcelus, 2009; Regan et al., 2021). SketchEngine collects data by grouping the inputted search terms into variation groups of three, collecting forum data from threads which encompass each variation of search terms.

Following data collection, initial screening was initiated, whereby forums which depicted participants outside the population of focus were removed. The majority of threads included in the analysis, had the target population within the title (e.g., gay men’s forum... etc.). Threads which did not include the target population in the title were further reviewed to ensure the topics discussed alluded to the users in the forum sharing an identity with the population of focus, with threads which did not, were removed from the dataset. For example, some discussions in forums depicted cis women who discussed eating and body image issues. This could be due to variations of search terms which did not include “gay men”, e.g., search term variation “eat/ing”, diet/ing” and “body image”. The final data set consisted of 37 threads and 6657535 words in total.

Data analysis

The data analysis strategy consisted of employing Reflexive Thematic Analysis (RTA), conceptualised by Braun and Clarke (2019). This analytic strategy was deemed appropriate in the context of the underpinning constructivist theoretical assumptions of the research; allowing for the data to be explored with the nuanced meaning of experiences participants held and valuing the reflexive interpretations of the data by the researcher (Braun & Clarke, 2019).

Data were analysed following the six steps outlined by Braun and Clarke (2006), whereby familiarisation occurred as the researcher read and screened the data. Initial codes were identified semantically, viewing and identifying surface-level meaning. As the data contained separate conversations located within individual threads, each thread was analysed separately. Codes were identified across threads, identifying shared meaning across multiple conversations, reflecting the cohesive approach to the dataset, providing insight into shared patterns of meaning across threads. A greater depth of insight was observed when codes were reviewed across the data, and shared patterns were observed. This more latent approach was continued through the following steps of analysis, whereby shared patterns of meaning were identified, and themes were produced, providing insight into participants' attitudes and experiences through the nuanced insight of the researchers' assumptions (Braun & Clarke, 2021). Initial codes and associated data were discussed with the wider research team, this helped the main researcher to identify clear patterns of meaning, forming overall themes. The inductive nature of this analytic process allowed for three overall themes to create a shared narrative of the data collected, in line with the research paradigm, theoretical underpinnings of the research and interpretation of the researcher.

Reflexivity

Aligning with the analytic strategy and interpretivism and constructivism theoretical underpinnings of the research, it is important to provide awareness of the researchers' role and research process in the analysis and theme production (Braun & Clarke, 2022). This further enhances understanding of the interpretation the researcher made of participants' understanding of the meaning of their experiences (Braun et al., 2023).

In consideration of my identity, I identify as a gay man and therefore share this identity with the population of focus within this research. I have a nuanced understanding of some shared experiences of participants within the data and their discussion of experiences. This was particularly valued for observing discussions around queer culture, coming out experiences and narratives within the queer community.

Ethical considerations

Ethical approval was obtained by the University's Faculty Ethics Committee (9463 /sub4 /R(B) /2021 /May /BLSS FAEC). The website forums used for data collection were open access, no sign-up was required, and password-protected sub-forums were not used within the data collection. Consent was not gained from participants due to the understanding that publicly open access data was collected, in line with guidelines outlined for conducting IMR by the British Psychological Society (2021). In addition, users within the forums often self-anonymised through the use of usernames or self-censorship, indicating some awareness for potential observation. Identifying information was removed and data was redacted in places to protect privacy, including usernames (British Psychological Society, 2021). Pseudonyms were used to refer to participants and relevant quotes within the analysis write-up to further anonymise participants.

6.4. Results

Three overarching themes were developed, providing insight into the participant's experiences relating to their perceptions of body appearance, weight loss and eating attitudes (see Table 6.1.). The first theme "Perfection or rejection" explored participants' experiences of 'being' within the queer culture and how prejudicial attitudes of others towards "overweight" body types translated to a lack of individual body acceptance. The second theme "Hate your current body, but not yourself" portrayed the extent to which self-critical attitudes towards participants' bodies were elicited, following responses from other users in the forum providing insight into how these attitudes can be utilised as a tool for promoting weight loss. The final theme "Better to be hungry than overeat" illustrated the actions, behaviours and attitudes participants showed towards dieting and food, with a focused initiative towards losing weight. All themes are explored within the following segment, with reference to quotes from the data and interpretation from the researcher in-line with Reflexive Thematic Analysis.

Table 6.1. Development of codes to Themes.

Themes	Perfection or rejection	“Hate your current body, but not yourself”	Better to be hungry than overeat
Codes	Stigma around people who are overweight	Is self-hatred a ‘good’ motivator?	Using problematic methods to lose weight
	Focus on aspects of the body that aren’t considered “skinny”	Gay community is judgemental of those not regarded as attractive	Sense of achievement for restricting food intake
	The burden of anti-fat prejudice is with overweight people	Self-care is losing weight	Obsessive focus on weight and food intake

Perfection or rejection

This theme overall presents the experiences of queer men in experiencing romantic rejection for not adhering to the “*fit*” body ideals preferentially by the queer community. Further discriminatory attitudes are presented in line with this focused ideal, whereby queer men deemed as overweight are regarded as unworthy of romantic partners. This created further internalisation of fat-prejudice and an overarching lack of acceptance for one’s body with specific feelings of inadequacy or lack of acceptance of elements of the body which are perceived to be inadequate by the queer community.

Participants’ evaluations of their body were discussed in line with the perceptions of how these evaluations have been, or could be, perceived by the wider queer community.

Body perception and dating culture were directly linked, showing the importance of being perceived as romantically attractive by queer men. Tim here highlights this focus on slim aesthetic ideals and romantic attraction where he mentions how after considerable weight loss, he was still single:

[Tim] *“At one point I had lost over 80 pounds. I was still heavy, but I was looking good. I'm 6'4 with extremely broad shoulders, so I carried my weight well. Still no takers”*.

Tim discusses how after considerable weight loss he still had “*no takers*”, suggesting the extent to which queer men romantically reject other queer men who do not adhere to slimmer body types. This feeling is reflected by the following quote, where Anton states the lack of acceptance experienced linked to their body shape presented on dating apps ‘Grindr’ and ‘GROWLr’.

[Anton] *“I've been saying this for years. I've got a belly and on Grindr I'm practically a persona non grata. I've taken to using GROWLr but it's still ridiculous”*.

Anton discusses using a different dating app due to a perceived lack of acceptance on Grindr and how his experiences on GROWLr are largely the same. The extent to which is described by his use of “*still ridiculous*”, suggests Anton’s experiences are similar, highlighting the stigma around body types deemed ‘unacceptable’ by the community.

Interestingly, negative perceptions of individuals described as “*overweight*” were observed within the data. Some participants made assumptions about queer men who are healthy and conform to slim and muscular ideals, and those who are overweight. Hayden here discussed the assumptions he has around queer men who are overweight vs healthy:

[Hayden] *“The attraction to fit-looking partners is more than just cosmetic, it is because of the vibe a fit body naturally exudes; you're going to assume the person is healthy, health-conscious, takes good care of themselves and lives a full active lifestyle”*.

Hayden here is providing their own justification for the communities' attraction to 'fit' people and associated body types and further the positive assumptions made around those who conform to 'fit' body ideals. The assumption here is that individuals who are overweight do not take *good care of themselves* or living a lazy or non-active lifestyle. Hayden further elaborates on their 'preferences' within the community of 'fit' body types, explaining how his perception of those who are overweight understand the benefits of losing weight i.e., appealing to other queer men:

[Hayden] *“These people know that too, they know if they lost the weight, they'd feel better about themselves firstly and have it easier attracting partners they actually find attractive (which is usually fit people, they prefer that themselves, which is partly why they're so angry, again they feel entitled to exceptionally attractive partners without doing the work to attract them).”*

Hayden gives a further explanation, suggesting that overweight people are not entitled to (what he deems as) attractive romantic partners, but they feel they are. There is an assumption made here around what constitutes as attractive, which reflects what seems to be the attitudes of the queer community in relation to romantic partners and body type preference. This perceived non-acceptance of diverse body types by the wider queer community seems to be reflected in an overarching lack of acceptance for one's body, with a specific focus on attributes deemed as 'undesirable' within the queer community. Deon provides insight into the progress of his weight loss so far, appreciating his progress; the second quote however highlights the significance of adhering to a “*skinny*” body type, despite the progress achieved.

[Deon] *“I can really see and appreciate the amount of weight I've lost so far [...] It's just the remaining areas that really can't be considered "skinny" yet, i.e., belly, butt and thighs.”*

There seems to be an analysis of body shape by Deon, in line with his weight loss progress, with negative evaluations made of specific elements (*“belly butt and thighs”*). These negative evaluations of elements of the body Deon are not ‘satisfied’ with, relate to a lack of body acceptance experienced, which is an internalisation of the prejudice experienced by those who aren’t deemed as *“skinny”* within the community. There were many similar elicitations of body non-acceptance whereby participants’ analysis of their body type and/or shape produced negative evaluations of elements that are not deemed acceptable by the queer community.

Luca provides another example, where after significant weight loss, Luca still analysed his body and made judgements of specific aspects.

[Luca] *“but I could still feel like I was so fat, by pinching the tiniest of fat left in me”*

This quote again relates to a lack of acceptance for aspects deemed ‘unacceptable’ by Luca; the lack of acceptance of elements of the body which did not represent slim or muscular ideals were discussed by many participants. The extent to which Luca does not accept his body is presented by him describing how he still felt ‘so fat’. There is a sense of dissatisfaction with the progress attained by his weight loss and a focus on any elements of ‘fat’ which are left. This relates to the previous quotes around the pressure to attain a ‘skinny’ body type as denoted by other gay men within the forum and the extent to which these ideals impact aspects of the body which do not meet these aesthetic standards.

Overall, this theme explores the prejudicial attitudes towards other gay men within the community, specifically in relation to their body type/shape. The importance of attaining or

maintaining a 'skinny' body type is presented; the consequence of not adhering to this would relate to experiencing romantic rejection and perceived fat prejudice. How queer men internalise these attitudes and potential rejection is by adopting a critical attitude toward one's own body and holding a lack of acceptance of attributes that do not adhere to the 'skinny' body type. This overall lack of acceptance for body types or attributes which lie outside of the established slim aesthetic norm, captured the self-critical nature of participants, cultivated it seemed, by perceived criticism of others.

“Hate your current body, but not yourself”

This overarching theme encompasses elements of self-judgement and criticism specifically focused on one's body, in the context of losing weight. There was an overall lack of compassion elicited within the data around perceiving one's body, especially relating to dieting and weight loss. Discussions around weight loss and weight loss strategies were discussed in many parts of the data; many times, acknowledging how “self-hate” towards one's body was often suggested and encouraged by other participants. Self-hate or dissatisfaction towards one's body was viewed as a “good motivator” for weight loss and weight loss-based behaviours.

Within aspects of the data where participants discussed weight loss, there was a suggestion of how self-hate or dissatisfaction could be perceived as useful and a tool to aid weight loss. Joab here makes a distinction of how self-hate can be experienced in relation to weight loss, suggesting focusing this experience on the '*fat*', not who you are as a person:

[Joab] *“Make sure you only hate the fat, but not the person. YOU are fine, but your body? She gotta go :).”*

This quote interestingly depicts the way participants view self-criticism, and that if an individual holds self-critical attitudes towards their body, this is considered acceptable and

desirable to promote weight loss. There is also a perceived separation between the mind and body, alluding to the notion that criticism to the body is justifiable, as this will not ‘affect’ the individual’s wellbeing, so long as they focus the self-criticism or hate towards their body, but not themselves.

Similar notions were reflected by participants who were giving advice to other participants about weight loss and dieting. Tom here gives advice about how hating your body can be a positive thing, and how this can encourage weight loss, leading to greater self-confidence.

[Tom] *“Hate your current body, but not yourself. Do your best to “kill” that off, and allow yourself to regrow into a better body that comes along with some sweet self-confidence.”*

This quote represents the ‘normalised’ and therefore accepted identity within the community. The language used here, specifically in relation to killing off aspects of the body of which an individual is not satisfied with, presents the extreme promotion of hate or dissatisfaction towards those aspects, and further how this should be maintained to encourage weight loss. Many participants promoted how self-hate could be utilised as a good motivator for weight loss.

e.g., [Callum] *“I gotta say, self-hatred is a good motivator for myself”.*

Presenting ‘self-hate’ of the body, in a ‘positive’ or ‘supportive’ way presents the misalignment between perceptions of overall wellbeing, encompassing the mind, body and self, and wellness of the body in terms of weight loss and promotion of weight loss advice. Tim discussed how potentially ‘self-hate’ might be better described as dissatisfaction and how this can be used as a more appropriate motivator for weight loss.

[Tim] *“Call it self-dissatisfaction, not self-hate. Dissatisfaction is what motivates you to become a better you”.*

Conceptualising how *“Dissatisfaction”* may be more appropriate than self-hate is interesting, this presents a diluted way of holding critical attitudes towards one’s body. Dissatisfaction could also be potentially problematic and encourages a negative judgement of the self in relation to the body; overall creating a less accepting and therefore less compassionate view of one’s body.

[Joe] *“Yeah my body image makes me feel like I don't even deserve to be gay. I hate myself so much and honestly don't have anything left to hold onto. Maybe I'll die, or maybe I'll lose more weight. Up to me to decide.”*

This quote overall presents the harmful impact of promoting *“self-hate”* and ‘dissatisfaction’ as tools to utilise for weight loss. There are multiple problematic elements which are encompassed by this quote which relate to overall wellbeing and acceptance. Specifically, Joe states his body image makes him feel undeserving of being gay; this shows how closely body image and body self-perception is aligned with identity within the population. Feeling underserved of the identity you embody or identify with due to not meeting physical ideals highlights the powerful detrimental impact of community pressures to be perceived as attractive and/or acceptable. The last section of the quote captured the negative impact of holding self-critical attitudes towards one’s body has on body image and wellbeing.

This theme overall encompasses the self-critical attitudes participants hold towards their perceptions of their body, and how they encapsulate this as *“self-hate”* and *“dissatisfaction”*. Participants’ views around *“self-hate”* and how this is regarded as a tool or *“motivator”* for weight loss within the sample, present problematic elements of self-criticism and the negative impact this can have on body perceptions, identity and overall wellbeing.

Better to be hungry than overeat

This theme encompasses discussions around how participants managed their past weight loss goals, with advice given to other participants in the forum of how to lose weight. Many elements of potentially problematic weight loss advice were discussed, including elements of eating restraint, a focus on calorie consumption and extensive exercise. The impact of engaging in these behaviours previously on weight and health was discussed, however despite the acknowledged negative impact, similar advice was still given to other participants to assist them in weight loss.

Many participants discussed employing dietary restraint and reducing calorie consumption with an aim to losing weight. This quote by Jacob represents the dangers of restrained eating:

[Jacob] *“I started restricting my eating habits and got super unhealthy.”*

Participants who engaged in restrictive practices would reflect on how “unhealthy” this was/is for them. This provides overall insight into the potential problematic ways of thinking and behaving in relation to weight loss. Significantly, restriction has been at the forefront of motivating overeating, and eating disorder symptomatology, and may be an element that deserves more attention in the care and advice provided to gay and bisexual men. Some participants presented some justification for their weight loss behaviours, providing in a way to seek reassurance from other users in the forum.

[Carl] *“I can't say that the way I lived was healthy, but it wasn't an eating disorder.”*

This quote by Carl suggests an acknowledgement that the eating behaviours adopted were unhealthy, refuting the idea that this behaviour constituted an eating disorder providing justification for the unhealthy nature of the eating behaviour exhibited. This could be interpreted as Carl reassuring others in the forum, and himself that his weight loss behaviours

were justified as they did not classify as an “eating disorder”, further solidifying his perception of current behaviours being okay to engage with.

The accompaniment of excessive exercise to eating restraint was discussed by participants who had previously lost weight. The following quote by Sam presents the extent to which food restriction was followed with exercise used to ‘maximise’ weight loss outcomes.

[Sam] *“At that point I became obsessive with eating once daily and exercising non-stop at that point I was 59 kg and I was 18, 182 cm. I had anemia and fainted a lot from malnutrition, to the point that I hit my head and was taken to the hospital.”*

This quote shows the extent to which participants would engage in problematic weight loss practices to achieve their desired goals. The direct impact of these behaviours shows how detrimental extreme food restriction and excessive exercise had on Sam’s health.

A contradiction emerged from the data, whereby, as explored, participants discussed the “*unhealthy*” nature of their eating behaviour and dietary restraint, but there were many examples of other users recommending guidance around problematic practices that could be utilised for weight loss (e.g., excessive exercise or weight monitoring). James here provides a suggestion to a different participant in a forum, whereby the other participant mentioned struggling with weight loss.

[James] *“Count calories, weigh yourself often, and move like your life depends on it.”*

While the advice given here doesn’t present any specific problematic behaviours, the way of being generally around weight loss and food suggested could promote maladaptive eating and weight loss behaviours. In many sections of the data there was a specific focus given to monitoring calories and weighing oneself often, which could foster future eating restraint.

Similar advice was given by Jessie within a different forum, following a participant discussing a difficulty experienced losing weight.

[Jessie] “*Measure your portions. Ensure you really are eating within your caloric range. TRACK EVERY BLT (bite, lick, taste).*”

Jessie’s advice reflects a similar focus on calorie in-take and the importance of tracking food and calorie in-take. The importance of this focus on tracking calories is presented in the final section of the quote “*TRACK EVERY BLT (bite, lick, taste).*”, whereby, consideration of calorie intake should be given to every “bite, lick, taste”. This is problematic focus on food consumption alludes to dietary restraint and a problematic emphasis on weight loss practices.

This theme overall summarises the “unhealthy” weight loss practices participants have employed to lose weight. The direct detrimental impact eating restraint and excessive exercise had on the health of participants is presented. Despite the negative impact on health, similar advice was given to other participants who were struggling with weight loss. The suggestion of ‘calorie counting’ and promoting an unhealthy focus on weight provided insight into how participants perceived the importance of weight loss, and the practices used to attain their weight loss goals.

6.5. Discussion

This research aimed to explore the attitudes and experiences of gay men in relation to perceptions of their bodies and dieting behaviours. This was observed through the lens of self-compassion and self-criticism. Participants’ perceptions of their own bodies were observed to be directly influenced by the perceived body ‘norms’ held by the wider queer community. This translated to lower perceptions of body image if they did not meet these ‘norms’, and an overall lack of acceptance of elements of the body which were deemed unacceptable by the wider community and therefore themselves. This aligns with previous

literature exploring the comparative nature of the gay community (e.g., Duggan & McCreary, 2013; Tiggemann et al., 2007) and how this relates to lower body satisfaction and image in gay men (Foster-Gimbel & Engeln, 2016; McArdle & Hill, 2009).

Participants conceptualised “self-hate”, as a positive experience in the context of losing weight and dieting behaviours, promoting this ideology to other participants’ who were dissatisfied with their body. This is both interesting and problematic, showing a distinct and purposeful lack of compassion towards their body. Dieting and losing weight seemed to supersede the negative association of being self-critical and judgemental. These findings are novel, presenting nuanced information around conceptualisations of self-compassion and self-criticism in relation to body perceptions and eating behaviours among gay men. However, these findings do allude to that of previous literature in other populations, whereby lower levels of self-compassion and higher levels of self-criticism relate to higher levels of body dissatisfaction, and problematic eating (Egan & Mantzios, 2018; Egan et al., 2022; Homan & Tylka, 2015; Mantzios et al., 2018a, b). The nuanced consideration for the findings presented among gay men, is that holding self-critical attitudes toward one’s body is intentional and purposeful in the context of promoting weight loss. This highlights the extent to which gay men aim to meet the body ideals presented by the queer community, as explored within the first theme.

Discussions of dieting and weight-loss presented the extent to which participants engaged in problematic weight loss behaviours, denoting eating restraint and excessive exercise to achieve weight loss and body goals. Restrained eating has been presented in previous literature aligned with a desire to lose weight through dieting behaviours (Haynos et al., 2018; Lebow et al., 2015; Whitelaw et al., 2014). The importance of focused slim body aesthetic ideal within the gay community has previously alluded to similar dieting and restrictive eating practices among gay and bisexual men (Duggan & McCreary, 2013;

Kousari-Rad & McLaren, 2013; Regan et al., 2021; Yelland & Tiggemann, 2003).

Interestingly, despite participants discussing how engaging in problematic dieting behaviours impacted their physical and psychological wellbeing, other participants made similar recommendations for problematic dieting behaviours to other participants. This highlights the understanding of the importance of losing weight for other gay men within the forums. This provides a connection to the elements within the second theme, showing the underlying understanding of the shared importance of losing weight and how this takes precedence versus the promotion of physical and psychological wellbeing.

It is important to consider the methods by which data was collected and analysed and the influence on the overall findings. Observing all the data collected, it is clear that participants were explicit in their discussions. The anonymous nature of posting discussions to a forum provided data which was perceived to be more forthright in its nature, comparatively to data collected through other qualitative methods (e.g., interviews). This gives value to analysing IMR, as participants disclose more congruent feelings and experiences through an online forum-based medium (McKiernan et al., 2017). Considering the role of the researcher in interpreting the data is important in the transparency of conveying the process of conceptualisation of the themes presented in line with RTA. The researcher's identity was shared with the target population, with many shared experiences of queer culture, 'being' within queer spaces and unique experiences of sharing this identity. This was valued in fully understanding the context in which participants discussed body ideals and dieting culture within the community.

The limitations of this research are discussed as follows. In contrast to other qualitative data collection methods, such as interviews, further exploration of posts made by participants were not possible. For example, follow-up questions and prompts were not possible to develop on points made, as is possible with semi-structured interviews. The

researcher, therefore, interpreted the data at face value, as further exploration or clarification was not possible. Further, due to the method of data collection, there were no means of discussing pre-formulated topics for analysis, aside from the choice of search terms inputted to SketchEngine. This along with the lack of structure provided with an interview schedule, made for a wide breadth of topics discussed by participants within the data. It is also important to consider the lack of demographic information that can be collected from participants within the data. Gathering information about participants' BMI, perception of body type and age may have provided further context to participants' discussions and experiences.

Future research should consider the themes discussed through this research utilizing relational qualitative methods, allowing for a greater depth of exploration around body satisfaction, dieting practices and self-criticism. This would provide a greater focus and structure to the data collected, generating a greater understanding of these constructs among gay men. It may also be interesting for future research to consider utilising compassion-based search terms to fully explore the possibilities of rich data around how self-compassion and self-criticism may relate to body perceptions and dieting practices through online platforms. Running search terms on other platforms not considered in this research (e.g., Twitter) may also provide a greater breadth of data, allowing for further insight.

Overall, this research provides novel insight into how gay men's experiences and attitudes towards their body, body ideals and weight loss practices through the lens of self-compassion and self-criticism. This provides an understanding of how self-criticism is conceptualised by the community in the context of weight loss. Previous research has supported the utility of self-compassion through guided interventions in attenuating eating and body image issues among general and specific populations. The findings of this research offer insight into the importance of considering self-compassion-based interventions, in

attenuating eating and body-related issues among gay and bisexual men. The current chapter provides insights into the experiences and attitudes of gay men concerning their body ideals, and weight loss practices in the context of self-compassion and self-criticism, and uncovering some complex interplay between societal pressures, self-perception, and dieting behaviours. This study also paves the way for further qualitative research that can delve deeper into the psychological and emotional aspects influencing relationships to equally important topics of body-perception and eating behaviours. The themes identified in this study serve as a foundation for more in-depth explorations in the next two chapters, allowing for a nuanced understanding of the underlying factors contributing to body image issues and disordered eating behaviours among gay men.

CHAPTER 7: AN EXPLORATION INTO EXPERIENCES OF BODY IMAGE, BODY ACCEPTANCE, AND SELF-COMPASSION ASPECTS AMONG GAY AND BISEXUAL MEN

7.1. Abstract

Background: Gay and bisexual men have been found to experience body image disturbance, with aspects of queer culture and pressures to attain focused body ideals found to contribute. Exploration of elements of body image, body acceptance and self-compassion may provide insight, which could support the utility of self-compassion-based interventions to attenuate, body image issues within the population.

Method: Twenty participants identifying as gay, bisexual or queer took part. Semi-structured interviews explored aspects of body-image, body acceptance, self-compassion and elements unique to the population (e.g., queer culture). Data were analysed using Reflexive Thematic Analysis, following the six procedural steps and valuing the researchers' interpretation.

Results: Three overarching themes were conceptualised, providing an understanding into participants' experiences of identity within the gay community, body image and self-compassion. The first theme, "A gym-bod is currency among gay men" explores participants' perceptions of body types which are most represented of gay men, and how this influences the underlying body-related hierarchy within the community. The second theme, "Hiding your body makes it easier to accept" portrays the significant dissatisfaction participants had with elements of their bodies which they felt did not meet the perceived body hierarchy within the community, and how this relates to not fitting in. The third theme "If I were compassionate towards myself, I would accept myself" explored how participants defined self-compassion as acceptance, including their perceived flaws.

Conclusion: Overall, the findings of this research offer elements to consider when utilising self-compassion or self-kindness-based interventions to attenuate body image-related issues among gay men and support psychological wellbeing.

7.2. Background

Early research has identified gay and bisexual men to experience disproportionate body related issues comparatively to straight men (Christophersen et al., 2010; Kaminski et al., 2005; Morgan & Arcelus, 2009; Tiggemann et al., 2007). Emerging research has focused on this prevalence, denoting elements such as homonegativity (Bianchi et al., 2017), minority stress (Kimmel & Mahalik, 2005) and queer community-based factors as contributing influences (Martins et al., 2007). Self-compassion has been negatively associated with body-related issues among general and more specific populations highlighted at greater risk of body image issues, presenting the potential utility of self-compassion in addressing such issues (Burychka et al., 2021; Ferreira et al., 2013; Mills et al., 2022; Wasylkiw et al., 2012). Exploration of specific elements highlighted within gay and bisexual men (e.g., queer culture and body ideals) in relation to body-related issues and self-compassion may provide insight into these constructs within the target population. This could discern findings to inform future self-compassion focused interventions to attenuate body-related issues among gay and bisexual men.

Gay men are a population which has been found to focus on perceived attractiveness and body aesthetic (Moreno-Domínguez et al., 2019; Schmidt et al., 2022; Wrench & Knapp, 2008). Research has discussed the importance of attaining or maintaining a slim and/or muscular physique and how this relates to romantic desirability within the community (Blashill, 2010; Kaminski et al., 2005; Lanzieri & Hildebrandt, 2016; Regan et al., 2021). Prevalence of the anti-fat bias has shown the extent to which those who encompass a healthy

BMI experience romantic rejection due to perceived prejudice of fatness (Foster-Gimbel & Engeln, 2016; Kaminski et al., 2005). This research shows the potential impact of community pressures to attain a focused body ideal and the negative impact on body image among gay and bisexual men.

Body acceptance has been described as the acknowledgement of aspects of the body one is dissatisfied with, but accepting them without judgement (Tylka & Wood-Barcalow, 2015). Qualitative explorations of body image among gay and bisexual men have highlighted how gay community enforced body ideals translate to a lack of body acceptance and body shame (Duncan, 2010; Morgan & Arcelus, 2009; Regan et al., 2021). Research conducted by Regan et al. (2021) showed that gay men were conscious of their body in gay spaces, particularly if they felt they did not meet a ‘slim’ or ‘muscular’ ideal. Similarly, Morgan and Arcelus’s (2009) research provided further support to the body pressures within gay spaces, finding that gay men, comparative to straight men were more focused on their body aesthetic in relation community pressures to have a thin body type. This research provides overall support to the notion that gay men are more likely to experience body dissatisfaction, body-related shame and self-criticism if they do not fit in with community body ideals.

Research has illustrated the usefulness of self-compassion in attenuating eating and body-related issues among general, and more specific populations (Burychka et al., 2021; Ferreira et al., 2013; Millset al., 2022; Wasylikiw et al., 2012). Self-compassion has been described as an awareness for one’s own suffering with the motivation to alleviate it (Germer & Neff, 2013). Studies have previously highlighted the link of self-compassion to body image; whereby higher levels of self-compassion related to greater body image (Burychka et al., 2021; Ferreira et al., 2013; Millset al., 2022; Wasylikiw et al., 2012). Self-criticism has been defined as making harsh negative evaluation of oneself (Blatt & Zuroff, 1992). Self-criticism has similarly been associated with body image among general and specific

populations (Ferreira et al., 2019; Geller et al., 2021; Salarian Kaleji et al., 2022). Self-kindness is a component of self-compassion, this component is identified as treating oneself kindly in the face of inadequacy, sometimes described as self-soothing (Egan & Mantzios, 2018; Germer & Neff, 2013; Hussain et al., 2021). Research conducted by Rodgers et al. (2017) found that self-kindness acted as a barrier to negative body image evaluations, providing insight into how self-compassion and self-kindness link to body image. These associations provide insight into how these elements relate within other populations. Exploring how self-compassion and body image align within gay and bisexual men would provide further understanding of these constructs.

Self-compassion-based interventions aim to instill a compassionate and accepting attitude to one's own suffering, and subsequently, have shown to attenuate body image-related disturbances (Boggiss et al., 2020; Kelly et al., 2014; Turk et al., 2021). Seekis et al. (2017) conducted an intervention, whereby participants completed a writing task pertaining to self-compassion and kindness-based reflections of their body. The self-compassion group experienced higher body image outcomes post intervention (Seekis et al., 2017). Similar outcomes were seen within comparative intervention studies, highlighting the efficacy of self-compassion-based interventions in increasing overall body image (Moffitt et al., 2018; Stern & Engeln, 2018; Ziemer et al., 2019). This research highlights the importance of self-compassion when considering body image disturbances, and present elements to explore in relation to gay and bisexual men.

The importance of focus body ideals within the queer community, and the impact on the body image of gay and bisexual men is clear. Self-compassion and self-kindness has been found to act as a barrier to body-related issues among general and specific populations. Exploring elements of body image, self-compassion and self-kindness among gay and

bisexual men may provide understanding and highlight the potential of self-compassionate interventions within the population.

7.3. Method

Participants

Twenty participants aged between 21 – 60 years from the UK took part, all of whom identified as gay or bisexual. Exclusion criteria included, participants who were below the age of 18 years of age, and those who did not identify as gay, bisexual or heteroflexible men. The study was advertised through an advert posted to social media, detailing the aims and process of the study, allowing participants to contact the researcher upon interest in taking part. Participants were recruited over a five-month period, data collection concluded when themes were clear and fully conceptualised. See Table 7.1. for participant demographic information.

Table 7.1. Participant Demographic Information.

Pseudonym	Age	Ethnicity	Gender identity	Sexuality	Self-identified body type
Stephen	46	White British	Cis male	Gay	Average build, skinny fat
Carl	21	White British	Trans male	Bisexual/ Pansexual	Stocky
Lewis	32	White British	Cis male	Gay	Slender
Harry	52	White Irish	Cis male	Gay	Stocky
Nathaniel	35	Afro-Caribbean	Cis male	Gay	Large
Brett	28	White British	Gender non-conforming	Gay	Large
Simon	44	British Asian	Cis male	Gay	Athletic
William	35	White British	Cis male	Gay	Slim
Jim	31	White British	Cis male	Gay	Slim
Jeremy	26	White British	Cis male	Gay	Average
Tyler	31	White British	Cis male	Gay	Chubby
Clark	24	White British	Cis male	Gay	Average
Griffin	60	White British	Cis male	Gay	Average
Adam	29	Black British	Cis male	Gay	Average
Carlton	30	Black British	Cis male	Gay	Sim
Jake	53	White British	Cis male	Gay	Medium/large frame
Jay	25	White British	Cis male	Gay	Slim
Mike	28	White British	Cis male	Gay	Average
James	28	White British	Cis male	Gay	Average
Ken	48	White British	Cis male	Gay	Stocky

Semi-structured Interviews

Semi-structured interviews explored participants feelings and experiences of body image, body acceptance, self-compassion and self-kindness. The interviews were guided by an interview schedule, detailing questions ordered into topics pertaining to the research aims. The semi-structured nature of the overall interview process, allowed for the researcher to explore some aspects from participants' responses in more depth, by following up with questions and prompts not detailed on the schedule. This allowed for a greater depth of exploration of the topics, gaining greater insight into participants, feelings, opinions and experiences. The questions were developed by the research team, aligning with existing literature exploring these topics within other populations and the target population.

The flow of the interview was determined by the schedule, whereby, more exploratory questions were placed earlier in the schedule, moving onto more sensitive questions and topics later in the interview. Firstly, initial ice-breaker questions were asked, this allowed participants to become accustomed to the nature of being asked questions by the researcher in the interview setting, and help to build rapport (e.g., What were your initial thoughts when seeing the interview poster?) (Ahlin, 2019). Secondly, questions explored general body image, gauging how participants felt about their body, and identifying any influencers, including aspects of queer culture, aligning with previous literature exploring body image within the population (e.g., How do you feel about your body in queer spaces?) (Moreno-Domínguez et al., 2019; Schmidt et al., 2022; Wrench & Knapp, 2008). Thirdly, questions were asked relating to body acceptance, aligning with the findings from previous chapters, and research highlighting the non-acceptance experienced within the community (e.g., How do you feel about your body?) (Blashill, 2010; Kaminski et al., 2005; Lanzieri & Hildebrandt, 2016; Regan et al., 2021). Fourthly, questions focused on exploration of self-compassion and self-kindness, and how participants experienced these constructs in relation to their body,

aligning with previous literature outlining the importance of self-compassion and self-kindness in addressing body image issues (e.g., How could you be kind to yourself?) (Egan & Mantzios, 2018; Germer & Neff, 2013; Hussain et al., 2021). Lastly, the researcher concluded the interviews with one or two closing questions, providing participants with the opportunity to discuss or ask any questions regarding the interview (e.g., Do you have any questions about the interview, now this it is coming to a close?) (Horton et al., 2004)

Procedure

Data collection occurred from November 2022 to March 2023. The study was advertised by posting a poster detailing the nature of the study and contact details of the researcher to social media (Facebook and Twitter). This opportunity sampling method allowed participants to be informed of the research, upon expressing interest, an information form was sent via email enabling participants to thoroughly understand the research process (Husband, 2020). The interviews were either face to face or virtual, dependent upon participants preference and lasted from 40 – 60 minutes. Face to face interviews were conducted in a public quiet place agreed upon with the participant prior to the interview. The virtual interviews were conducted on Microsoft Teams from a password-protected university Microsoft account, following ethical considerations for conducting online research. A departmental Dictaphone was used to record the face-to-face interviews, and the record function on Microsoft Teams was used to record the virtual interviews. Once the interview was concluded, participants were sent a Debrief form, detailing information about withdrawal, researcher contact information, and guidance for further support.

Ethical considerations

Ethical approval was obtained by the University's Faculty Ethics Committee (Regan /#10932 /sub4 /R(B) /2022 /Sep /BLSS FAEC). Participant information forms were

reviewed outlining the nature of the research and process involved in taking part upon participants expressing interest in taking part. Participants' right to withdraw, including taking a break or stopping mid-interview was verbally explained before recording commenced. The researcher also asked the participant if they would like to have a break/were happy to continue, mid-way through the interview, mitigating potential harm or fatigue, Consent forms were sent via email and were completed before interviews were scheduled. Data was stored on a password-protected university on-drive account and stored for five years, and recordings were deleted immediately after transcription. Any identifiable information was removed from transcripts to preserve participants anonymity (e.g., names and places of work).

Data analysis

Data collection occurred until consensus among research team determined data saturation had been reached. Reflexive Thematic Analysis (RTA), conceptualised by Braun and Clarke (2019), was employed to analyse the data, considering the constructivist and interpretivist theoretical underpinnings of this analytic strategy. RTA allows for the data to be considered including the meaning of experiences participants held and appreciating the unique interpretations of the data by the researcher (Braun & Clarke, 2019). The primary researcher transcribed all interviews verbatim, creating a word for word account of the interviews, allowing for data familiarisation to occur.

Data was analysed following the six steps outlined by Braun and Clarke (2006); familiarisation occurred as the researcher read and transcribed each interview verbatim, creating a word for word account of each interview. Initial codes were identified through a latent approach whereby deeper meanings were identified through the lens of the researcher's interpretation (Braun & Clarke, 2021). Overall codes and quotes were reviewed, and patterns

of meaning were identified, forming final codes, and later, developed into overarching themes. One researcher followed this analytic process, creating the overall themes, in line with their own interpretations of the data. Initial interpretations of the data were shared with the supervisory team, and this process was repeated throughout the analysis to ensure consistency and consensus of code and theme generation.

Reflexivity

Aligning with the interpretivist and constructivist theoretical underpinnings of RTA, it is important to provide understanding of the primary researchers process and assumptions in developing the overall themes (Braun & Clarke, 2022). This further enriches the understanding of the unique interpretation the researcher made of participants' understanding of the meaning of their experiences (Braun et al., 2023).

Considering the overall analytic process, I took followed the six steps of analysis, by latently reviewing the responses from participants and creating initial codes which elaborated on the surface meaning. This approach allowed for a depth of exploration of participant's responses and therefore covered multiple narratives thought the lens of analysis. After grouping these codes and quotes into one shared space, I was able to review all these and began to colour code patterns of shared meaning. I identified multiple narratives running through the data. I then proceeded to group those narratives by re-reviewing the quotes attached to each theme, allowing me to link overall codes into overarching themes.

Reflecting upon my own underlying assumptions in analysing the data and conducting the interview; it is important to consider my own identity and the role this had within data collection and analysis. I identify as a gay cis male, therefore sharing an identity with most of the participants within the research. Many participants made assumptions of my identity within the interviews, or this was inferred when discussing topics around queer culture.

Participants appeared to speak more freely around topics relating to gay culture, dating and casual relationships. This was helpful in that it allowed depth of exploration around these topics, although, there were points where assumption of shared knowledge led to a lack of discussion. At these points, I ensured to ask participants to explain these elements in more depth to provide greater context to the wider audience, and enhance clarity within the data.

7.4. Results

Three overarching themes were conceptualised, presenting insight into the participant's experiences of identity within the gay community, body evaluations and self-compassion (*see Table 7.2.*). The first theme, "A gym-bod is currency among gay men" explores participants' perceptions of body types which are most represented of gay men, and how this influences the underlying body-related hierarchy within the community. The second theme, "Hiding your body makes it easier to accept" portrays the significant dissatisfaction participants had with elements of their bodies which they felt did not meet the perceived body hierarchy within the community, and how this relates to not fitting in. The third theme "If I were compassionate towards myself, I would accept myself" explored how participants defined self-compassion as acceptance, including their perceived flaws. This was interesting considering participants' earlier in the interviews, outlining the lack of acceptance experienced from the wider queer community in relation to body aesthetic. Themes are discussed within the following section, along with supporting data and interpretation from the researcher, following a Reflexive Thematic Analytic approach to theme conceptualisation.

Table 7.2. Development of codes to Themes.

Themes	A gym-bod is currency among gay men	Hiding your body makes it easier to accept	If I were compassionate towards myself, I would accept myself
Codes	Slim and muscular bodies are most represented among gay men	Lack of acceptance of elements of your body that don't meet the standard	Self-love is accepting yourself for your flaws
	Body aesthetic hierarchy within the community	Gay community is judgemental of those not regarded as attractive	Self-kindness is not being critical of yourself and your body
	If you don't have a slim and/or muscular body type, you don't fit in	Hiding your body to cope with non-acceptance	Difficulty in accepting your flaws due to the community body standards

A gym-bod is currency among queer men

This theme conveys the perceived representation of the gay male body as being slim and/or muscular; this was discussed within wider society but also within queer spaces. Many participants discussed the aesthetic hierarchy within the gay community, outlining how larger body types are not viewed as 'acceptable' within the community. Participants also discussed how other gay men would be critical of body types which were 'lower' in the hierarchy, and

how having a body which did not meet the standard set out by the community meant they did not feel that they ‘fitted in’.

Many participants illustrated the body type and shape they felt were most represented within gay spaces. Brett, a male/gender-nonconforming drag queen describes themselves as being an active member within the queer scene in the midlands and surrounding areas; here they describe the body type most represented of queer men in queer spaces:

[Brett] *“And the gym gays, I guess. Where it's like, you know, you have got abs or they're just very conventionally attractive. You know, they kind of fit the Instagram model kind of idea.”*

This representation of queer male body types and aesthetics provides insight into how this conceptualisation is internalised within the population. Brett discussed how most queer men represented are conventionally attractive, this alludes to a homogeneity in appearance, without room or representation of diverse body shape or appearances. Speculatively, negatively influencing those who encompass an appearance or body aesthetic that lies outside of the congenitally attractive queer men with abs. The language used here also suggests that such body aesthetics are not attainable, at least by the majority; having abs and looking like an Instagram model is not an aesthetic which all gay men can relate to or attain.

Participants further elaborated on perceived ideals of attractiveness and representations of queer men within the community. Tyler, a manager for a supermarket chain, builds on the response by Brett, describing the ‘standard’ of aesthetic most represented within the community as being pristine:

[Tyler, 31 years old, Gay] *“They're always like pristine, or it seemed to be pristine and perfect.”*

The idea of perfection relates back to Brett's quote of the ideal expected of gay men is unattainable and unrealistic. The influence of unrealistic and unattainable ideals presented within the community has the potential to promote feelings of isolation and exclusion of those who do not meet that norm. Cultivating spaces where gay and bisexual men feel an expectation to meet such ideals to be considered accepted and valued by other gay and bisexual men is detrimental, considering the expectations of the queer men to meet heteronormative expectations within a wider societal context.

Participants discussed the impact of representation of pristine or unattainable slim ideals had on their feelings towards their own body. Carlton, a recently graduated 30-year-old gay man working in marketing discussed the representations of muscular body types within queer spaces, and how this translates to his feelings about his own body aspirations:

[Carlton, 30 years old, Gay] *"whenever I go out in London like to the clubs, it's it, that's all, that's all you see. You just see the like muscular man. Kind of like it's getting embedded like in your mind like that. Like, that's the body to like desire and aspire to have."*

Encompassing a muscular body represents a focused body ideal within the community with this being represented in the wider society but also within queer spaces. Carlton further states how he internalises this representation and encourages him to feel as there is an expectation for him to aspire to this ideal.

Jay describes themselves a gay male mental health professional living and working in the Midlands. Here Jay describes the body related 'hierarchy' existing within the queer community, highlighting the prejudice towards those who are perceived as lower in the chain:

[Jay, 25 years old, Gay] *"you go down the hierarchy with more chubby or perceived as fat, without a lean body, who are yeah, kind of on the bottom of hierarchy"*.

This quote represents how body aesthetic is understood within the community, with queer men who do not meet the slim or muscular body standard, are placed lower within the overall 'hierarchy'. The negative implications for those who do not poses a slim or muscular body aesthetic are made to feel as though they are not as important or valued within the community; this is illustrated by Jay mentioning how those without a slim or muscular body are perceived as the bottom of the hierarchy. Moreover, this provides insight into the potential negative impact of the unattainable aesthetic ideals prevalent within the community, and the negative impact on psychological wellbeing for those who do not conform.

Many participants illustrated a similar perception of an aesthetic hierarchy within the queer community, and the focus on attaining or maintaining a slim or muscular body aesthetic ideal. Stephen a 46-year-old gay man discusses the importance of conveying to other gay men that you go to the gym, and how this seems to bring social standing:

[Stephen, 46 years old, gay] *"You must have a picture of you in the gym. And it seems like this is like the currency of gay and bisexual men."*

This quote highlights the importance of showing other gay men you go to the gym and have a gym related body. Describing this as 'currency' is interesting and alludes to wealth in the sense of social capital and status within the hierarchy. This also represents self-aggrandisement in relation to the body, whereby gay men feel a sense of 'wealth' or power when showing other gay men that they go to the gym or have an associated body aesthetic.

There were many discussions of how participants felt ostracised in being around such focused ideals and representations among gay and bisexual men in gay spaces, especially if they felt they did not feel they embodied these ideals. Brett here discusses the implications for individuals who have a body that does not meet the expectations of the community within the hierarchy:

[Brett, 28 years old, Gay] *“Sometimes I feel like the odd one out when I'm surrounded by, particularly like the younger gay guys who will often be the slim kind of conventionally handsome. And sometimes I feel like I'm sticking out.”*

Many participants mentioned how they felt pressure to adhere to the bodily standards set out by the community, and how if they felt they did not meet these standards they would ‘stick out’ or not ‘fit in’ with the community as a whole. Feeling isolated within queer spaces, when those spaces were purposed to foster an accepting environment for queer people, comparatively to the historical non-acceptance of being queer in a heteronormative society, presents potential negative implications on psychological wellbeing and clear motivations for wanting to attain such ideals to experience acceptance. The acceptance sought in terms of encompassing focused appearance-related ideals, links closely with identity, and how attaining such ideals enhances association to being gay (or bisexual/queer) and feeling accepted within the community.

Griffin, a 60-year-old, an Irish public servant encapsulates this, by discussing their previous experiences of being in gay spaces and how the focus on aesthetics, especially in relation to the body, impacted their feelings of acceptance within those spaces:

[Griffin, 60 years old, Gay] *“so when you would get ready to go out to the bars or the club you wanted to portray the right sort of image, and also it would be very much about fitting in, feeling as though you were included, and you were a, a part of this community and that you felt accepted or acceptable.”*

This quote represents the impact of existing within this community and within the hierarchical structure set out by the community. The focus on image and aesthetic can make the individual feel as though they are not ‘accepted’ or ‘acceptable’ within gay spaces if they feel they do not meet the ideal. The potential importance of experiencing acceptance among queer men,

considering this community has historically experienced the opposite within wider society, presents the negative impact of not attaining a slim or muscular body type on psychological wellbeing.

This theme overall highlights the importance placed on body aesthetic ideals and the focus on a slim or muscular body type within the community. Participants discussed the body aesthetic hierarchal system which exists within the community. Showing other gay men that you go to the gym or have an associated body was described as ‘currency’ within the community, relating to social capital or status within the hierarchy. The impact of these ideals within the community of those who feel they do not meet the conditions within the hierarchy is to feel as though you do not fit in or feel accepted within queer spaces.

Hiding your body makes it easier to accept

This theme encapsulates the feelings participants hold towards their own body, seemingly directly influenced by the bodily standards upheld by the community. Participants described an overall lack of acceptance for elements of their body which did not ‘conform’ to the slim or muscular ideals denoted within the previous theme. There seemed to be a direct relation of a lack of acceptance for body shape to shame and how participants described how they may cover up aspects of their body with baggy clothes or tattoos.

Many participants discussed the lack of acceptance, and dissatisfaction for their overall body shape and weight, specifically if they felt this did not meet the slim or muscular ideals prevalent within the community, Jake, a 53-year-old, gay man working in the charity sector, here describes his own feelings towards his body shape:

[Jake, 53 years old, Gay] *“I never feel good about being big.” [...] “I always feel as though I am carrying too much weight, and I feel bad. No one sees it apart from me, I don’t like seeing it, so why should I make others have to see it so yeah”.*

Many participants who described themselves as having a “larger body type” would also discuss how dissatisfied they were with having this body. This shows the extent to which Jake is not accepting of his bigger body shape and represents an aspect of shame. He feels as though he should hide his body and feels as though no one should see it or want to see it as a direct response to his own shame and lack of acceptance of his own body.

This overall lack of acceptance for one’s body was shared by many participants; especially those who described themselves as having a larger body type. This remains consistent with the previous theme, in that those who do not meet the body expectations of the community are not ‘accepted or acceptable’. Interestingly, this seems to also relate to a personal lack of acceptance for one’s own body.

[Brett, 28 years old, Gay] *“ultimately if you said take this press this button then you can look however you want. I would press it immediately.”*

This quote shows how unhappy or non-accepting Brett is of his appearance. The use of the word ‘Immediately’, alludes to the extent to which they are unaccepting of their appearance. Experiencing such a stark desire to change one’s appearance highlights the evident dissatisfaction in the appearance one has. The lack of acceptance of participants’ appearance discussed was viewed in line with the perceived lack of acceptance of encompassing an appearance or body type which did not align with the expectations from the wider queer community.

Numerous participants also mentioned how they did not feel that they had a body which was slim or muscular or was particularly sought after within the community, but that

their body was 'passable' or it was something that they could get away with. An example here from Stephen shows how he still feels some shame or lack of acceptance for his body, but satisfied that he could get away with it:

[Stephen, 46 years old, Gay] *"I think it could be worse. It could be better. I don't feel proud of it. No, not at all, I feel. Again, it's not kind of what I just said there on the sort of just the sort of getting away with it. But yeah, don't typically like what I see in the mirror."*

A lack of pride in one's appearance could be interpreted as potential shame, highlighting he overall lack of acceptance Stephen feels about his appearance and body. Stephen here alludes to how he is not accepting of his body, but how in the parameters of the hierarchal community he can get away with it. Potentially he is just about acceptable, in the perspective of the hierarchy within the community. This also alludes to a critical and less than self-compassionate attitude to Stephen's body, presenting the impact of experiencing non-acceptance of the body on the psychological wellbeing of gay and bisexual men.

Some participants discussed how they felt they had a healthy or generally average body shape/weight, but within the parameters of the queer community, they did not feel satisfied or accepting of this appearance. Here Jay discusses how their BMI and body are healthy, but how despite this they feel unsatisfied with their body shape as a result of the body related expectations of the community:

[Jay, 25 years old, Gay] *"I think now I am a in a healthy body and a healthy BMI and healthy weight. But my body isn't kind of still representing that leanness, what everyone wants in the community, and so that's why it's making me feel less confident."*

Jay mentions how he feels less confident as he feels his body is not representing the 'leanness' that is expected of him by the community. This shows the impact of these body expectations within the community on individuals within it, and further highlights the extent

to which he does not accept the body he has, despite him describing it as healthy. Jay discussing that he does not encompass a lean body, that everyone wants in the queer community, alludes to him feels different from what is expected, alluding to potential feelings of isolation or non-acceptance.

Numerous participants described aspects of their body which they were unhappy with or that they would change. These aspects were generally focused on non-slim attributes and focused on not having a flat stomach.

[Tyler, 31 years old, Gay] *“I think my stomach and my love handles, I think that's an aspect that I would want to change because it's like mid centre, it's kind of the area I'd hide.”*

This quote provides insight the lack of acceptance participants experience, relating to elements of their body which do not align with the slim body expectations prevalent within the queer community. Interestingly many participants discussed how they would like to or currently ‘hide’ aspects of their body which they deem unacceptable, further highlighting their lack of acceptance.

Many participants discussed how they would use clothes as a barrier for them to hide aspects of their body in which they not satisfied with or accepting of. Tyler here mentions how wearing an oversized t-shirt or a thicker cotton top is a way for him to hide aspects of his body which he does not deem acceptable:

[Tyler, 31 years old, Gay] *“And shirts that I can kind of wear oversized T-shirt so I can hide certain aspects or try to imitate height. Like a thicker cotton top or a T-shirt which doesn't show so many bumps and lumps.”*

This clearly presents the extent to which Tyler is unaccepting of his body, and by using clothes to ‘hide’ these aspects he is masking this lack of acceptance. Many people wear clothes which will be flattering to their size/shape, however this appears heightened within

the gay community, alluding to the inability to expose one's body, if it does not conform to body ideals. Tyler mentioning hiding 'bumps and lumps' with thicker material in t-shirts, illustrated there are specific aspects of his body he is not accepting of, and therefore, perceives others to be non-accepting of. The implications on being non-accepting of one's body, and hiding aspects due to perceived non-acceptance of others demonstrates lack of self-compassion participants 'exercised in relation to their body perceptions.

Jeremy a 26-year-old support worker working with LGBTQ+ individuals who have endured domestic abuse, here he supports the quote by Tyler by discussing how he feels more accepting of his body because of his tattoos:

[Jeremy, 26 years old, Gay] *"so I have lots of tattoos which you can't actually see at the moment I think that's possibly if I have art work on me then I feel better about it because at least my partner can look at art work rather than my actual body"*.

This shows the extent to which Jeremy is unaccepting of his body aesthetic and having tattoos to him, provides barrier in which others are not subject to seeing his body, or elements which he feels are not acceptable. Tyler also mentions how his partner can look at his artwork rather than his body, there is a focus here on the body and aesthetic appeal, with no mention of Tyler discussing himself as a person. This alludes to the importance of the body in gay male relationships, whereby, aesthetic appearances are perceived of greater importance than other aspects of connection and intimacy. The importance Tyler places on the visual aspects of intimacy are further highlighted by the distraction he describes as his tattoos being the primary focus, further exemplifying the lack of acceptance of his body and importance being considered aesthetically attractive.

Overall, this theme highlights the extent to which participants experienced a lack of acceptance for aspects of their body which did not align with a slim or muscular ideal. This

interestingly also aligned with the perceived body expectations that participants described in the queer community, relating to the body related hierarchy discussed within the first theme. Participants discussed how not meeting these prevalent expectations meant a lower place in this hierarchy within the community. The extent to which participants were unaccepting of their body was evident, as they discussed hiding elements of their body which they did not accept through wearing oversized clothes or using tattoos to feel more acceptable.

If I were compassionate towards myself, I would accept my body

Finally, this theme explores participant's definitions of self-compassion. Interestingly, this was widely discussed in relation to acceptance of themselves including elements of themselves they perceived as flaws or aspects they are not satisfied with. Interviews also explored self-kindness, and what this meant to participants in relation to their body, this was often related to their previous concept of self-compassion; actively accepting themselves and ensuring to avoid self-criticism of their body.

Most participants relayed acceptance of themselves as the principal aspect when asked to describe what self-love meant to them. Harry, a 52-year-old gay man from Ireland discusses what self-love means to him:

[Harry, 52 years old, Gay] *“Self-love is accepting yourself for who you are with all your faults and all your failings, and realizing that we all have faults. We all have feelings. We are not perfect, but just loving yourself for who you are.”*

Many participants reflected a similar response when asked about their conceptualisations of self-compassion. Acceptance of the self is relevant to this community due to historical lack of overall acceptance and discrimination faced by queer individuals, highlighting the importance of acceptance of the self within the community. These conceptualisations of self-compassion

as acceptance were interesting, considering the discussions in previous themes whereby, participants elicited an overall lack of self-compassion and acceptance.

Many participants illustrated how self-compassion to them, aligned with acceptance of their appearance, highlighting the importance of appearance to gay men and how this links to self-compassion:

[Brett, 28 years old, Gay] *“Umm. And I guess acceptance of yourself and what you look like and how you are as a person that including your personality but not excusing your flaws, but just embracing that nobody's perfect.”*

Brett here mentions how self-compassion to him is accepting what he looks like, this is interesting considering previously, he spoke of how unaccepting he is of his appearance. In accepting that ‘nobody is perfect’, Brett is alluding to the expectations of the community that gay men should present as aesthetically perfect. This provides insight into how self-compassion is experienced among queer men and how there is an understanding of self-compassion, but as illustrated in previous themes, they are not accepting or self-compassionate in relation to their appearance and body.

Brett here further elaborates on what accepting himself means and how this relates to his feelings about not conforming to the aesthetic expectations set out by the community:

[Brett, 28 years old, Gay] *“If I do feel like I'm standing out, own the fact that I'm standing out and that I'm unique rather than seeing it from a negative point of view of, oh, my God, these people think I look different. Own the fact that you do look different and that you're not just a clone of every other kind of person in the room.”*

This response relates to the responses within the second theme, where participants spoke of how they would use mechanisms to hide aspects of their body they did not feel were acceptable or aligned with the ideals within the queer community. Brett here discusses how

acceptance is valuing being different to the 'norm' and not being conscious of how others perceive you, even in situations you may perceive judgement, and in light of your different aesthetic and aligns with their previous conceptualisations of self-compassion.

Multiple participants mentioned how self-compassion means accepting or loving elements of yourself, that you are not 'normally' accepting of. Jeremy here discusses how loving yourself means loving elements of yourself you consider 'bad bits', and how this is an internal state, as opposed to seeking love from others:

[Jeremy, 26 years old, Gay] *"Loving yourself for all your good bits and all your bad bits and on the days where you feel worse for ware, it's so much bigger than that its learning to love yourself without being loved, it's an internal state of loving yourself as opposed to getting love from other people."*

This again relates to how unaccepting participants were of those elements previously within the interview. Jeremy here also states the importance of loving yourself and not seeking love or acceptance from other people. This is interesting considering how in the previous two themes, there was a focus on how others perceive you especially through the lens of body aesthetic, and how this leads to a lack of acceptance of elements of the body that do not meet the community ideals.

William, a 35-year-old gay man who describes themselves as 'slim' responds to a question around how he could be kind to himself in relation to his body:

[William, 35 years old, Gay] *"I know that I'm quite self-critical about not just body image but other things as well and you know, I sort of yeah often said to myself that, you know, I just need to kind of recognize it when that happens and stop myself from doing it. But yeah, in the moment it can be quite hard to do."*

William acknowledges his own self-critical attitude towards his body. His explanation of self-kindness is to recognise when these critical attitudes occur and stop himself in that moment. Following this, William mentions how this can be difficult to do, this could be interpreted as difficult due to the community pressures of being “*pristine and perfect*”, and further highlights the unique barriers to self-compassion and acceptance experienced by the population.

Many participants discussed how difficult it is to fully accept yourself in the context of your appearance and body, despite understanding how crucial this is to psychological wellbeing. This quote builds on the response from William, discussing how difficult acceptance of your body is, through the lens of self-compassion and self-kindness:

[Stephen, 46 years old, Gay] “*a friend said to me and said, you know, instead of stressing about what you look like and I said why don't you just, you know, accept yourself as you are and you might feel like happier and for some reason I can't accept that for some reason. I guess it feels like I'm giving in. I'm throwing in the towel.*”

Stephen here is alluding to William’s comment, whereby acceptance is difficult to achieve. This is not surprising considering the themes how critical the gay community is and how this translates to gay men not accepting their body’s if they do not been the ideals set by the community. Stephen elaborates on this, mentioning that accepting yourself would feel like ‘giving in’; this could be viewed through the lens of the hierarchy within the gay community. Accepting a body which does not fit the community ideals would mean accepting that you are lower within the aesthetic hierarchy, and this is difficult for Stephen to accept.

Overall, this theme provides insight into how participants conceptualised self-compassion and self-kindness. With love towards oneself relating to acceptance, including elements of oneself that is not considered to be acceptable. Self-kindness was viewed in

relation to stopping yourself from being critical of your body which relates to the previous discussions of acceptance and self-love. Some participants denoted how difficult accepting the body is, and how this relates to the aesthetic hierarchy explored within theme one and two. Further to this, how the concept of accepting one's body if it does not meet the expectations of the community, would feel like accepting defeat, which provides an explanatory view of the difficulty experienced.

7.5. Discussion

This research aimed to explore the feelings and experiences in relation to their body evaluations, acceptance of their body and self-compassion. Considering prior research outlining the negative prevalence of body image and related issues, the in-depth examination of self-compassion and self-kindness and links to body acceptance offers valuable insight into how these constructs are experienced within the wider parameters of queer experiences. Overall findings provide support to previous research, outlining the social comparative nature of the gay community, and impact on body ideals, and acceptance within queer spaces. Exploration of these elements through the lens of self-compassion, self-criticism and self-kindness provides adds to previous research, denoting the importance and potential utility of self-compassion in attenuating body image issues among gay and bisexual men.

Participants widely expressed the most represented body type of queer men was a slim or muscular aesthetic, both within the media and within queer spaces. A body-related hierarchy was discussed among multiple participants, with those who attain a slim or muscular physique at the top, and those who do not, placed lower within the hierarchy. This is related to previous research, that gay and bisexual men aim for a slim or muscular body ideal (Blashill, 2010; Kaminski et al., 2005; Lanzieri & Hildebrandt, 2016), enforced by community-based norms and values relating to body aesthetics (Duncan, 2010; Morgan &

Arcelus, 2009; Regan et al., 2021). It was also accepted that this hierarchy had a specific negative impact on individual's wellbeing, whereby participants felt they did not feel accepted or acceptable within queer spaces if they felt they were lower within the aesthetic hierarchy.

Although the majority of participants discussed in some way, the extent to which this hierarchy affected them and their own body ideals and non-acceptance, there were times where participants mentioned that they preferred to be in more inclusive queer spaces. Some queer venues market themselves as 'bear bars', whereby, a sub-section of the community who identify as bears (typically encompassing larger body types) would go and drink. There were times where participants mentioned they would prefer to go to bear bars as they were more inclusive of diverse body types, or that they would avoid being in queer spaces. Given the detrimental impact of non-acceptance of queer individuals historically within heteronormative society, the need for inclusive space is clear. Not feeling comfortable or accepted in those spaces due to not encompassing a slim or muscular body, illustrates the potentially negative impact on psychological wellbeing of the population.

Participants discussed how specific elements of their body were unacceptable through the lens of the community body standards, and how this lack of acceptance translated through their own feelings about their body. This lack of acceptance was further represented by the way participants discussed using baggy clothes as a way to hide aspects of their body they are not happy with. Findings highlighted the extent to which participants were non-accepting of their bodies and how this aligned with the lack of acceptance of diverse body types within the community. Focusing on how the internal hierarchy of body aesthetics within the community detrimentally affects individuals who do not align with the community's defined ideals refers to the first theme also. This is supported by previous research highlighting the dissatisfaction gay and bisexual men experience, and how this links to a lack of acceptance of the body, self-

criticism, and body shame (Foster-Gimbel & Engeln, 2016; Moreno-Domínguez et al., 2019; Schmidt et al., 2022; Wrench & Knapp, 2008).

General questions about what self-compassion meant to participants interestingly proposed responses related to the body and appearance-related acceptance; this was further explored when participants responded to questions about self-kindness. Many participants conceptualised how self-kindness was acceptance of the self despite their perceived flaws in relation to their appearance and body. This was viewed in relation to the unique experience of the population as not being accepted historically and within current society, and further how within the queer community, acceptance is conditional and based upon focused body ideals. Cumulatively, it was interesting to observe how participants understood the value of self-compassion and self-acceptance, but given the discussions in previous themes, did not practice this. Some context of this difficulty was illustrated where participants discussed how accepting one's body felt like throwing in the towel or giving up. This shows the extent to which participants focus on the ideals set out by the community, and how acceptance is harder to work towards than self-criticism and working towards a slim or muscular body type and being considered acceptable by others. Moreover, this relates to the internal and unique importance of experiencing acceptance from others, which could be explained by the lack of acceptance of queer individuals by wider society, and how this translates to a desire or need for acceptance from other queer men, by attaining and/or maintain a slim aesthetic ideal.

It is important to consider the process in which data was collected and the role of the researcher in contextualising the data within the aims of the researcher and the theoretical underpinnings of RTA. When collecting the data, the researcher reflected on the unspoken acknowledgement that participants mostly shared the same identity as the researcher. This assisted data collection in that participants appeared to feel comfortable discussing topics which were unique to queer people, like dating, dating apps and sexual encounters. It is also

important to note however, that because of this comfortability, participants would avoid explaining the wider context of certain situations, due to the understanding that the researcher already had this knowledge. Within data analysis, the researchers own experiences were key to contextualising the data from a queer position, highlighting elements of the data which aligned with their own knowledge and experiences of queer culture. This is valued within RTA, allowing room for the research perspective to guide the narrative developed within each theme explored (Braun and Clarke, 2019; Braun and Clarke, 2021; Braun et al., 2023).

The researcher concedes the following limitations of the study. The study aims denote exploring gay and bisexual men's experiences, but only one bisexual participant responded to the recruitment call. Future research should aim to explore the experiences of bisexual men to provide insight into their experiences in relation to body image, acceptance, and self-compassion. One participant identified themselves as a trans-man, and it is equally important to consider the unique experiences of trans men in relation to body image. During this interview, in-depth discussions centred around the participant's experiences, particularly regarding their body as it related to their transitioning journey. The focus was on how their sense of body esteem was intrinsically tied to how they perceived their body aligning with their gender identity. Further exploring body image among trans men would help to gain insight into how these nuanced experiences relate to self-compassion and self-kindness.

It is also important to note the lack of clarity participants had around understanding 'self-compassion'. In early interviews, it became clear that some questions should be re-worded to address elements of self-compassion, and not to ask participants to comment on their own perceptions of self-compassion as a whole. Future research should consider the theoretical complexities of exploring self-compassion among participants and contemplate the impact of this on attaining responses that are congruent with the theoretical understanding of self-compassion. Future research should aim to further explore the experience of gay men

in relation to self-compassion, self-kindness and body image by exploring body shame and self-criticism further, as well as highlighting potential barriers to utilising self-compassion-based interventions within this population.

Overall, this research provides insight into the feelings and experiences of gay men in relation to body image, body acceptance and self-compassion. This research highlighted the overall lack of acceptance gay men have of their bodies through the lens of the body aesthetic expectations set out by the queer community. The body shame and criticism experienced were shown to be a potential barrier to accepting oneself and engaging in self-compassion and self-kindness. The findings of this research offer elements to consider when utilising self-compassion or self-kindness-based interventions to attenuate body image-related issues among gay men and support psychological wellbeing.

**CHAPTER 8: EXPLORING PROBLEMATIC EATING AND QUEER
EXPERIENCES: A QUALITATIVE INVESTIGATION OF SELF-COMPASSION
AND EATING BEHAVIOURS AMONG GAY AND BISEXUAL MEN**

8.1. Abstract

Background: Research has denoted a higher prevalence of eating disturbances among gay and bisexual men, compared to straight men. Slim and muscular body ideals prevalent in the community were found to underpin dieting behaviours and restrictive eating practices to attain such ideals. Qualitative explorations of self-compassion in relation to eating behaviours may provide an understanding of how the construct is experienced in the population, yielding support for its utility in future interventions in eating behaviours.

Method: Nineteen self-identified, gay, bisexual or queer men took part in a semi-structured interview, exploring how eating behaviours are influenced by queer culture, body ideals and self-compassion. Data was analysed using Reflexive Thematic Analysis, following the six procedural steps, while valuing the reflexivity and interpretation from the researcher.

Results: Four themes were conceptualised, providing insight into how body ideals and identity influence eating behaviours and the way in which self-compassion is framed as a means to engage in problematic eating behaviours aimed at achieving a body ideal. The first theme, “Body ideals within the community encourages weight loss”, explores participants' perceptions of body types which are most represented within the community, and how this influences participants to feel critical of their own body and therefore influence eating behaviours. The second theme, “Eating for comfort leads to feeling guilty”, highlighted participants experience of eating high calorie food to cope with negative emotions, and the subsequent feelings of guilt experienced post eating. The third theme “Restrained eating and dieting practices to lose weight”, explored the focused and controlled way participants were

around food, including the dieting and weight management behaviours they engaged with to maintain a specific weight and body ideal. The fourth theme, “Cruel to be kind”, explored how participants defined self-compassion as acceptance, including their perceived flaws, but conflictingly, how perceptions of self-kindness in relation to the body involved maintaining a restricted diet to meet their desired body ideals.

Conclusion: Findings present the importance and potential utility of self-compassion in addressing problematic eating behaviours motivated by body related issues.

8.2. Background

Gay and bisexual men have been found to experience disproportionate eating and body-related issues comparatively to straight men (Kaminski et al., 2005; Morgan & Arcelus, 2009, Tiggemann et al., 2007; Williamson & Hartley, 1998). Research has explored elements of queer culture, and pressure to conform to slim and muscular body ideals within the community, influence eating behaviours and dieting practices within the population (Kvalem et al., 2016; Morgan & Arcelus, 2009; Tiggemann et al., 2007; Regan et al., 2021). The greater emphasis on attaining or maintain a slim ideal within the community has promoted engagement of restrictive eating and dieting behaviours to meet community body-related expectations (Duggan & McCreary, 2013; Filice et al., 2019; Regan et al., 2021; Tran et al., 2020). Self-compassion has been associated with eating and body-related issues among general and more specific populations (Egan & Mantzios, 2018; Mantzios et al., 2018a; b). Qualitative investigations into eating behaviours, body image perceptions, and the underlying determinants among gay and bisexual men may yield a deeper understanding. Such inquiries have the potential to offer novel perspectives and avenues for informing the development of future interventions centred on self-compassion, with the aim to mitigate eating-related and body image concerns within this particular population.

Research focusing on eating behaviours deemed problematic has provided insight into how such behaviours relate to body-related issues and wellbeing. Such as restrained eating, described as the restrictive intake of food to achieve or maintain weight loss or to avoid weight gain (Herman & Mack, 1975). Restrained eating has been related to dieting culture and weight loss (Goldstein et al., 2013; Lowe et al., 2005), and has been found to be predictive of disordered eating among specific populations highlighted as more at risk of eating and body-related disturbances (e.g., cis female heterosexual populations) (Anderson et al., 2016; Costarelli & Patsai, 2012). Research investigating the role of restrained eating among gay men reports the association of body fat dissatisfaction, body-related shame and psychological distress (Blashill, 2010; Martins et al., 2007), highlighting the importance of the relationship of body-related disturbances and restrained eating among gay men.

Emotional eating is similarly considered problematic and related to negative health outcomes (e.g., increased weight gain and BMI) (Banna et al., 2018; Modrzejewska et al., 2021); it has been defined as overeating in response to experiencing negative (and positive) emotions (Frayn & Knäuper, 2018). Similar to restrained eating, emotional eating has been associated with disordered eating and body dissatisfaction among general and specific populations (Barnhart et al., 2021; Danner et al., 2012; Stojek et al., 2017). An investigation into emotional eating, dietary restraint, and body-related concerns among gay and bisexual men would offer valuable insights into the interconnections among these constructs within this specific demographic. Such research would contribute to a more comprehensive understanding of how to effectively address and mitigate these issues within the community.

One potential approach to mitigating detrimental eating and body-related perceptions is the cultivation of self-compassion. Self-compassion is a mindfulness-based construct that is defined as the recognition of one's own suffering and the impetus to alleviate it, encompassing three enabling elements: self-kindness, common humanity and mindfulness

(Germer & Neff, 2013). Self-compassion-based interventions have been effective in attenuating eating disturbances. Breines et al. (2014) found that a self-compassion intervention reduced body shame and disordered eating in participants who responded to their perceived body flaws with self-acceptance. The same self-compassion intervention also led to lower weight gain concerns and self-punishment motives among those with restrained eating habits post-intervention. Similar outcomes were presented across comparative intervention studies, utilizing meditative and reflective practices, highlighting the efficacy of self-compassion-based interventions in attenuating problematic eating and body-related issues (Boggiss et al., 2020; Kelly et al., 2014; Turk et al., 2021). Collectively, research highlights the importance of self-compassion when considering eating and body-related issues, presenting elements to explore in relation to gay and bisexual men.

Divergent to previous literature, self-kindness, a component of self-compassion, is identified as treating oneself kindly when experiencing feelings of inadequacy or failure (Egan & Mantzios, 2018; Germer & Neff, 2013). Previous research has reported a negative association of self-compassion with problematic eating and body-image related issues (Egan & Mantzios, 2018; Mantzios et al., 2018a; b). Qualitative explorations of self-kindness, within the context of weight management and dieting provided incongruent perceptions of self-kindness, misaligned with dietary restraint and exercise (Egan & Mantzios, 2018). Treating oneself to highly palatable foods and taking a break from dieting or eating in a restrictive manner was viewed as an act of self-kindness, illustrating a conceptualisation of self-kindness which caters more to supporting the mind rather than the body (Egan & Mantzios, 2018). This research provides insight into perceptions of self-compassion and self-kindness in relation to eating and weight management. Furthermore, self-kindness can be extended to both the mind and the body; however, research suggests that directing self-kindness toward the body may yield more favourable outcomes in terms of eating behaviours

(Hussain et al., 2021). An equilibrium directed towards both body and mind has the potential to foster healthier self-perceptions and health-related behaviours (see also Mantzios & Egan, 2017). Exploration of self-compassion, self-kindness and problematic eating among gay and bisexual men would provide an understanding of how these elements are understood and experienced.

The pervasive societal pressures exerted upon gay and bisexual men to conform to slender and muscular body standards contribute to the cultivation of eating and body-related problems. Extensive research has demonstrated the efficacy of self-compassion and self-kindness in ameliorating eating and body-related concerns across diverse populations. Consequently, a comprehensive examination of the interplay between eating behaviours, body image evaluation, self-compassion, and self-kindness among gay and bisexual men holds promise for identifying potential avenues to inform the development of future interventions rooted in principles of self-compassion.

8.3. Method

Participants

Nineteen participants took part in the research, aged between 23-54 years old, 16 self-identified as gay or bisexual male, and three participants identified as non-binary queer and fluid. Exclusion criteria included participants who were below the age of 18 years of age, and those who did not identify as gay, bisexual or heteroflexible men. Non-binary, trans and fluid individuals were welcomed to take part in the research, as presented on the poster advert. Participant demographic information is presented within Table 8.1.

Table 8.1. Participant Demographic Information.

Pseudonym	Age	Ethnicity	Gender identity	Sexuality	Self-identified body type
John	23	White Polish	Non-binary	Gay	Chubby
Aiden	43	White British	Cis male	Gay	Large
Jason	38	Black British	Cis male	Gay	Not fat, not fully toned
Mark	26	White Irish	Cis male	Gay	Slender build
Jaz	N/A	N/A	N/A	N/A	N/A
Connor	40	White British	Cis male	Bisexual	Fit
Joel	34	White British	Cis male	Bisexual	Lean/average
Paul	29	White British	Cis male	Gay	Slim
Seth	29	White British	Cis male	Gay	Average
Lewis	N/A	N/A	N/A	N/A	N/A
Max	29	Dual Heritage	Cis male	Queer	Athletic
Carl	29	British Asian	Cis male	Gay	Extra Large
Terry	54	White British	Cis male	Gay	Large
Ibai	33	Other	Cis male	Bisexual	Slim(ish)/Otter
Corey	N/A	N/A	N/A	N/A	N/A
Marco	28	White British	Cis male	Gay	Bear
Jake	24	White British	Cis male	Queer	Fat
Theo	19	White British	Cis male	Gay	Average
Leon	33	British Irish	Cis male	Gay	Average

Semi-structured Interviews

Semi-structured interviews were employed to explore participants feelings, opinions and experiences of eating, body acceptance, self-compassion and mindfulness. Interviews were guided by a semi-structured interview schedule, exploring questions aligning with the topics of focus and aims of the research. The semi-structured nature of the overall interview process allowed for the researcher to follow up with further questions and prompts to support further exploration of relevant responses from the participant. Questions were developed by the research team, deriving from previous research conducted within the parameters of the topics explored. The cadence of the interview was influenced by the order of questions in the schedule, allowing for some structure within the schedule, allowing participants to start with more general discussions, moving to more sensitive focus later in the interviews.

Overall, questions were open ended in nature, with leading and closed questions avoided, allowing for greater depth of responses from participants and cultivating greater elaboration of topics explored. Firstly, initial ice-breaker questions were asked, to allow participants to feel grounded in the interview, helping to build rapport between the researcher and participants (Ahlin, 2019) (e.g., how did you feel about taking part in this research?). Secondly, the researcher explored general eating and participants relationship with food, this enabled participants to discuss their eating behaviours and any potential influencers, aligning with literature exploring eating among gay and bisexual men (e.g., Drummond, 2005; Morgan & Arcelus, 2009; Tiggemann et al., 2007) (e.g., How would you describe your relationship with eating?). Thirdly, the researcher asked questions around body perception and acceptance, building on the work from previous cross-sectional chapters, and literature highlighting the lack of acceptance gay and bisexual men experience of their body (Boisvert & Harrell, 2010; Morgan & Arcelus, 2009) (e.g., How do you feel about your body?). Fourthly, the researcher asked questions focusing on self-compassion and self-kindness,

providing insight into participant's perceptions of these constructs, providing insight into experiences unique to the population of focus (e.g., How would you be kind to yourself in relation to your body?). Lastly, the researcher asked one or two concluding questions, gauging how the participants were feeling as the interview was ending, this gave participants' the opportunity to ask any questions and be guided through debrief information (Horton et al., 2004) (e.g., How are you feeling, as the interview is coming to a close?)

Procedure

Data collection occurred from November of 2022 to March of 2023. Advertisement of the research study was utilised through posting a poster to social media platforms (Facebook and Twitter), containing information around the study process, aims and researcher contact information. This opportunity sampling method allowed for potential participants to be informed when deciding to contact the researcher to take part (Husband, 2020). Upon expression of interest in taking part, participants were sent the participant information sheet providing more detailed information on the research process, allowing participants to be fully informed when deciding to take part (Husband, 2020). Data collection occurred until consensus among research team determined data saturation had been reached.

The interviews were both face-to-face and virtual interviews, based on participants' expressed preferences, lasting around 40 to 60 minutes. Face-to-face interviews were conducted in a public quiet place agreed upon with the participant prior to the interview. The virtual interviews were conducted on Microsoft Teams from a university password-protected Microsoft account, following ethical guidelines for conducting virtual interviews. A departmental Dictaphone was used to record the interviews when conducted face to face, and Microsoft Teams was used to record interviews conducted virtually. Upon completion,

participants were sent Debrief forms, containing information about data handling, withdrawal, further support and researcher contact information.

Ethical considerations

Ethical approval was obtained by the University's Faculty Ethics Committee (Regan /#10932 /sub4 /R(B) /2022 /Sep /BLSS FAEC). Participant information forms were sent upon participants expressing interest in taking part, outlining the aims of the research process, sample questions from the interview schedule and withdrawal information. Participants were verbally informed of their right to pause, stop or withdraw from the research at any time during the interview. During the interviews, the researcher checked in with the participant and asked them if they would like a break, this was to mitigate any potential harm and avoid participants feeling overwhelmed. Consent forms were sent via email and were completed before interviews were scheduled. Data and participant information was stored on a password protected one-drive account and stored for five years; recordings were deleted immediately after transcription. Any identifiable information was removed from transcripts to preserve participants anonymity (e.g., names and places of work). The virtual interviews took place on MS Teams and were conducted using a Birmingham City University account.

Data analysis

Reflexive Thematic Analysis (RTA) was employed to analyse the data, aligning with the constructivist theoretical underpinnings and assumptions of this analytic strategy (Braun & Clarke, 2019). Please see '7.3., Data Analysis' for detailed information regarding how the data was analysed within the reflexive analytic strategy within the current chapter.

Reflexivity

Please see ‘7.3., Reflexivity’ for a detailed reflexive account of the researcher’s involvement and influence in data analysis within the current chapter.

8.4. Results

Reflexive Thematic Analysis was applied to the interview transcripts using the Braun and Clarke’s (2006) model; four overarching themes were explored, providing insight into participant’s experiences and attitudes towards eating behaviours, identity, body ideals within the gay community, and self-compassion (*see Table 8.2.*). The first theme, “Body ideals within the community encourages weight loss” explores participants’ perceptions of body types which are most represented within the community, and how this influences participants to feel critical of their own body, and further insight motivation to lose weight. The second theme, “Eating for comfort leads to feeling guilty”, highlighted participants experience of eating high calorie food to cope with negative emotions, and the subsequent feelings of guilt experienced post eating. The third theme “Restrained eating and dieting practices to lose weight”, explored the focused and controlled way participants were around food, including the dieting and weight management behaviours they engaged with to maintain a specific weight and body ideal. The fourth theme, “Cruel to be kind”, explored how participants defined self-compassion as acceptance, including their perceived flaws, but conflictingly, how perceptions of self-kindness in relation to the body involved maintaining a restricted diet to meet their desired body ideals. Themes are discussed within the following section, with supporting data and interpretation from the researcher, following a Reflexive Thematic Analytic approach to theme conceptualisation. There are aspects of participants’ experiences and understandings that overlap across these themes, however this was to be expected.

Table 8.2. Development of codes to Themes.

Themes	Body ideals within the community encourages weight loss	Eating for comfort leads to feeling guilty	Restrained eating and dieting practices to lose weight	Cruel to be kind
Codes	Slim and muscular bodies are most represented among gay men	Eating high calorific foods to cope with negative emotions and experiences	Exercising a controlled way of being around food and consumption.	Self-love is accepting yourself for your flaws
	Body ideals in the community translate to individual body goals	Regret/sham experienced after eating high calorific foods	Monitoring food intake to align with specific diet guidelines	Self-kindness is not being critical of yourself and your body
	Body ideals in the community encourage a desire for weight loss	Guilt experienced due to the impact of eating high calorie foods on body aesthetic	Monitoring overall weight with negative perceptions of weight gain.	Self-kindness perceived as engaging in weight management behaviours.

Body ideals within the community encourages weight loss

This theme highlights the motivations and reasons which impact on eating behaviours. Most participants made reference to the slim and muscular body ideal represented within the queer community and how this drove the way in which they engaged with eating. Eating

behaviours were led by a desire to reduce critical or judgemental responses both from others and from the self.

Many participants would discuss the high, and sometimes unrealistic body standards within the queer community, and how this specifically related to weight and body size. Jaz, a senior care worker, discusses the body standards prevalent within the community, highlighting how these relate to specific aesthetic and weight ideals:

[Jaz] *“It is very much physical and it's like you've got to look a certain way and if you're a bit different, say if you're a little bit fat or, if you're a little bit, I don't know. Being fat and overweight, it seems to be a big no no in the community definitely.”*

A number of participants highlighted the extent to which gay men are expected to conform to slim body ideal, where those who do not embody this norm are perceived to not be accepted others, and struggle to accept themselves. Further to this, Jaz offers how being overweight or a ‘a little bit’ fat is not acceptable, emphasising the fat prejudice within the community.

Most participants spoke of similar representations of slim body types within the community and how they felt this was an expectation, and those who do not meet these ideals are met with judgement.

e.g., [Lewis] *“I think there's a lot of judgment when it comes to gay men that are overweight or obese? They're all just supposed to be slim and have a have a flat stomach.”* This quote supports Jaz's quote, conveying the extent to which queer men are judgemental of weight and body shape within the community. Interestingly, Lewis here mentions how queer men are ‘supposed to be slim’, highlighting how this expectation is strongly linked to the identity of gay and bisexual men and the promotion of on potential restrictive eating and dieting behaviours to attain such ideals. Following discussions of representation of community body ideals, participants moved on to discuss how these ideals would affect or

influence how they felt about their own body, and body goals. Connor, a 40-year-old occupational therapist who enjoys traveling with his family, further discussed body-related ideals prevalent in the queer community, and mentions how this affects his own body ideals:

[Connor, 40, Bisexual] *“A gay nightclub or something. And you see these sort of. Younger guys who are really slim and like really amazing bodies and then. Sometimes I do think like, you know, I’d like to be like that.”*

Connor’s quote reflects responses from many participants, the focused body ideals prevalent within the community negatively affect perceptions of participants’ own bodies. This shows a lack of acceptance of one’s own body, specifically if participants felt their body did not meet these aesthetic expectations of the community. Similarly to Lewis’s quote, Connor’s response links to identity, and the importance of attaining or maintaining a slim body type to feel accepted in gay in gay spaces, and provides insight into the potential impact of such ideals on the promotion of restrictive eating to attain such ideals to feel accepted.

Participants would also discuss their own identity in relation to age and body type, and how age and body type are important factors in feeling accepted within the community. Jason is a 38-year-old who works in accordance with youth violence reduction and enjoys a busy social life; here he highlights how the representations of slim body types in gay spaces influences him to feel conscious of his food choices:

[Jason, 38, Gay] *“compare yourself at times to people whether it's because of age or you're seeing these younger slimmer fitter guys and you thinking, Gosh, you know you makes you more self-conscious of what you're eating.”*

Jason discusses how age and being older does not align with representations of the community and how he feels this further distances him from the queer slim, young ideals within the community. This also alludes to worth within the population and the higher worth

placed on younger, slimmer queer men. Moreover, this quote shows the influence of body aesthetic and weight expectations had of gay men by the wider community on the individuals eating and food choices. Similar responses were reflected by other participants, whereby the desire to lose weight or attain a slim body type was in discussed from perceived critical expectations of the community, which translated individuals feeling critical of their own body, cultivating conscious attention of food choices.

Further discussions of body ideals within the community would also prompt responses around identity and how gay men are expected to align their eating or health behaviours with these focused ideals. Mark, a 26-year-old hospitality worker who enjoys queer nightlife, further elaborates on the influence of gay body aesthetic representation on individual eating behaviours and attitudes towards food choices:

[Mark, 26, Gay] *“It feels like all you kind of have to eat is stuff that's high in protein. It seems like everything that you were supposed to eat as a as a gay man is high in protein, something that's gonna build your body build muscles build some kind of shape or form, and then go to the gym and you burn it off and then you have some more protein to kind of boost the protein that you burnt off.”*

Mark here discusses how the ideals presented within the community translate to expectations of gay men to make specific food choices. Eating a high protein diet is directly linked to supplementing a slim and/or muscular physique, Mark mentions this when he discusses how protein is eating to build shape and muscles. This quote also states how this seems to be a repetitive dietary expectation, where gay men will burn off protein in the gym and will then continue eating high protein foods to replace the food burned off. This is a focused way of being with food and shows insight into how food is perceived as fuel to supplementing the progress of developing specific body ideals. The focused way of eating adopted by Mark,

suggested a distinct lack of pleasure in overall eat, motivations for eating seem to be exclusively for supplementing body shape and attaining or maintain a slim or muscular body type.

Many participants felt they did not possess a body type which was accepted within the community ideals. They would discuss how this made them feel self-conscious in gay spaces being around other gay men who did poses this body ideal, and further, encouraged them to feel they should attain it. Carl is a 29-year-old who described themselves as a 'foodie', suggesting that he takes pleasure in food and eating, but his discussion of slim body ideals within gay spaces, translates to self-comparison and self-criticism influencing him to want to diet and lose weight:

[Carl, 29, Gay] *“And you see them and think, I’m not that, so it makes you think I want to go home and go on a diet, and lose some weight or something yeah being around that in that community can be quite hard I think.”*

This quote represents how the ideals portrayed within the community strongly impact eating behaviours for gay men, specifically if they feel they do not meet the aesthetic standards. Carl discusses how for him, this relates to weight loss and feeling he should conform to this slim ideal. He also mentions how it can be hard to exist in gay spaces if you do not conform, which provides insight into the detrimental impact feeling unaccepted in queer spaces, which are designed to foster an accepting environment situated within heteronormative and potentially non-accepting society. Carl later in the interview discussed the extent to which his desire to lose weight affects his mental wellbeing, and extreme measures he considered to achieve a slim body type:

[Carl, 29, Gay] *“there have been times where I looked at my body and just wanted to go for the easy option and go to Turkey and get your stomach put down. You get to the point*

where you get sick of how you feel and how you look. It starts to affect your mental health doesn't it, and you go down this rabbit hole, so I feel like that, it got to a point where it was actually quite scary where I was considering doing that, so it affects your mental health I think."

Having surgery to lose weight is an extreme measure to consider losing weight and shows the extent to which Carl is motivated to attain a slimmer body type and feels that this cannot be achieved by changing his eating behaviours. Carl self-identified his body type as being 'extra-large', which provides context to perceived non-acceptance by the community in not embodying a slim or muscular ideal. The negative affect of being non accepting of your body and the extremity of dissatisfaction Carl experiences is clear, this is further highlighted by his own description of this recollection as being 'scary', suggesting his own awareness of the extreme measures he considered to lose weight. Overall, this highlights the negative affect of experiencing non-acceptance, when feeling accepted within one's own community is deemed of novel importance and aligns with accepting one's own identity.

This theme highlights how the representation of slim and/or muscular body types among gay and bisexual men impacts on eating behaviours. Discussions of how these representations affect individuals and how they perceive their own bodies provides insight into the critical attitudes held towards those who do not encompass this body aesthetic. The impact of these judgements and expectations on individuals within the community were discussed, showing the extent to which participants were dissatisfied if they felt they did not meet this ideal, providing motivations to amend their eating and lose weight. The impact of being in gay spaces, if participants felt they did not meet this ideal, was presented in the negative influence this has on mental wellbeing.

Eating for comfort leads to feeling guilty

Many participants discussed how they would eat high-calorie foods to cope with negative emotions or experiences. This theme conceptualises the extent to which participants engaged in these behaviours. Participants also discussed how they would experience shame and guilt after eating high-calorie foods, alluding to the impact this would have on their overall body aesthetic. This was viewed in the context of moving further away from attaining or maintaining a slim body type alluding to community pressures to attain such ideals as discussed within the first theme.

Many participants illustrated how high calorie foods were used as a coping mechanism to deal with stressful events; some stress related events consisted of occupational, difficulty in coping with general daily stress and negative elements associated with being gay and accepting identity. Joel, a 34-year-old bisexual man working in mental health, and Aiden, a 43-year-old lecturer, discuss how they are more likely to eat high calorie foods when experiencing stress:

[Joe, 34, Bisexual] *“I’m if there’s sort of stress that may be linked to something that’s kind of made me angry or pissed off like I may be more inclined to eat like sugary crap.”* [...]
[Aiden, 43, Gay] *“if I’m miserable or feeling a bit down or whatever it is then food is usually the thing. Sweet food particularly is usually the thing that I will use to kind of get me through things.”*

Eating to cope with negative emotions was viewed in the context of stress or emotional eating. Many participants presented similar responses when asked to describe their relationship with food and eating. Commonly, responses reflected a similar way of coping with negative situations, feelings, or experiences, by eating high-calorie foods; this was discussed as a regular and consistent way of dealing with such experiences. These responses are indicative of emotional eating, e.g., the greater consumption of foods to deal with

negative emotions. Sweet food is considered of high calorific value, providing an insight into the potentially unhealthy nature of engaging in emotional eating behaviours and further the detrimental impact of unwanted weight gain on mental wellbeing for gay and bisexual men.

Some participants discussed how they had previously struggled greatly with overeating due to negative experiences, and how this led to weight gain. Lewis works in hospitality, here he provides further insight into emotional eating or using food to cope with negative emotions and experiences:

[Lewis] *“So one of the things to cope with that trauma of her leaving, I turned to food. And then realizing the fact that I was gay as well. That only added to it, so I eat more and became really obese.”*

Lewis discussed how he had endured family problems throughout his life, and reflected on how he used food to manage his emotional response to these experiences. Lewis also mentions that he accepted his own identity, and how this experience further contributed to his coping-driven eating. Using food as a mechanism to cope refers to the reduction of negative affect through eating, a learned response to negative emotions and experiences. Motivations for eating and food choices for these participants during these times were not influenced by nutritional value or the impact it would have on their body (as described in theme one), it was instead largely determined by emotions. The detrimental impact of gay and bisexual men in relation to weight gain and the non-acceptance of larger body types present the unique negative implication of engaging in emotional eating among the population. This further provides an understanding of how the unique and potentially negative experiences of coming to terms with one's sexuality, can affect gay and bisexual men, providing a necessity to cope, in this instance, using food.

Interestingly, participants also reflected on their feelings of guilt upon eating high calorie foods. The following quote by Carl encompasses how many participants felt after eating high calorie foods:

[Carl, 29, Gay] *“I think in that moment you feel pleasure, but then after you feel a bit shit, so for example, last night I had McDonalds and after I felt awful, you feel like you can’t eat a lot of food, and your body doesn’t feel great, you regret it after.”*

This quote relates to the guilt experienced by Carl after eating McDonalds, conveying how in the moment, pleasure is experienced, but replaced by regret after eating. Feelings of regret and blaming oneself alludes to shame, which coincides with Carl’s previous discussions of wanting to lose weight within theme one and explained by the opposing outcome from eating high calorie foods. Motivation to eat such foods at the cost of not feeling great post eating, and subsequent effect on body size/shape, falls at the intersection of being kind to one’s mind (eating to soothe stress) versus one’s body, presenting overall conflict in the utility of coping vs impact of emotional eating among the population.

Many participants reflected similar responses, whereby elements of shame or guilt were experienced after overeating or eating high calorie foods in response to negative emotions or experiences. John’s quote follows this pattern, whereby guilt is followed by shame upon eating high calorie foods:

[John, 23, Gay] *“And then I feel a bit guilty. And then, you know, I kind of blame myself like shouldn’t have done that.”*

John mentions how he blames himself, and how upon reflection feels regret; this element of blame insights potentially negative implications on one’s own wellbeing and could encourage further negative affect. This provides insight into mechanisms of coping which are unhealthy both in terms of health behaviours but also having detrimental impact on mental wellbeing.

There seemed to be an acknowledgement and awareness that engagement in such eating behaviours were unhealthy for the body, but a lack of awareness was present about the negative psychological implications of emotional eating. In the context of the mind and body, eating as a coping strategy was viewed as integral to managing negative emotions or something that could not be avoided in the moment.

Participants would also discuss how eating high calorie foods would negatively affect their own bodily perceptions and evaluations. Joel's following quote supports the pattern running through this theme in relation to eating high calorie foods, following feelings of shame and guilt:

[Joel] *"it's just like it's this burger and chips and like it's actually like it's just a bit stodgy and horrible and then you know, you'll say things like, I feel fat and obviously like you've not just become fat like through eating one burger but like you'll sort of have these negative thoughts about what you've just done."*

Here Joel discusses his feelings of guilt and shame following eating a burger and chips. The interesting element here is that his regret in eating the high calorie food, translates to feeling 'fat' afterwards, his feelings of guilt directly relate to his feelings about his body.

Participants' discussing negative thoughts or feelings relating to shame or guilt for emotional eating and subsequent weight gain also presents a less compassionate and more critical attitude towards oneself in the face of suffering. This aligns with participant's quotes within the first theme, highlighting the extent to which feeling 'fat' lies outside of the community body aesthetic norms expected of gay men, providing further explanation of the guilt and shame experienced after eating high calorie foods among gay and bisexual men.

This theme overall encapsulates how participants discussed their eating high calorie foods to enable them to cope with negative emotions and experiences. Such eating was

interpreted as emotional eating, whereby participants ate foods in greater quantity and of higher calorific value to deal with negative emotions. Some insight was given around the unique experiences of gay men, in terms of accepting their sexuality and how this encouraged emotional eating to cope with these experiences. Further in the schedule, experiences of guilt and shame were discussed upon eating emotionally, and how participants would blame themselves for doing so. There was a misalignment between engaging in such eating behaviours to cope and the negative implications in terms of guilt experienced post eating and subsequent weight gain, and lower perceptions of body image, viewed as conflict between acting kindly towards the mind vs body. The extent to which participant's experienced guilt and shame were viewed in the context of the expectation of gay and bisexual men to eat healthy foods and attain a slim body ideal, as conceptualised within the first theme.

Restrained eating and dieting practices to lose weight.

This theme explores participants experiences and behaviours relating to weight, eating and weight-loss practices. The majority of participants discussed how they are currently or have recently engaged in weight loss behaviours. Participants discussed eating restrictively in the context of 'dieting' and discussed positively, alluding to the weight loss this entailed. The motivations for eating in this way was underpinned by the 'positive' impact it would have on their body, aligning with perceived body ideals deemed more accepted within the community (as outlined in theme one). This further prompted discussions of obsessive weight monitoring behaviours and further discussion of weight and body-related results gained from their dieting practices.

Participants would often discuss how they would limit or restrict specific foods, deemed as unhealthy (e.g., chocolate or takeaways), with a view to losing or maintaining

weight. In the following quote, John describes the foods in which he has removed from his diet:

[John, 23, Gay] *“So yeah, cutting out chocolate or sugary drinks or sugary snacks and limit the amount of fat I have so I don't eat any yogurt, so I don't eat any, you know, chocolate bars crisps and any cereal bars.”*

Removing many foods from one's diet could be described as food restriction and represents a focused way of being with food. Some foods mentioned by John may not be viewed in the wider context as unhealthy, or high in calorie (e.g., “yoghurt”, “cereal bars”); restriction or avoidance of these foods highlights the extent to which John is focused and controlled in his way of being with food. Participants who discussed avoidance of foods deemed ‘unhealthy’ or high in calorie would allude to the positive impact this would have on mitigating weight gain or to maintain current weight, as this would help them to stay within the parameters of an acceptable body shape.

John further explains how he monitors his food intake, calorie consumption and food choice to ensure this keeps within the parameters of his diet:

[John, 23, Gay] *“I've got an app that I use to monitor my, you know, water levels, my fluids, my sugar intake, my calories. I measure every type of food I'm eating, so I'm making the salad. I have to weigh the salad, the veg. You know all the veg. 1 by 1, all the seasoning to see how many calories that is and also the portion. It's not making it too big, but you know big enough to feel fulfilled.”*

John here discusses how he monitors his calorie intake, portion size and sugar intake. The level in which he controls these elements is extreme, to the point where he weighs vegetables and seasonings to ensure that they do not exceed his desired calorie intake, this is supportive of the previous quote in managing intake of foods not perceived as unhealthy in the wider

context, showing the extent to which John exercises control over his diet. There did not seem to be feelings of enjoyment or pleasure when participants spoke about eating in this focused way, it seemed to be goal orientated, to lose or maintain weight to meet aesthetic body ideals.

Participants would also discuss how they would restrict the amount of food consumed, with a view to manage weight and weight gain. The following quote by Jason is an example of this, whereby he skipped meals and aimed to avoid eating a full portion of food to manage his weight and weight gain:

[Jason, 38, Gay] *“I feel that if I skipped a meal and then I have that meal later on, I won't put on any weight. [...] Sometimes I may only eat 80% of it because I'm conscious that you know, I don't wanna put on any extra weight.”*

Jason here states his motivations for restricting his food intake as to avoid weight gain, highlighting the restive practices participants would engage with to manage weight, showing the importance or fear associated with weight gain within the population. This could be explained by the importance of maintaining a slimmer body ideal, as expected of gay men by the wider community.

Participants also discussed how they would monitor their weight, by weighing themselves multiple times a week or more. Paul, an admin assistant who enjoys making YouTube videos in his spare time, discusses how he would weigh himself excessively to monitor his weight:

[Paul, 29, Gay] *“I used to obsessively weigh myself yeah, so every single day or several times a day, I mean my happy weight at the time was 9st 11 or 9st 12, and if I was ever above that, like 10st or 10st 2 I would be like omg no, and I think even now if I saw that I would feel a bit uneasy.”*

Weighing oneself daily, or multiple times a day presents an obsessive focus on weight, and monitoring weight gain and loss. Paul mentions that he has a fixed weight target he wishes to maintain, and how moving beyond this target instils a sense of unease for him, presenting an overall lack of compassion for the self in relation to the potential of gaining weight. This is a focused attitude to have towards weight and associated body ideals, fostering a non-acceptance in weight or body shape fluctuation. This shows the extent to which Paul and other participants who discussed similar weight management behaviours, are focused on weight, and maintaining associated body ideals.

Monitoring one's weight aligned with monitoring the impact of weight on body aesthetic, participants responses around weight and body ideals often linked to how they would adapt their eating behaviours to align with their focused ideals:

[Mark, 26, Gay] *"I've got to the point where I know my body is that I can notice pretty much any even the minor changes in it and notice that I've put on a bit away or lost a bit of weight. I tend to eat compensate to kind of regulate me back to where I feel comfortable."*

This response relates to Paul's quote, whereby Mark monitors his body in a way that he feels he can notice even minimal weight gain. By stating that he can notice 'even the minor changes' presents how focused his ideal body and weight is, showing the extent to which, he monitors this to maintain his ideal. Mark also discussed that he eats to compensate and regulate his weight and body in line with this focused ideal, providing insight into the importance of weight management within the community. This also presents a problematic focus on weight and body shape, rather than on health, cultivating food restriction without consideration for potential negative health implications and only on weight and body shape management.

Many participants discussed how they would weigh themselves regularly to monitor weight and weight changes, allowing them to adapt their behaviours to manage this change. Leon is an Irish gay man and similarly discusses how he weighs himself regularly to ensure he maintains his target weight:

[Leon, 33, Gay] *“normally I’ve got scales in my bathroom, and I tend to weigh myself daily to the point where I’ve got a target weight that I always want to stick around, and if I feel I am going to far over that I will then sort of be healthy”.*

Leon monitors his weight and will adhere to healthy eating to ensure he maintains a weight that aligns with his target. This presents a focused way of perceiving and managing one’s weight, reflected in a similar focused way of being around food restriction and intake participants had around their diet and eating behaviour. Overall highlighting the importance of weight and weight management among gay and bisexual men. Leon then continues to discuss weight management behaviours:

[Leon, 33, Gay] *“so that was when I started to make myself sick and eating healthier and going to the gym for like three hours a day but it was purely cardio, and I wasn’t getting huge results but it was a way to improve myself and my wellbeing.”*

Engaging in extreme measures to lose weight and stay consistently within Leon’s target weight highlights the importance of staying in this weight bracket for him and shows the lengths to which he would adhere to this goal. It is also interesting that Leon describes engaging in these practices as improving his wellbeing. This is a distorted way of thinking about wellbeing, providing insight into how perceptions of weight management and body ideals translate to perceptions of wellbeing within the community. This focus on weight management and the distorted positive view of wellbeing highlights the importance of this, as benefits of attaining or maintain a slim body ideal outweighs the negative impact on welling.

Overall, this theme highlights the controlled way participants engaged in dieting, eating and weight management. Food restriction was exercised by reducing overall food intake and limiting food choices, eliminating potential foods which were perceived to oppose weight loss. An obsessive focus on weight though monitoring weight and weight gain was discussed, with the perceived benefits of engaging in such behaviours and food restriction to lose or maintain weight to adhere to a slim body ideal, outweighed the without negative impact on wellbeing. These behaviours and perceptions were interpreted in alignment with the focused body ideals and expectations had of gay men, as explored within the first theme.

Cruel to be kind

This theme explores participants feelings and experiences of self-compassion. Overall, this was conceptualised as acceptance of the self, including physical attributes, without judgement of perceived flaws. Participants discussed how difficult this is to practice, specifically if participant's felt they were not slim and/or attractive. Further exploration of self-kindness in relation to the body showed how participants perceived this as eating healthily, to attain a slimmer body type.

Many participants conceptualised self-compassion as unconditional acceptance of the self, despite any perceived flaws; John describes this as unconditional acceptance:

[John, 23, Gay] *"I would describe this as unconditional acceptance. Accepting myself as who you are, no matter how you look or how you act or how you behave or think or feel."*

John here discusses his own conceptualisation of self-compassion, unconditionally accepting oneself is to accept any perceived flaw of inadequacies. This is interesting considering the previous responses John made, with regards to the guilt and blame he experienced when eating high calorie foods. Therefore, highlighting that John understands how to be self-compassionate towards himself, but does not adopt this attitude towards himself when eating

high calorie foods. This could be perceived as the extent to which community-based slim ideals influence internal feelings of guilt and shame when eating such foods, as this may result in subsequent weight gain.

Joel further supports John's conceptualisation of self-compassion, attributing acceptance to not only internal aspects but also physical:

[Joel] *“There is something, well, a component of self-love if it is to be possible is a kind of very deep acceptance of all of who you are. This includes not just sort of your internal sense of self, you know, but this includes your physicality in every way.”*

Describing self-compassion as an acceptance of who you are, alludes to identity, this is important considering the potential lack of acceptance of gay men within a wider societal context. Joel mentions how acceptance should be extended to physical aspects of the self, similarly to John's quote, this is an interesting perception of self-compassion due to the external pressures and expectation on body aesthetic ideals within the queer community.

Participants would further explore their own conceptualisations of self-compassion and acceptance, discussing the difficulty in practicing self-acceptance if they did not perceive themselves as accepted by the wider queer community. Terry is a 54-year-old gay man who runs a busy queer venue in the UK. Here he discusses the difficulty in self-acceptance due to feeling as though he does not meet the community aesthetic ideal:

[Terry, 54, Gay] *“I've always struggled for self-acceptance because I'm not that young, good looking slim guy, you know?”*

This quote presents the potential barriers to gay men practicing self-compassion in the context of self-acceptance. This provides insight into the detrimental impact of existing within the queer community, when there are focused aesthetic expectations, and how this

opposes individual perceptions of self-compassion as acceptance of the self, posing a thin line to tread, between being accepting of oneself and meeting community expectations.

Participants' illustrated perceptions of kindness which contrasted with previous conceptualisations of self-compassion as acceptance, whereby, kindness towards oneself was more aligned with healthy eating or exercise. Jake is a 24-year-old queer university student; here he discusses his feelings towards self-kindness:

[Jake, 24, Queer] *“Even if something is like going to the gym now, like having a nap is always gonna feel better than going to the gym, and that doesn't mean that it's gonna be the best thing.”*

Here Jake discusses the difficulty in conceptualising self-kindness, opposing viewpoints in terms of having a nap vs going to the gym and how both ideas may be considered being kind to oneself. He mentions how going to the gym may be more aligned with self-kindness, even if this may not feel better in the short term. Jake further explores this concept and how this can be described as being ‘cruel to be kind’, highlighting how being kind to yourself aligns with focusing on physical health and attaining a slimmer body ideal, compared to promoting psychological wellbeing:

[Jake, 24, Queer] *“So being kind to yourself, I think is a tricky thing, because there's that whole cliché of like sometimes you got to be cruel to be kind and that I feel is like terrible advice when you're giving it.”*

This shows the importance of health and weight management behaviours within the community in the context of the elements explored within the previous theme. This perception of self-kindness contrasts to previous conceptualisations of self-compassion as being accepting of oneself, with self-kindness described as going to the gym.

Leon further supports this quote, discussing how kindness in relation to the body for him, would be to plan his diet and exercise routine, aligning with attaining a slim body ideal without consideration of psychological wellbeing:

[Leon, 33, Gay] *“Yeah so I know the areas I need to tackle, I think It would be one of those things where I need to have a little talk to myself, get that plan written down, you know, so in the next month, I have a lot of free time, so I can stick to it, and then the next month, I’ll be able to see all of those improvements.”*

This quote highlights the perceptions of self-kindness among participants, as being focused and remaining on track with diet and exercise plans. Leon also mentions how important it is for him to see the ‘improvements’ from him engaging in his weight management plans, showing the importance of weight management in the context of self-kindness. This is further supported by the following quote from Leon, whereby it is clear that progress towards desired body ideals were conceptualised as self-kindness:

[Leon, 33, Gay] *“The intent is there, I would get back to the body I had when I was at my best.”*

Exercising kindness to oneself in relation to the body interestingly opposed previous conceptualisations of self-compassion. Whereby, attaining or maintaining body ideals deriving from community expectations is described as self-kindness.

Overall, this theme explored participants conceptualisations of self-compassion and self-kindness. Accepting oneself, including any potential perceived flaws was consistently attributed to perceptions of self-compassion. Self-kindness was viewed as engaging in health behaviours, with a focus on attaining or maintaining weight and body ideals, this was seen as adherence to community expectations of body aesthetic and weight by the wider queer community.

8.5. Discussion

This research aimed to explore participant's experiences and perceptions of eating behaviours, body evaluations, self-compassion and self-kindness among gay men, providing insight into how these elements are experienced within the population. Given the prior research on the pervasive influence of slender and muscular body ideals and the prevalence of eating disturbances within this demographic, an in-depth examination of self-compassion offers valuable insights into how this construct is experienced among gay and bisexual individuals in the context of well-documented eating and body image issues. Overall findings present elements which support previous literature around perceptions of weight, body, and weight management behaviours. Exploration of how these elements are perceived through the lens of self-criticism and self-compassion builds on previous research, providing considerations for future mindful or self-compassion-based interventions among gay and bisexual men.

Pressure to adhere to focused body ideals within the community were discussed with many participants experiencing pressure to attain slim ideals and eating in accordance with meeting them as explored within. This aligns with previous research exploring the impact of body image ideals on eating behaviours among gay and bisexual men (Kvalem et al., 2016; Morgan & Arcelus, 2009; Tiggemann et al., 2007; Regan et al., 2021). Interestingly, encompassing a slim body linked with identity, and how those who felt they did not embody this ideal felt as though they needed to change or alter their body type to conform. The first theme appeared to underpin subsequent discussions of participants eating and weight management behaviours. The focus on attaining or maintaining a slim or muscular body type, cultivated feelings of shame and guilt experienced when participants ate high calorie foods, cultivated by perceived non-acceptance by the wider community and further, themselves. There seemed to be a crossover with themes two and three, whereby earlier in the interview,

participants would discuss their relationship with food in terms of eating high calorie foods to cope with negative emotions and the guilt experienced post eating. Later in the interviews participants would discuss how they would engage in eating restraint and obsessive weight monitoring behaviours. This narrative of emotional eating, guilt and weight management behaviours seemed consistent across multiple interviews, providing insight into how problematic eating behaviours are interlinked and experienced within the population.

The focus participants had on weight monitoring, weight management and restrictive eating behaviours presented lack of a compassionate attitude towards themselves, in the context of potential weight gain or not encompassing a slim body ideal. The underlying motivations for engaging in such behaviours aligned with changing the body to meet aesthetic ideals, and less with supporting physical health. There was a sense of focus placed on engaging in restrictive eating, and a perception of this as good and useful in terms of being kind to the body, with a lack of consideration for the potential negative affect this has on psychological wellbeing. This provides overall insight into how participants perceived self-kindness and self-compassion in relation to engagement in restrictive eating and weight management.

Participants' perceptions of self-compassion as being accepting of oneself was interesting considering the apparent lack of acceptance they had towards their body, as discussed in theme one. The overall lack of acceptance appeared to underpin the guilt experienced when eating high calorie foods and the desire to lose and/or manage weight and subsequent restrained eating. This provides an understanding of how self-compassion relates to acceptance within the community and shows the potential influence self-compassion (or acceptance) may have in attenuating the eating and body-related issues experienced by gay men.

Further discussions of self-kindness in relation to the body showed how this was internalised as losing weight or being cruel to be kind in terms of perceptions of weight loss behaviours. However, it is worth noting that this propensity for self-cruelty can be addressed by recognizing that both the body and the mind may require distinct manifestations of self-kindness, as elucidated in earlier research. This approach offers an alternative to adopting a self-critical standpoint, which is pivotal to the development of appropriate interventions. Participants' perceptions encompass self-criticism, rather than self-compassion and present a contrast to the previously highlighted perception of self-compassion. It was clear that there was an understanding of how to be self-compassionate towards themselves but did not demonstrate this through self-kindness-based behaviours. This misalignment is supported in previous explorations of self-compassion in relation to eating and in the context of treating oneself, as discussed in previous literature focusing on general populations (Egan & Mantzios, 2018; Mantzios et al., 2018a; b). Future research should consider a more body-mind focused intervention of self-kindness among gay and bisexual men, and the importance of aligning interventions with individuals' specific physiological needs and self-perceptions within the context of eating and body image concerns.

The current research findings should be interpreted within the context of the following acknowledged limitations. A lack of cultural diversity within the sample was observed, meaning the findings and conclusions drawn are limited in application. Future research should endeavour to enact similar explorations among queer men from ethnically diverse backgrounds to provide insight into overall experiences. Secondly, it is acknowledged that three participants chose not to complete the demographic information sheet, presenting a lack of characteristic information of those participants. Lastly, researchers acknowledge the complexities of encompassing gender and sexuality-based identities under one population identification. Although the research pertains to largely gay and bisexual men, it is

understood that two participants identified as gender fluid and non-binary. Future research should consider exploring the potentially nuanced experiences of eating, body-related constructs and self-compassion among such populations, to avoid misrepresentation and assumptions made on collective queer experiences.

Overall, this research provides insight into the perceptions, feelings and experiences of gay and bisexual men in relation to body ideals, eating and self-compassion. This research highlighted the importance of attaining or maintaining a slim or muscular body type, and how community pressures encouraged participants to adopt their eating behaviour. Eating high calorie foods instilled experiences of guilt and shame, which further translated to weight monitoring and management. Self-kindness was perceived as engaging in behaviours which progressed attainment of a slim body, which contrasts with exploration of self-compassion and kindness among other populations. Participants' engagement in weight monitoring and restrictive eating behaviours presented a focus on supplementing the body through a misalignment of being kind to oneself, by lack of consideration for the negative impact on psychological wellbeing. This research should inform future consideration for future interventions which focus self-kindness in relation to supporting both body and mind among the population, to attenuate problematic eating and body-related issues.

CHAPTER 9: GENERAL DISCUSSION

9.1. Overview of the Current Thesis

The current thesis aimed to explore relationships of body-related constructs, eating behaviours and mindfulness-based constructs among gay and bisexual men. Further knowledge and understanding of such relationships aimed to provide insight into the potential utility of mindfulness or compassion-based intervention to attenuate eating and body issues within the population. The broad aims of the current thesis include: (1) understanding the relationships of mindfulness, self-compassion and mindful eating to body image and body acceptance; (2), investigating the role and potential utility of body-acceptance in explaining relationships of mindfulness, self-compassion, mindful eating to body image and problematic eating; (3) investigating the role of weight- and body-related shame and guilt in explaining relationships of mindfulness, self-compassion, mindful eating to body image and problematic eating; (4) exploring participants experiences of eating, body ideals and dieting through online forum platforms; (5) gaining insight into feelings and experiences in relation to body image, body acceptance, mindfulness and self-compassion; (6) exploring feeling and experiences of eating, body acceptance, mindfulness and self-compassion.

The findings from individual Chapters will be discussed in the following section, representing an integrated understanding and synthesis of the results in the context of the aims of the present thesis, and aligned with prior research. Moreover, the overall limitations of the research project, considerations for further research, and potential real-world implications will also be discussed.

9.2. Key Findings

Chapters 3, 4, and 5 employed cross-sectional methods to examine the relationships between mindfulness-based constructs and various aspects of body image and problematic

eating, which will be covered next. Correlation analysis within Chapter 3 (Study 1), showed positive associations of mindfulness, self-compassion and mindful eating to body image and body acceptance. This is reflective of similar associations of mindfulness-based constructs to body image among general and more specific populations (Balciuniene et al., 2021; Zamzami et al., 2015). Findings show the importance of considering the potential utility of mindfulness, self-compassion and mindful eating when addressing body image issues among gay and bisexual men. Further mediation analysis presented the mediating role of body-acceptance in explaining the relationships of mindfulness, self-compassion and mindful eating to body image. Body-acceptance aligns with the theoretical underpinnings of mindfulness and related constructs, harnessing aspects of acceptance, and promoting a flexible way of being when met with body image threats. Findings present the importance of body-acceptance when considering future mindful and/or compassion-based interventions aiming to attenuate body image issues among gay and bisexual men.

Chapter 4 (Study 2) explored the relationships of mindfulness, self-compassion and mindful eating to body-acceptance and problematic eating. Positive associations were observed between mindfulness, self-compassion and mindful eating to body acceptance, reflecting relations observed in Chapter 3 (Study 1). Negative associations were observed between mindfulness, self-compassion and mindful eating to problematic eating (emotional, restrained and external eating, and grazing). These findings were reflective of previous explorations of mindfulness-based constructs to problematic eating among general and more specific populations (Egan et al., 2018; Mantzios & Egan, 2017; Mantzios et al., 2018; Rahimi-Ardabili et al., 2018). Further mediation analysis showed the mediating role of body-acceptance in explaining relationships of mindfulness, self-compassion and mindful eating to emotional, external and restrained eating and grazing. Findings present the importance and potential utility of body-acceptance when considering the efficacy of future mindful and/or

compassion-based interventions aiming to attenuate problematic eating among gay and bisexual men.

Chapter 5 (Study 3) aimed to explore the relationships of mindfulness, self-compassion and mindful eating to problematic eating, and the potential associations to weight- and body- related shame and guilt. Negative associations of mindfulness, self-compassion and mindful eating to problematic eating (emotional, restrained and external eating) were observed, reflecting the previous findings from Chapter 4 (Study 2). Mindfulness, self-compassion and mindful eating were also negatively related to weight-and body-related shame and guilt. Positive associations were observed between shame and guilt to problematic eating, this finding is reflective of previous research exploring the negative impact of focused body ideals within the queer community and links to disordered eating outcomes (Blashill, 2010; Davids et al., 2015; Foster-Gimbel & Engeln, 2016). Further mediation analysis presented the mediating role of both weight- and body- related shame and guilt in explaining relationships of mindfulness, self-compassion and mindful eating to emotional, restrained and external eating. These findings highlight the importance of considering shame and guilt when investigating the efficacy of a mindful- and/or compassionate-based intervention aiming to attenuate problematic eating among gay and bisexual men.

Cumulatively, the findings from the initial cross-sectional research Chapter 3 (Study 1), Chapter 4 (Study 2) and Chapter 5 (Study 3) provided a basis for insight into the relationships of mindfulness-based constructs to body-related constructs and problematic eating among gay and bisexual men. Associations of mindfulness-based constructs to problematic eating were reflective of relations observed in previous research focusing on the general and more specific populations. Nuanced findings included the mediating role of body acceptance in explaining the relationship of mindfulness-based constructs to body image and

mindfulness-based constructs to problematic eating, providing insight into population-specific elements to consider. The utility of body-acceptance when considering future mindful and/or compassion-based interventions insights consideration of body image flexibility. Body acceptance and body image flexibility align with underlying mechanisms for change in Acceptance and Commitment therapy (ACT) (e.g., psychological flexibility), therefore findings support the efficacy of ACT in attenuating body image issues and problematic eating among gay and bisexual men (Hayes, 2007).

Chapters 6 (Study 4), 7 (Study 5) and 8 (Study 6) all employed qualitative methodology and analysed data using Reflexive Thematic Analysis (RTA). Chapter 6 (Study 4) explored experiences and feelings towards eating, dieting and body ideals through internet-mediated research (IMR), by collecting online forum-based data catered to gay and bisexual men. Three themes were conceptualised within the data, the first theme explored how gay spaces were perceived to be critical, and specific in relation to weight and body shape, the theme further aligned this perceived lack of acceptance from others into individual lack of acceptance of participants' own body. The second theme highlighted how participants would discuss 'self-hate' towards the body as a good thing, if it resulted in the outcome way weight loss. The third theme conceptualised how participants would discuss engaging in regimented exercise, eating restraint and weight management behaviours to lose weight and attain a focused body aesthetic ideal.

Findings from Chapter 6 (Study 4) provided further insight and context to elements explored within the cross-sectional chapters (namely, Chapter 3 (Study 1) and Chapter 4 (Study 2), providing further insight into participants' experience of non-acceptance within the first theme. Discussions of the critical nature of queer culture, mainly from other gay men in gay spaces, support previous literature denoting the perceived critical nature of the community in relation to aesthetic ideals (Duggan & McCreary, 2013; Foster-Gimbel &

Engeln, 2016; McArdle & Hill, 2009; Tiggemann et al., 2007). Non-acceptance of participants' body was further highlighted in theme two by perceptions and attitudes towards dieting and losing weight. 'Self-hate' towards the body was promoted by some users in the forum in response to, other users discussing their desire to lose weight. This non-accepting and skewed view of self-hate as a form of self-compassion is extreme and psychologically damaging, highlighting how important losing weight to adhere to focused body ideals within the community was to participants. There seemed to be a separation between the mind and body, and how being critical of your body would be 'useful' in the context of losing weight, provided you are not critical of your overall self. This presents an interesting avenue to explore around individual conceptualisations of self-compassion and self-kindness in the context of the body and losing weight within the population. Findings from Chapter 6 (Study 4) informed the development of future research studies within the thesis, whereby elements were explored in greater depth by utilising the free-form nature of semi-structured interview methodology (Adeoye-Olatunde & Olenik, 2021).

Chapter 7 (Study 5) aimed to explore participants' feelings and experiences of their body image, body acceptance, self-compassion, and self-kindness through semi-structured qualitative interviews. Three themes were produced within the data, the first theme outlined how participants perceived the importance of body aesthetic within the community, outlining how slim and muscular body types are most represented. The second theme captured how participants felt towards their own bodies, discussions of specific aspects of their body towards which they were non-accepting of, with an effort made to hide these aspects through wearing baggy clothes and/or tattoos. The third theme explored how participants experienced and perceived self-compassion and self-kindness, this was largely discussed as an overall acceptance of oneself, with self-kindness being encapsulated as the awareness and prevention of self-critical attitudes towards their body.

Participants discussed slim and muscular body types most represented within the gay community, and how this perceived representation created a body aesthetic social hierarchy; this aligns with previous research denoting the perceived critical nature of the community, and its impact on body ideals and dissatisfaction (Blashill, 2010; Kaminski et al., 2005; Lanzieri & Hildebrandt, 2016; Morgan & Arcelus, 2009). Participants elaborated further, discussing how presenting a slim or muscular body in queer spaces, was viewed as an underlying ‘currency’ within the community. The perceived ‘wealth’ or power associated with showing other gay or bisexual men you encompass this body aesthetic was interpreted as self-aggrandisement or body narcissism, further highlighting the importance of attaining this ideal within the community (Blashill, 2010; Kaminski et al., 2005; Lanzieri & Hildebrandt, 2016). There was a link between themes one and two, whereby non-acceptance of one’s body or specific aspects seemed to relate directly to the perceived non-acceptance of those aspects by the wider community. Hiding or covering one’s body in an attempt to shield themselves from judgement portrayed elements of shame or guilt for encompassing a body which participants felt others would not accept.

Participants’ discussions around self-compassion and self-kindness were interesting, acceptance of the self was viewed in line with the potential non-acceptance of being gay in a heteronormative society, and heightened the importance of acceptance within the community. Self-kindness in relation to the body was, similarly, conceptualised as self-acceptance, and actively recognising when one is being self-critical of their body and attempting to reduce or prevent self-critical attitudes or self-talk. Moreover, participants also discussed how difficult they felt this was to practice, this was, accepting themselves and their bodies, felt like giving up. This was viewed within the context of the pressure on attaining focused body ideals, acting as a potential barrier to practising self-kindness and self-acceptance. The findings from Chapter 7 (Study 5) therefore provide insight into experiences and perceptions of body image

and body acceptance in relation to self-compassion, further supporting the utility of considering body-acceptance when investigating the efficacy of a mindful or compassion-based intervention to attenuate body image-related issues within the population. The study also contributed insight into potential barriers to self-compassion and self-kindness with links to acceptance and how these elements are experienced among gay and bisexual men. Such barriers should be considered when developing self-compassion or self-kindness-based interventions to attenuate body-related issues within the population.

Chapter 8 (Study 6) aimed to explore participants' feelings and experiences of eating behaviours, body acceptance, self-compassion and self-kindness. This study largely focused on eating behaviours, exploring how participants' experienced eating in relation to their unique experience of queer culture, body ideals and viewed in the context of self-compassion and self-kindness. Four themes were conceptualised within the data, theme one explores motivations for eating behaviours and these were largely focused on losing weight to fit in with perceived body ideals. Theme two, captured participants' discussions around eating high calorific foods in response to stress, interpreted in the context of emotional eating. Theme three explored participants' weight loss and management practices, revealing engagement in food restriction and obsessive focus on monitoring weight. Theme four explored participants' conceptualisations of self-compassion as self-acceptance, but contrastingly, identified self-kindness as adherence to dieting practices to facilitate weight loss.

Participants discussed their eating behaviours predominantly in relation to eating in a way that would help them to achieve or maintain the body ideals of slim and muscular discussed in Chapter 7 (Study 5) and previous literature around body ideals sought after by gay and bisexual men (Kvalem et al., 2016; Morgan & Arcelus, 2009; Tiggemann et al., 2007). The application of how this representation translated into non-acceptance of one's own body providing motivation for weight loss and dieting practices builds on this, providing

insight into the impact of community pressure on dieting motivation (Kvalem et al., 2016; Morgan & Arcelus, 2009; Tiggemann et al., 2007; Regan et al., 2021). Overall explorations of eating behaviour engagement provided insight into experiences of emotional eating and subsequent guilt experienced upon eating high calorific foods, and restrained eating in response to noticing weight gain. These findings support and corroborate with findings from the previous cross-sectional studies (Chapter 4, Study 2 and Chapter 5, Study 3), in relation to experiences of problematic eating, links to body non-acceptance and weight- and body-related shame and guilt.

The study further explored participants' conceptualisation of self-compassion, which largely denoted self-acceptance, including appearance which further aligned with findings from Chapter 7 (Study 5). Explorations of self-kindness in relation to the body however contrastingly represented participants' keeping within the parameters of their diet plans and aligned with them attaining or maintaining their desired body ideals. This provided insight into a misconception of the mind and body, supporting the skewed perceptions of self-criticism in Chapter 6 (Study 4), and has been reflected in previous literature exploring self-kindness and treating oneself (Egan & Mantzios, 2018; Mantzios et al., 2018a; b). Findings overall provide a depth of insight into problematic eating behaviours experienced within the population, and relations to body non-acceptance, self-compassion and self-kindness. Providing a nuanced understanding, which should be considered when developing or testing the efficacy of a mindful or self-compassion-based intervention to attenuate problematic eating among gay and bisexual men.

9.3. Limitations, Future Considerations and Practical Implications

The overall project explored the relationships of mindful-based constructs to body-related constructs and problematic eating, providing insight into the unique experiences of the

population. However, several limitations are conceded pertaining the overall research project, which warrant further examination. Firstly, the lack of representation of ethnic minority individuals within the overall samples collected meant the conclusions drawn were not representative of queer men from culturally diverse backgrounds. Therefore, findings should be considered in accordance with the white-centric sample recruited. Future research should aim to provide greater insight into the unique experiences of culturally diverse queer populations to provide greater insight into applications of mindfulness-based constructs to problematic eating and body-related issues among culturally diverse queer men. It is also acknowledged that the overall project aimed to explore a population of gay and bisexual men, though the samples collected reflected disproportional gay cis gender men to bisexual men comparatively to the identity ratio prevalent within the UK (Sanders, 2020). The representation of bisexual men within the population, therefore, does not reflect bisexual male identities within the wider population. Future research should aim to capture bisexual men's experiences, in relation to eating, body image and mindfulness.

Chapters 3, 4 and 5 adopted cross-section methodology, providing insight into relationships of mindfulness-based constructs to problematic eating and body-related constructs. This provided a basis of understanding of these constructs within the population, although it is acknowledged that this data is limited in some respects, with lack of deeper exploration of experience. It is important to consider the limited scope of cross-sectional research, in terms of the findings reflecting the observation of relationships which occurred; therefore, causality is not implied. Future research should consider employing longitudinal exploration of the relationships of mindfulness-based constructs to body image and problematic eating among gay and bisexual men, to investigate the long-term relationships of these constructs. Future research should also consider experimental methods, to determine the

impact of causal relationships, and further highlight the utility of mindfulness-based constructs in attenuating body-image issues, and problematic eating.

It is also important to consider the large number multiple mediations conducted in Chapter 4 (Study 2) (twelve mediations observed) and Chapter 5 (Study 3) (eighteen mediations observed) and the potential of Type 1 error (false positives) which is an element that signalled some relationships that may suffer and need to be replicated in future research. After applying a Bonferroni Correction, in Study 2, one observed mediation where body acceptance mediated the relationship of self-compassion to emotional eating was non-significant under the corrected p-value of .004. In Study 3, two observed mediations where weight- and body- related guilt mediated relationships of restrained eating to mindfulness and emotional eating to mindfulness, were non-significant under the corrected p-value of .002. The non-significance of the relationships highlighted, shows the potential impact of not using an adjusted p-value to mitigate the impact of Type 1 error within Studies 4 and 5. Future research should replicate these relationships to further understand potential mediations of which, could explain these relationships.

The following qualitative chapters aimed to add depth of exploration, contextualising the experiences and feelings of participants in relation to the initial cross-sectional findings. However, the qualitative chapters focused more on self-compassion and self-kindness of the overall mindfulness-based constructs explored within Chapters 3, 4 and 5, in relation to eating and body image. Future research should aim to build on the associations of mindfulness and mindful eating to problematic eating and body image by utilising qualitative methods to add further depth of insight. Additionally, it is important to consider the potential limitations of the culmination of both face to face and virtual interviews used to collect data in Chapters 7 and 8. Face to face interviews are more relational in nature, allowing both verbal and non-verbal communication to occur between the researcher and participant,

cultivating a more comfortable and supportive environment. However, face to face interviews can evoke a more anxious response from participants due to the public settings they take place in, limiting the discussion of topics pertaining to a more sensitive nature (Suchman & Jordan, 1990). Conversely, virtual interviews allow for less relational contact, but can facilitate more depth of discussion around sensitive topics, as usually participants are in a familiar private setting (e.g., their home) (Bleicher & Farma, 2021). As Chapters 7 and 8 adopted both data collection methods, consideration for the lack of relational contact in the virtual interviews and the influence of the public settings that face-to-face interviews took place in and the impact on the depth of data collected, should be acknowledged.

The present thesis provides insight and understanding of eating behaviours, body-related constructs and mindfulness-based constructs, which inform future interventions and offer practical application in real-world settings. The overall findings from the thesis support the development, or investigation of the efficacy of a mindfulness, self-compassion or mindful eating-based intervention to attenuate eating or body image issues among gay and bisexual men. The importance of body acceptance was clear within the cross-sectional and qualitative work, this along with the aligning theoretical principles of body-acceptance with mindfulness presents an important aspect to explore when considering future interventions. The utility of body acceptance and links to body image flexibility also aligns with psychological flexibility, an underlying mechanism for change within ACT (Hayes, 2007). The qualitative findings from Chapters 7 (Study 5) and 8 (Study 6) provide further experiential context to which gay and bisexual men experience body acceptance, and how this aligns with eating and weight management. The thesis therefore informs future clinical practice information and guidance in utilising ACT in attenuating body image issues and problematic eating issues among gay and bisexual men.

Chapters 7 (Study 5) and 8 (Study 6), offered further insight into participants conceptualisations of self-compassion and self-kindness, providing a contextual understanding to the associations presented in the earlier cross-sectional work. The unique experiences of gay and bisexual men in relation to community-based pressure around attaining focused body ideals and the impact of subsequent eating and weight management behaviour influenced participants internalisation of self-compassion and self-kindness. These findings should inform future mindfulness, self-compassion and/or self-kindness interventions aiming to attenuate eating and body-related issues within the population. The thesis further lends recommendations of the potential utility of such interventions and applicability of Mindfulness-based Cognitive Therapy (MBCT) and Self-Compassion-Focused therapy (SFT) in attenuating eating and body-related issues among gay and bisexual men (Walloch et al., 2014).

Practical, real-world applications of the findings of the thesis should also be considered. A greater awareness for the struggles experienced by gay and bisexual men in relation to eating and body issues, and further the impact of the critical nature of queer culture is needed. Dissemination of thesis findings would provide greater insight into these experiences including awareness of the critical nature of queer spaces in relation to appearance and body-related aesthetic among lay people. The findings could also inform future interventions for queer adolescents who could be yet to embark on experiences of queer culture, encouraging acceptance of the self in relation to the body, promoting a more compassionate attitude towards others and the self. Such interventions could facilitate greater awareness of queer experience and cultivate change, aligning with mindful, compassionate, and accepting attitudes towards the self and other queer people.

Implementation of mindfulness, self-compassion, and mindful eating interventions can help address body image concerns among gay and bisexual men. Recognizing the pivotal role

of body acceptance can inform the development of effective interventions aimed at attenuating problematic eating behaviours. Understanding the impact of weight- and body-related shame and guilt is crucial in designing compassionate-based interventions to alleviate disordered eating. Creating safe and accepting spaces within the queer community is essential to reduce the prevalence of body dissatisfaction and foster a healthier body image. Emphasizing the importance of promoting self-compassion and self-kindness can help individuals navigate societal pressures and cultivate a positive self-image. Integration of Acceptance and Commitment Therapy (ACT) principles can effectively target body image issues and problematic eating behaviours among the LGBTQ+ community. Considering the complexities of emotional eating and restrictive eating patterns can inform the design of comprehensive interventions to promote healthier behaviours and positive body attitudes. Integrating insights from both qualitative and cross-sectional research can provide a comprehensive understanding of the multifaceted factors influencing body image and eating behaviours among gay and bisexual men, allowing for the development of holistic intervention approaches.

9.4. Conclusion

The current research aimed to explore relationships of mindfulness, self-compassion and mindful eating to problematic eating and body-related constructs among gay and bisexual men. Findings presented similar relationships to general and more specific populations, with additional aspects, highlighting the importance of body acceptance, and weight- and body-related shame and guilt. Further explorations into participants' feelings and experiences provided insight into queer culture and the impact on body ideals, weight management behaviours. Considering the paucity of research conducted in this area, within the population, and the high prevalence of detrimental psychological wellbeing issues experienced within queer populations (Dürbaum & Sattler, 2020; Wittgens et al., 2022); the current research

adds valuable insight into unique elements of importance and offers guidance of therapeutic interventions applicable to queer men. The research offered perceptions and self-conceptualisations of self-compassion and self-kindness in relation to eating and body image. Cumulatively, findings should inform future mindful and/or self-compassion-based interventions aiming to attenuate eating and body-related issues among gay and bisexual men. Applications of findings to real-world settings in the form of dissemination or interventions to queer people and adolescents would provide greater awareness of these issues and cultivate a more mindful or compassionate attitude to the self in relation to eating and the body, supporting the overall wellbeing of gay and bisexual men.

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APPENDICES

Appendix A: Interview Schedule (from Chapter 7- Study 5)

Appendix B: Interview Schedule (from Chapter 7- Study 5)

Appendix C: Copies of Publications

Appendix A: Interview Schedule (from Chapter 7 Study 5)

Ice Breakers Question's:

- Thank you for taking part
- What were your first thoughts when you were asked to take part in this research?
- Did you have any hesitations about agreeing to take part?
- So, to begin with, can you tell me a bit about your life?
 - What do you do in your spare time?
 - Do you work / study?
 - Live with your family?

Body image

- Generally, how would you describe representations of the 'perfect' gay/queer male body?
 - E.g., how is this represented in the media?
- Would you say that your body is an important aspect of your identity?
 - Please expand on this.
 - Could you say more on this?
- How do you feel about your body?
- How do you feel about your body in relationships?
- How do you feel if/when others see your body? (e.g., in relationships)
- How do you feel about your body when single?
- How is the experience of shopping for clothes for you?
 - Any specific items of clothing that you find easy/tricky to buy for?
- How do you feel about your weight?
 - Are there any times when these feelings change?
 - Could you describe this?

Body acceptance

- Are you happy with the body you have?
- Are there any aspects of your body you would change?
- Do you have any body aspirations or body goals?
- Name three things you love about your body and why?

- How does how you feel your body affect your overall well-being?
- How do you feel about your body in gay spaces?

Self-compassion

- How would you define self-love?
- How would you define kindness?
- How would you be kind to yourself?
- How would you be kind to yourself in relation to your body?
- Are there any thoughts or affirmations you may have towards yourself?
- Are there any thoughts or affirmations you may have towards your body?
- Are there any times you may feel critical of yourself?
- Are there any times you may feel critical of your body?

Closing questions

- How do you feel now the interview has finished?
- Is there anything you feel we haven't covered?
- Do you have any questions for me?

Appendix B: Interview Schedule (from Chapter 8 Study 6)

Ice Breakers Question's:

- Thank you for taking part
- What were your first thoughts when you were asked to take part in this research?
- Did you have any hesitations about agreeing to take part?
- So, to begin with, can you tell me a bit about your life?
 - What do you do in your spare time?
 - Do you work / study?
 - Live with your family?

Eating behaviours

- How would you describe your relationship with eating and food?
- Is eating something that gives you pleasure?
 - Can you describe this?
- Are there any influencers in the way in which you eat/what you eat?
- Are there are ways of eating, that are expected of gay men (of you)?
 - Could you explain this?
- How could the gay community have any influence on your eating/food choices? If so, what would they be?
- Do you snack or graze much throughout the day?
 - Can you explain?
 - How does this make you feel?
- Do you ever feel guilty for eating high calorie foods?
 - Can you explain this?
 - How does this make you feel?
- Do you take into account your weight and body when making food choices?
- Are there any positive emotions that you would link with eating?
- Are there any negative emotions that you could link with eating?
- How do you feel about your weight?
 - Are there any times when these feelings change?
 - Could you describe this?

Body acceptance

- Are you happy with the body that you have?
 - Could you please explain?
- Do you have any body aspirations or body goals?
- Name three things you love about your body and why?
 - Please take your time.
- Are there any aspects of your body you would change?
- How does how you feel your body affects your overall well-being?
- How do you feel about your body in gay spaces?

Self-compassion

- How would you define self-love?
- How would you define kindness?
- How would you be kind to yourself?
- How could you be kind to yourself in relation to your body?
- Are there any thoughts or affirmations you may have towards yourself?
- Are there any thoughts or affirmations you may have towards your body?
 - If not, are there any thoughts/affirmations you feel you should have towards your body?
- Are there any times you may feel critical of yourself?
- Are there any times you may feel critical of your body?

Closing questions

- How do you feel now the interview has finished?
- Is there anything you feel we haven't covered?
- Do you have any questions for me?

Appendix C: Copies of Publications

Mindfulness (2023) 14:596–605
<https://doi.org/10.1007/s12671-023-02095-7>

ORIGINAL PAPER



The Mediating Role of Body Acceptance in Explaining the Relation of Mindfulness, Self-Compassion and Mindful Eating to Body Image in Gay Men and Bisexual Men

Harvey Regan¹ · Rebecca Keyte¹ · Michael Mantzios¹ · Helen Egan¹

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Abstract

Objectives Mindfulness and mindfulness-based constructs, such as self-compassion and mindful eating, have been positively associated with healthier eating and body related perceptions. Exploration of mindfulness and related concepts have not been investigated extensively in gay and bisexual men, a population where eating and body related concerns have been found to be widespread.

Method Participants completed an online questionnaire, assessing mindfulness, self-compassion, mindful eating, body image and body acceptance. Correlation analysis and further mediation analysis was conducted to explore the relations between these constructs within the present sample ($n = 163$).

Results A community sample showed a positive association of body image to mindfulness-based concepts, and negative to body non-acceptance, within the target population. Mediation analysis showed the role of body acceptance in explaining the relation between mindfulness, self-compassion and mindful eating to body image.

Conclusions Findings highlight the importance of body acceptance when considering the development of a mindfulness or compassion-based intervention to attenuate body related issues among gay and bisexual men.

Preregistration This manuscript has not been preregistered.

Keywords Self-compassion · Body-acceptance · Gay men · Mindfulness · Body image

Mindfulness and mindfulness-based concepts, such as self-compassion and mindful eating, have been utilised in research throughout health psychology, especially in assisting populations engaging with problematic eating behaviours and experiencing body image concerns (Jordan et al., 2014; Mantzios, & Wilson, 2015; Tihanyi et al., 2016; Wasylkiw et al., 2012). Mindfulness has been described as paying attention to the present moment, with a non-judgemental attitude (Kabat-Zinn, 2015). Exploration of mindfulness has promoted the development and efficacy of mindfulness (Balciuniene et al., 2021) and compassion-based interventions (Albertson et al., 2015) aiming to attenuate body image and eating related issues in the general population, but also in

more specific populations where these issues are prevalent (e.g., adolescent females; individuals with a diagnosis of Cystic Fibrosis) (Egan et al., 2021; Hussein et al., 2017). Exploration of mindfulness and related concepts have not been investigated extensively in gay and bisexual men although evidence shows that this is a population who are also at higher risk of developing eating and body image related issues (e.g., Fussner & Smith, 2015; McClain & Peebles, 2016; Tran et al., 2020). The development of interventions which consider the specific experiences of different populations increases the efficacy of such interventions, hence the need for increased knowledge of experiences of body issues in gay and bisexual men.

Within Western culture, presentation of “thin” or “slim” female body types have contributed to poor body image perception among younger female populations (Bombak et al., 2019). Those who do not meet this ideal expectation often display lower body image and dissatisfaction (Bombak et al., 2019) and perceive a lack of acceptance of their body shape from peers, family, and friends (Tylka

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& Homan, 2015). Body acceptance has been defined as an acknowledgement of feeling unsatisfied with some aspects of the body but accepting these non-judgementally (Tylka & Wood-Barcalow, 2015); it is often aligned with “fat acceptance” though there are many facets to body acceptance amongst different populations (Ruggiero et al., 2000). The perceived “body acceptance by others” (Swami et al., 2020) in relation to those who are close to the individual (*family and friends*) has also been linked to body image and mental health outcomes (Layman et al., 2021). Evidence shows that higher rates of body acceptance relate to positive body image (Swami et al., 2021). A higher prevalence for body related issues has been found in female populations including a lack of body acceptance, leading to poor body image and body dissatisfaction (Santonastaso, 1995). A large collection of research has attributed this to women internalizing the “thin” body ideals portrayed by the media (Pidgeon & Appleby, 2014). While findings generally indicate a thin “ideal body” proposition, further explorations of body acceptance and how this relates to body image and mindfulness constructs is needed.

Research that explores body image in men does not often depict the sexuality of participants and therefore does not consider the specific experiences of gay and bisexual men (Fussner & Smith, 2015). This omission is important, as recent literature has highlighted gay and bisexual men as experiencing a higher prevalence of eating and body related issues when compared with heterosexual men (Blashill, 2010). Brewster et al. (2017) suggest that the pressure upon gay men to conform to the high standards of bodily appearance in the gay community could result in disordered eating and body dissatisfaction. Yelland and Tiggemann (2003) compared measures assessing disordered eating and desire for muscularity in gay men, using heterosexual men and women as control groups. Gay men scored higher in the disordered eating and desire for muscularity measures than both the control groups (Yelland & Tiggemann, 2003). This suggests that the aspirational male gay body type is both lean and muscular. This body ideal can be difficult to achieve and maintain and may help to explain the higher rates of disordered eating. A perceived failure to achieve such body ideals may also negatively affect wellbeing in gay men (Brewster et al., 2017; Regan et al., 2021; Yelland & Tiggemann, 2003).

Qualitative explorations of body ideals in relation to social perceptions and the impact on the individual have reflected similar findings (Morgan, & Arcelus, 2009). Regan et al. (2021) highlighted the appearance-based judgement experienced by gay men who visited “gay spaces”, and how this related to a lack of body acceptance within gay men. Further findings showed that participants were judgemental of themselves when they had eaten unhealthy food, particularly when consumption was unplanned or eaten without

attention (i.e., mindless eating). This research highlights the lack of body acceptance experienced and the perceived importance of attaining or maintaining a slim or muscular body type to be “accepted” within this community (Regan et al., 2021). The potential of mindfulness and self-compassion to improve body acceptance and body image is proposed (Brewster et al., 2017; Regan et al., 2021; Yelland & Tiggemann, 2003).

Literature presents several explorations of mindfulness-based interventions and their effectiveness at attenuating body related issues within the general and more specific populations. Balciuniene et al. (2021) tested an 8-week intervention programme utilising mindfulness based physical exercise and educational sessions with a sample of female college students who showed an increase in body image scores post intervention. Similarly, Zamzami et al. (2015) demonstrated that mindfulness-based exercise attenuated lower body image in female students. This provides evidence of the effectiveness of mindfulness-based interventions when addressing body related issues in specific populations (Balciuniene et al., 2021; Zamzami et al., 2015).

Self-compassion is a mindfulness-based construct which describes compassion directed towards oneself, comprising of three main elements, kindness, a sense of common humanity and mindfulness (Germer & Neff, 2013). This concept has been explored within body image and eating literature, where higher levels of self-compassion relating to higher levels of body satisfaction and lower reports of disordered or maladaptive eating (Egan et al., 2018; Mantzios & Egan, 2017; Rahimi-Ardabili et al., 2018; Regan et al., 2021). Wasylikiw et al. (2012) explored self-compassion and self-kindness in relation to body image in a sample of female university students. Higher levels of self-compassion and self-kindness were found to be predictors of higher levels of body image. Self-compassion-based interventions have also shown efficacy in reducing body dissatisfaction in female populations, Albertson et al. (2015) tested a daily audio guided self-compassion based-meditation intervention over 3 weeks, results showed higher levels of self-compassion which were associated with higher levels of body image.

Emerging research has looked at the potential influence mindful eating may have on reducing not only maladaptive eating behaviours, but also body dissatisfaction (Olvera-Ruvalcaba & Gómez-Peresmitré, 2021). Mindful eating encompasses non-judgment, eating with awareness and engaging with the physical and emotional sensations associated with eating (Mantzios, 2021). Ponde Nejedan et al. (2018) explored mindful eating, body image and quality of life in a sample of married Iranian women, showing increases of mindful eating related to increases in body image and quality of life. This research suggests that mindful eating may also play a role in promoting positive body image. Further links between mindful eating and body image

are presented by Webb et al. (2018) who investigated the impact of family talk around mealtimes. Results showed that self-denigrating talk was inversely linked with mindful eating while increases in mindful eating behaviours increased positive body image and appreciation. Research proposes the importance of mindful eating (Mantzios et al., 2018), and by extension, of mindful-eating based interventions (Hussain et al., 2017; Mantzios et al., 2020a, b), when considering its potential impact on positive body image.

The links between body image and mindfulness-based concepts have been discussed (Jordan et al., 2014; Tihanyi et al., 2016; Wasylikiw et al., 2012); however, the potential link of body acceptance to mindfulness has not been extensively explored. Exploration of these concepts within gay and bisexual men would highlight elements that may be important when considering a mindful or compassion-based intervention to attenuate body and eating related issues in gay and bisexual men. The aim of this study is to explore body image and the potential relationships to mindfulness, self-compassion, and mindful eating in gay and bisexual men to inform future mindful and/or compassion-based intervention to attenuate body related issues. Importantly, the present research assumes the close association of body acceptance to body-image, and the congruent nature of acceptance to mindfulness, self-compassion, and mindful eating to be a significant indicator of promoting healthier changes towards body perceptions.

Method

Participants

All participants ($n = 163$, $M_{age} = 37.29$, $SD = 12.07$; $M_{BMI} = 26.37$, $SD = 4.94$) were English-speaking, from the UK and self-identified as either *gay* (89%, $n = 145$), bi-sexual (7.4%, $n = 12$), or heteroflexible (1.2%, $n = 2$) with 2.4 % ($n = 4$) not disclosing any information regarding sexuality. Eligibility criteria included individuals who were over the age of 18 years old and those who has not received a diagnosis of an eating or body-related disorder within the past 2 years, this was screened for within the Participant information sheet and the Informed consent form. According to Fritz and MacKinnon (2007), a sample size of 163 participants would enable observations of an indirect effect of a medium-sized alpha pathway coefficient (i.e., *predictor to mediator*) and a medium-sized beta pathway coefficient (i.e., *mediator to criterion*) at 80% power using bias-corrected bootstrapping estimating procedures (Table 1).

Procedure

Participants were recruited through volunteer sampling; an advert for the study outlining its nature, target population

Table 1 Participant demographic information

Variable	Participants ($n = 163$)
Sexuality	
Gay	145
Bisexual	12
Heteroflexible	2
Non-disclosure	4
Gender	
Trans-male	1
Non-binary	1
Cis male	130
Gender fluid	4
Gender non-conforming	5
Non-disclosure	22
Ethnicity	
White British	115
White Irish	5
White and black Caribbean	4
African	3
Caribbean	4
White and Black African	2
South Asian	6
Non-disclosure	24

and link to the questionnaire was used for recruitment. This poster was disseminated by the research team through social media platforms, highlighting the study information and linking to the questionnaire platform to potential participants. The online survey platform Qualtrics was used to contain the questionnaire. Upon clicking the link, participants were presented with an online version of the Information sheet and Consent form which had to be viewed and agreed to before the questionnaire could be accessed. Once all measures were completed, participants were presented with the Debrief form. This included information regarding the contact details of the researcher, further support, and details of their right to withdraw their data from the study should they wish to do so at a later date. Data were collected from March until August 2021. Ethical approval was received from The Business Law and Social Sciences Ethics Committee at Birmingham City University (Regan /#7972 /sub3 /R(B) /2021 /Jan /BLSS FAEC).

Measures

Participant information sheet. Participants were asked to report their age, gender, height, weight, ethnicity, smoking and exercise engagement.

The *Sussex-Oxford Compassion for the Self* (SOCS-S; Gu et al., 2020) is a 20-item scale containing 5 sub-scales (*Recognising suffering; Understanding the universality of suffering; Feeling for the person suffering; Tolerating uncomfortable feelings; Acting or being motivated to act to alleviate suffering*). Total scores were calculated and used within the analysis; with the higher the score meaning higher levels of self-compassion. Responses were recorded using a 5-point Likert scale (1 = *Not at all true*, 2 = *Rarely true*, 3 = *Sometimes true*, 4 = *Often true*, 5 = *Always true*), sample items include: "I notice when I'm feeling distressed" and "I connect with my own suffering without judging myself". Cronbach's alpha and McDonald's omega were used to assess the scale reliability for the SOCS-S in the present research ($\alpha = 0.95$, $\omega = 0.95$).

The *Body Image Acceptance and Action Questionnaire -5* (BI-AAQ-5; Basarkod, Sahdra & Ciarrochi, 2018) is a short form of the *Body image – Acceptance and Action Questionnaire* (BI-AAQ-5) which aims to assess body image acceptance. Total scores were calculated and used within the analysis; with a higher score meaning lower levels of body-acceptance (or higher levels of body non-acceptance). The BI-AAQ-5 is a 5-item scale where responses are recorded using a 7-point Likert scale (1 = *Always true* and 7 = *Never true*). Sample items include: "Worrying about my weight makes it difficult for me to live a life that I value" and "I shut down when I feel bad about my body shape or weight". Cronbach's alpha and McDonald's omega were used to assess the scale reliability for the BI-AAQ in the present research ($\alpha = 0.92$, $\omega = 0.92$).

The *Dresden Body Image Questionnaire* (DBIQ; Schefers et al., 2017) is a 35-item questionnaire with positively and negatively worded statements comprising of five subscales (*Body Acceptance, Vitality, Physical Contact, Sexual Fulfilment and Self-aggrandizement*). The DBIQ aims to assess body image, with higher scores meaning higher levels of a more positive perception of body image; total scores were calculated and used within the analysis. Responses were recorded using a 5-point Likert scale (1 = *Not at all true*, 2 = *Rarely true*, 3 = *Sometimes true*, 4 = *Often true*, 5 = *Always true*), sample items include: "I wish I had a different body" and "I use my body to attract attention". Cronbach's alpha and McDonald's omega were used to assess the scale reliability for the BDIQ in the present research ($\alpha = 0.91$, $\omega = 0.91$).

The *Mindful Eating Behaviour Scale* (MEBS; Winkens et al., 2018) is a 20-item scale, and has 5 subscales (*Focused Eating, Eating with Awareness, Eating without Distraction, Hunger and Satiety Cues*). Total scores were calculated and used within the analysis; with a higher score meaning higher levels of mindful eating. Responses were recorded using a 4-point Likert scale (1 = *Never* to 4 = *Usually*), sample items include: "I wish I could control my eating more

easily" and "I trust my body to tell me when to eat". Cronbach's alpha and McDonald's omega were used to assess the scale reliability for the MEBS in the present research ($\alpha = 0.80$, $\omega = 1.08$).

The *Five Facet Mindfulness Questionnaire* (FFMQ-15; Gu et al., 2016) is a 15-item scale, and comprises of 5 subscales (*Observing items, Describe items, Acting with awareness items, Non-judging items, Non-reactivity items*). Total scores were calculated and used within the analysis; with the higher the score meaning higher levels of mindfulness. Responses were recorded using a 5-point Likert scale (1 = *Never or very rarely true* to 5 = *Very often or always true*), sample items include: "I'm good at finding words to describe my feelings" and "I find myself doing things without paying attention". Cronbach's alpha for the FFMQ in the present research was $\alpha = 0.67$. McDonald's omega was used to assess the scale reliability for the FFMQ in the present research, but the low association of the items and the proposed poor model fit did not allow for a score until Observe items (i.e., 1, 6, and 11) and Item 5 (non-reactivity) were removed ($\omega = 0.62$).

Data Analyses

All statistical analyses were conducted using IBM SPSS 25. A total of 44 participants were excluded from the study due to incomplete or missing data, which took place within the initial screening process, leaving a total of 163 participants completing all measures described within this study. A significance value of <0.05 was used to determine significant relationships between variables. Bivariate correlation analysis was used to determine the relationship between variables explored within the questionnaire. Mediation analyses were conducted using Hayes' (2017) PROCESS macro (Model 4) with a bootstrap sample of 5000. Confidence intervals (CI) do not cross zero and are considered significant when upper and lower boundaries are corrected to 95%. Body acceptance was used as a mediator to explore the effect on the relationship between Mindfulness, Self-compassion, and Mindful Eating on Body Image.

Results

Correlation Analyses

Pearson's Bivariate correlation coefficient was employed using significant values between variables (Body acceptance, Body image, Mindfulness, Self-compassion, and Mindful eating), as well as means and standard deviations as presented in Table 2. Significant negative associations were observed between body non-acceptance and body

Table 2 Means and standard deviations of variables, and bivariate correlations between body image, body acceptance, mindfulness, self-compassion and mindful eating

Scales	1	2	3	4	5	<i>M</i>	<i>SD</i>
(1) BIAAQ						18.82	8.21
(2) DBIQ	-0.63**					106.75	20.25
(3) FFMQ	-0.41**	0.32**				46.26	7.29
(4) SOCS-S	-0.50**	0.50**	0.65**			66.69	14.71
(5) MEBS	-0.43**	0.48**	0.41**	0.52**		67.85	10.01

BI-AAQ-5 – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance); *DBIQ* – Dresden Body Image Questionnaire; *FFMQ* – Five Facet Mindfulness Questionnaire; *SOCS-O* – The Sussex-Oxford Compassion for Others; *MEBS* – Mindful Eating Behaviour Questionnaire.

** Correlation is significant at the 0.01 level (two-tailed).

image ($r = -0.63, p < 0.001$), suggesting that with higher body image there is a decrease of non-body acceptance (essentially meaning the higher body image, the higher the scores on measures assessing body acceptance). Significant negative associations were observed between body non-acceptance, mindfulness ($r = -0.42, p < 0.001$), self-compassion ($r = -0.50, p < 0.001$) and mindful eating ($r = -0.43, p < 0.001$). The higher the body non-acceptance, the lower the scores in mindfulness, self-compassion and mindful eating (essentially meaning the higher body acceptance the higher scores in mindfulness, self-compassion and mindful eating). Significant positive associations were observed between body image, mindfulness ($r = 0.32, p < 0.001$), self-compassion ($r = 0.50, p < 0.001$) and mindful eating ($r = 0.48, p < 0.001$). As body image increased, scores on measures assessing mindfulness, self-compassion, and mindful eating also increased.

Mediation Analyses

Further analysis explored the mediating effect of body acceptance on the relationships of mindfulness,

self-compassion and mindful eating to body image. First, mindfulness was entered as the predictor variable and body image was entered as the outcome variable. Body acceptance was entered as the potential mediating variable. Findings indicated that mindfulness indirectly relate to body image, through its relationship with body acceptance. Mindfulness significantly predicted body acceptance ($b = -0.49, t = 5.47, p < 0.001$), as scores on mindfulness increased, scores on body acceptance decreased which related to body acceptance significantly predicting body image ($b = 1.43, t = 7.77, p < 0.001$). A 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect ($b = 0.70$) which was above zero ($CI = 0.41, 1.00$) Fig. 1.

Secondly, self-compassion was entered as the predictor variable, body image as the outcome variable and body acceptance as the potential mediator. Findings indicated that self-compassion indirectly related to body image, through its relationship with body acceptance. Self-compassion significantly predicted body acceptance ($b = -0.29, t = 5.41, p < 0.001$), as scores of self-compassion increased, scores on body acceptance decreased which related to body acceptance significantly predicting body

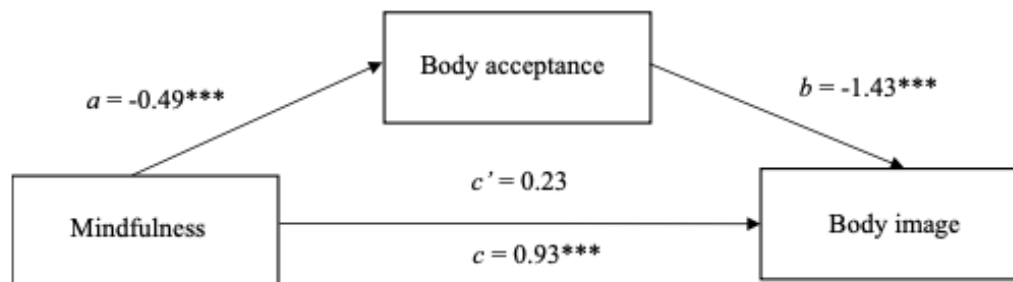


Fig. 1 The mediating effect of body acceptance in the relationship between mindfulness and body image. Note: All presented effects are unstandardised; *a* is the effect of Mindfulness on body acceptance; *b* is the effect of body acceptance on body image; *c'* is the direct effect

of mindfulness on body image; *c* is the total effect of mindfulness on body image. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Further note: *BI-AAQ-5* – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance)

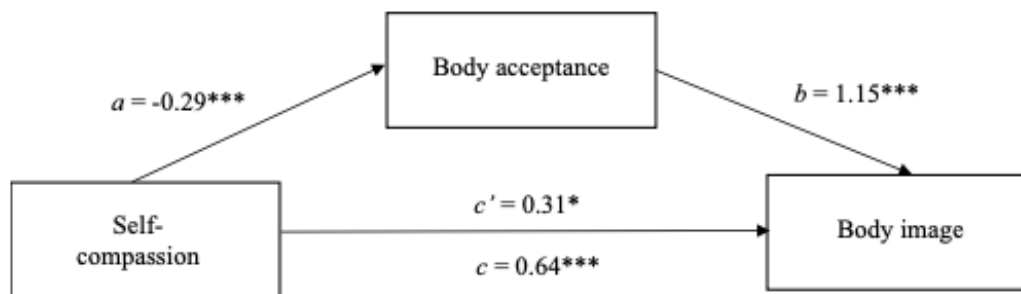


Fig. 2 The mediating effect of body acceptance in the relationship between self-compassion and body image. Note: All presented effects are unstandardised; a is the effect of self-compassion on body acceptance; b is the effect of body acceptance on body image; c' is the

direct effect of self-compassion on body image; c is the total effect of self-compassion on body image. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Further note: BI-AAQ-5 – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance)

image ($b = 1.15$, $t = 6.60$, $p < 0.001$). A 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that the indirect effect ($b = 0.33$) was above zero ($CI = 0.18, 0.54$) Fig. 2.

Lastly, mindful eating was entered as the predictor variable, body image as the outcome variable and body acceptance as the potential mediator. Findings indicated that mindful eating indirectly related to body image, through its relationship with body acceptance. Mindful eating significantly predicted body acceptance ($b = -0.36$, $t = 5.30$, $p < 0.001$), as scores of mindful eating increased, scores on body acceptance decreased which related to body acceptance significantly predicting body image ($b = 1.14$, $t = 5.70$, $p < 0.001$). A 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that the indirect effect ($b = -0.42$) was above zero ($CI = 0.23, 0.62$) Fig. 3.

Discussion

The aim of this research was to explore body image, body acceptance and their relationship to mindfulness, self-compassion, and mindful eating among gay and bisexual men. Exploring these concepts among the current population provides novel insight into body image and their relationships to mindfulness and related concepts (i.e., self-compassion and mindful eating) among a previously underrepresented community. Furthermore, the potential relationship between mindfulness, mindful eating and self-compassion to body-image, and the potential of explaining such relationships through body acceptance was also explored. Findings indicated that body acceptance mediated the relationship between mindfulness, self-compassion and body image, and mindful eating and body image. This corresponds with previous literature that outlines the link between mindfulness (Zamzami et al., 2015), self-compassion (Mantzios &

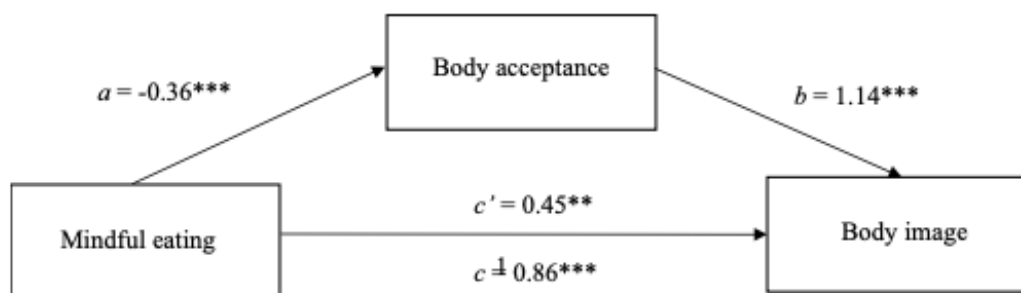


Fig. 3 The mediating effect of body acceptance in the relationship between mindful eating and body image. Note: All presented effects are unstandardised; a is the effect of mindful eating on body acceptance; b is the effect of body acceptance on body image; c' is the

direct effect of mindful eating on body image; c is the total effect of mindful eating on body image. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Further note: BI-AAQ-5 – Body image Acceptance and Action scale (higher scores represent higher body non-acceptance)

Egan, 2017, 2018) and mindful eating (Ponde Nejadan et al., 2018) to body image. These findings presented within a gay population reflect the outcomes of research within general and more specific populations (Albertson et al., 2015). This research also shows the potential association of body acceptance to mindfulness and body image within this population. The indication of the relationships between mindfulness, self-compassion and mindful eating to body image can be explained through body acceptance, highlighting its importance within this community.

Correlation analysis also provided some novel and interesting findings. Within this population, body image related positively to self-compassion, mindfulness and mindful eating. Research exploring mindfulness-based concepts and body image in female populations are similar to the current findings presented (Balciuniene et al., 2021; Zamzami et al., 2015); suggesting that an increase in body image relates to a more mindful and compassion view of the self. Higher body acceptance also related positively to mindfulness, self-compassion and mindful eating, suggesting that this construct relates similarly to body image in its relationship to mindfulness-based constructs.

It is important to consider the demographic of participants included within this sample. The average BMI of participants (26.37) falls into the category deemed as "overweight"; meaning the conclusions drawn from this sample can only be attributed to an overweight population. The majority of participants also identified themselves as "White British" ($n = 115$). Future research should endeavour to capture the experiences of queer people of colour within their research, helping to provide insight into body- and mindfulness-related constructs among diverse samples.

The findings from the present study should inform future research and practice in aiming to attenuate body related issues in this population. The role of body acceptance here also provides a clear link that this construct is related to mindfulness, self-compassion, mindful-eating, and body image. Future research exploring these concepts or investigating the efficacy of interventions should consider this construct in relation to body image.

Limitations and Future Research Directions

This research concedes the following limitations which are significant to consider for future research. First, the cross-sectional nature of this study does provide limited insight, and qualitative explorations should gather more in-depth data from gay men. Second, conclusions can only be drawn from the period that data was collected. Consideration should be given to data being collected during the COVID-19 pandemic (March to August 2021) where variations of restrictions were in place across the United Kingdom. This could have played some role in altering participants' perceptions of body image and body acceptance, specifically in relation to mindfulness-based constructs.

This could be specifically prominent within this community; whereby the social influence of perceived body ideals is compounded by perceptions of other gay men, particularly when in 'gay spaces' which negatively impacts on body self-acceptance (Regan et al., 2021). Future research should explore these concepts within gay and bisexual men in more standard social parameters to gain a more a comprehensive understanding.

All scales and corresponding items included in this study were completed at one time by participants, the anticipated completion time was around 15–20 minutes. It is also important to consider the potential risk of survey fatigue experienced by participants in completing a questionnaire with many items and the implications this may have had on the results. Common methods bias (or variance) is a well-documented phenomenon observed in research based on self-reported measures. Multiple constructs are measured on multiple-item scales presented within the same questionnaire which can lead to spurious effects due to the measurement instruments rather than to the constructs being measured. For example, participants are asked to report their own perceptions on two or more constructs in the same questionnaire; this is likely to produce spurious correlations among the items measuring these constructs owing to response styles, social desirability, priming effects which are independent from the true relationships presented among the constructs being measured (Podsakoff et al., 2012). It is also important to consider the impact of the reliability score (Cronbach Alpha) for the FFMQ, as this was below the widely accepted 0.70 (0.67).

The disproportionate number of gay men who took part in this study when compared to bisexual men, highlights a lack of balance when considering the conclusions drawn from this research. The office for National Statistics stated that in 2019, the percentage of gay and bisexual men within the UK was 1.9% (*gay men*) and 0.6% (*bisexual men*) (Sanders, 2020); meaning the data from this research does not reflect the representation of bisexual men within the wider population. Future research should endeavour to include a more diverse sample, to produce a balanced approach to drawing conclusions around the body image and related concepts of gay and bisexual men. The authors also consider the complexity of defining "gay men" or "bisexual men". Non-binary, non-conforming and gender fluid individuals were included within this sample, the authors fully recognise that these individuals may or may not be comfortable with the label "men". The inclusion of gender minorities within this sample are to strive to provide a greater inclusion of queer experiences within research, and not to label or make assumptions about participants' gender.

Further research is needed to develop the understanding of mindfulness and related concepts within this community to aid in the development of an appropriate intervention. The necessity for a suitable intervention to attenuate eating and body related issues experienced by gay and bisexual men is clear. Mindful and compassion-based interventions have been effective in

reducing body related issues within other populations (Balciuniene et al., 2021; Zamzami et al., 2015), therefore, evaluating the efficacy of such interventions within the gay population may provide novel research. This research shows the unique role of body acceptance to mindfulness, self-compassion and mindful eating when relating these concepts to body image. This provides insight into the potential addition of body acceptance and mindfulness-based concepts when considering potential avenues in overcoming body-related issues experienced by gay and bisexual men.

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Data Availability Data available from the corresponding author upon request.

Declarations

Conflict of Interest The authors declare no competing interests.

Ethics approval The study was approved by The Business Law and Social Sciences Ethics Committee at Birmingham City University (Regan /#7972 /sub3 /R(B) /2021 /Jan /BLSS FAEC) and was in accordance with the ethical standards of the institutional and/or national research committee, and with the 1964 Helsinki Declaration and its later amendments. This article does not contain any studies with animals.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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The Importance of Body Acceptance in Exploring the Relationships of Mindfulness-Based Constructs to Eating Behaviours among Gay and Bisexual Men

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Abstract

Introduction Mindfulness and mindfulness-based constructs (e.g. self-compassion and mindful eating) have been negatively associated with problematic eating and body-related issues in general and other specific populations. Exploration of mindfulness-based concepts in relation to problematic eating would provide novel insight into the relationships of these elements among gay and bisexual men. The present research aimed to identify the role of body acceptance in exploring previous relationships between mindfulness-based constructs and eating behaviours.

Methods Participants completed an online questionnaire, comprising measures assessing mindfulness, self-compassion, mindful eating, body acceptance, grazing, emotional eating, restrained eating and external eating (data collection occurred in 2022). Correlation and further mediation analysis was employed to assess the relationships of these constructs within the present sample ($n = 164$).

Results Positive associations between body acceptance and mindfulness-based concepts and negative associations to problematic eating (grazing; emotional, restrained, and external eating) were found within a sample of self-identified gay and bisexual men. Mediation analysis showed the importance of body acceptance in exploring relationships between mindfulness, self-compassion, and mindful eating to grazing, emotional, restrained and external eating.

Conclusions Findings highlight the importance of body acceptance when considering the development of mindfulness- and/or compassion-based interventions to attenuate problematic eating among gay and bisexual men.

Policy Implications This research consolidates the importance of mindfulness and related constructs when considering problematic eating, which should be reflected in policy aiming to attenuate unhealthy eating in specific populations.

Keywords Self-compassion · Body-acceptance · Gay men · Mindfulness · Emotional eating · Restrained eating · Grazing

Introduction

Gay and bisexual men have been found to experience eating- and body-related issues disproportionately compared to heterosexual men (Williamson, 1999). A growing body of literature denotes several attributing factors relating to the increased eating- and body-related issues including social influences (Blashill, 2010) and homonegativity (Badenes-Ribera et al., 2018). Research within this community is

predominantly focused on clinical disordered eating and eating disorder prevalence (Parker & Harriger, 2020), with a lack of exploration of other problematic eating behaviours which could also be prevalent. Mindfulness and related concepts (i.e. self-compassion and mindful eating) have been shown to be negatively associated with unhealthy eating behaviours (Egan & Mantzios, 2018; Mantzios & Egan, 2017; Mantzios et al., 2018a, b). Mindfulness and compassion-based interventions have shown to reduce problematic eating within the general population and more specific population groups with specialised needs (Atkinson & Wade, 2016; Egan et al., 2021; Mantzios & Wilson, 2015; Marchiori & Papiés, 2014; Smith et al., 2006), but again, similar examinations are scarce for gay and bisexual men. Explorations of the relationships of mindfulness and related concepts to problematic eating behaviours in gay and bisexual men may

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provide novel insight and suggestions for future interventions to attenuate eating and body-related disturbances.

Eating and Body-Related Issues among Gay and Bisexual Men

Recent research has shown the disproportionately adverse eating- and body-related issues experienced by gay men when compared with straight men (Joy & Numer, 2018). Gay and bisexual men experience higher prevalence of eating disorders and disordered eating, compared to straight men (Naamani, 2018; Siconolfi et al., 2009; Williamson & Hartley, 1998). Research attributes homonegativity and body dissatisfaction to predicting eating disturbances within this population (Smith et al., 2011). Williamson and Spence (2001) investigated maladaptive eating in a sample of 202 gay men aged 14–72, where the importance of slimness and attractiveness was reported as the most influential predictor of problematic eating-related attitudes presenting a basis when considering problematic eating in gay men.

Further explorations of eating and body concerns highlight how gay men are subject to social pressures presented by the community to conform to weight and body ideals (Joy & Numer, 2018; Regan et al., 2021). The strong focus on social capital gained from attracting potential romantic partners leads to self-objectification (Martins et al., 2007) and further fosters a critical aspect of the community, which focuses on body shape (Peplau et al., 2009; Regan et al., 2021). Foster-Gimbel and Engeln (2016) reported that gay men experienced romantic rejection due to the anti-fat bias in more instances than straight men. This negative projection of critical perspectives around body image has produced a community which idolises a 'slim' or 'muscular' body shape, with those who do not attain or maintain these attributions potentially experiencing low self-esteem (Yelland & Tiggemann, 2003). Overall, the non-acceptance of the community and the potential implications of self-non-acceptance of one's body support the utility and effectiveness of mindfulness-based interventions and previous relationships observed in gay and bisexual populations.

Body Acceptance and Associations to Problematic Eating

Body acceptance has been described as the acknowledgement of aspects of the body and accepting them without judgement (Tylka & Wood-Barcalow, 2015). Perceived 'body acceptance by others' (Swami et al., 2020) relating to those who are close to the individual (family and

friends) has also been linked to body image and wellbeing outcomes (Layman et al., 2021). An exploration of how mindfulness, self-compassion and mindful eating relate to body image and body acceptance in gay and bisexual men was conducted by Regan et al. (2023) and found that body acceptance mediated the relationship between mindfulness, self-compassion and mindful eating to body image. This research presents the importance of body acceptance in explaining the relationship between mindfulness-based constructs and body image providing considerations of acceptance and mindfulness within future interventions to attenuate body concerns within gay and bisexual men. Considering the association between body concerns and problematic eating behaviours, the potential implications for eating behaviours through the association with body acceptance poses another interest in developing health amongst gay and bisexual men and has not been explored in previous literature.

The strong focus on slim and/or muscular body ideals within this community leads to a high prevalence of restrained eating (Conner et al., 2004). Restrained eating relates to the restricted consumption of foods to achieve weight loss or to prevent weight gain (Herman & Mack, 1975). Research has shown that this behaviour is counter-productive and may eventually be followed by weight gain (e.g., Lowe et al., 2013). External eating and grazing have both been presented as behaviours associated with weight outcomes in the general population and not extensively explored among gay and bisexual men (Carter & Jansen, 2012; Wardle, 2007). Grazing is defined as the uninhibited repetitive eating of small portions of food (Heriseanu et al., 2019); external eating relates to eating due to food-related stimuli, regardless of hunger or satiety (Schachter et al., 1968). Greater attention has been given to grazing as a problematic behaviour, due to its greater prevalence through the changing social parameters instigated by the pandemic and the greater amounts of time spent at home (Ramalho et al., 2022).

Further exploration of eating behaviours relating to adverse health outcomes revealed that emotional eating has been found to contribute to weight increase, higher BMI and obesity in the general population (Van Strien, 2018) but also in more specific populations with specialised needs in nutritional intake (Egan et al., 2021; Spinosa et al., 2019). Emotional eating refers to over-eating in response to experiencing negative emotions (Frayn & Knäuper, 2018). While literature focusing on relationships of problematic eating and body acceptance is limited, previous associations of body image to problematic eating propose a potential of associations to body acceptance (Brytek-Matera et al., 2021; Duarte & Pinto-Gouveia, 2015).

Mindfulness and Self-Compassion in Relation to Eating and the Body

Mindfulness has been described as paying attention to the present moment on purpose, non-judgementally (Kabat-Zinn, 2015). Trait mindfulness has been included in research that explores the prevalence of eating behaviours and body image (e.g. Mantzios & Wilson, 2015; Prowse et al., 2013). Self-compassion links closely with mindfulness, a construct described as the awareness of one's own suffering, with a desire to alleviate it, comprising of three elements, kindness, common humanity and mindfulness (Germer & Neff, 2013). Mindfulness and self-compassion generally relate positively to healthy eating and negatively to 'unhealthy' or problematic eating (Dutt et al., 2019; Hussein et al., 2017; Mantzios & Egan, 2017; Mantzios et al., 2018a; Rahimi-Ardabili et al., 2018). This finding has been reflected in research within the general population, but also in more specific populations (e.g. adolescent/student females; health care professionals; individuals with a diagnosis of cystic fibrosis) (Egan et al., 2021; Kauser et al., 2022).

Mindfulness and compassion-based interventions have been found as effective in attenuating body- and eating-related disturbances (Minot, 2016). Considering the critical nature of the gay community and the tendency to experience romantic rejection when not adhering to idolized body ideals, engagement with community norms could lead to lower self-esteem, self-criticism and potentially lower levels of self-compassion (Williamson & Spence, 2001). Mindfulness and self-compassion have been found to relate negatively to grazing, suggesting that greater levels of mindfulness and self-compassion may lead to fewer instances of engaging in grazing behaviours (Mantzios et al., 2018b). Mindful eating is related negatively to grazing, further highlighting the importance of mindfulness in relation to grazing (Mantzios et al., 2018a). Mindful eating behaviour is defined as an awareness of eating, moment by moment, non-judgementally (Mantzios, 2021, 2023). These findings provide interesting insight into the potential efficacy of mindful- and/or compassion-based interventions at attenuating grazing behaviours. Exploration of grazing behaviours, mindfulness and self-compassion among gay and bisexual men has not been explored in past literature and would provide novel insight into potential problems and solutions for this population. Previous studies have reported that mindfulness (Verrier & Day, 2021) and self-compassion (Gouveia et al., 2019) negatively relate to emotional eating, suggesting that higher levels of trait mindfulness and self-compassion relate to lower scores of emotional eating. These findings are consistently presented within eating literature within general and more specific populations (e.g. adolescent females, individuals with a diagnosis of cystic fibrosis) (see Egan et al., 2021; Hsu & Forestell, 2021).

Furthermore, Alberts et al. (2012) investigated the efficacy of a mindfulness-based intervention programme for eating aimed at reducing emotional, external and restrained eating and body image concerns. Participants scored significantly lower on all measures of eating and body image concern in the mindfulness condition when compared with the control group. Previous experimental research has indicated how mindfulness-based interventions are responsible for changes in body and eating measurements, while the interrelation between mindfulness-based constructs, body image and eating behaviours has been a common theme of understanding the utility and rationale behind mindfulness-based constructs (Breines et al., 2014; Kelly & Stephen, 2016; Mantzios et al., 2020a, b; Prowse et al., 2013; Webb et al., 2018).

Collectively, these findings present interesting insights when considering the role of mindfulness-based constructs in problematic eating and outline the potential effectiveness of reducing body image issues and problematic eating behaviours within more general populations; however, similar research focusing on gay and bisexual men is scarce. There is a clear justification for exploring eating-related behaviours, body image and mindfulness-based concepts among gay and bisexual men. The disproportionate prevalence of eating and body disturbances in this population when compared with straight men highlights the need to explore problematic eating within this community. Exploring the potential of body acceptance in explaining relationships of mindfulness-based constructs to problematic eating would provide a basis for investigating the efficacy of a body acceptance, mindful and/or compassion-based intervention to attenuate eating-related issues among gay and bisexual men.

The Present Study

The association of mindfulness, self-compassion and mindful eating to eating behaviours and the potential importance of body acceptance within the general and more specific population present insight into how these mechanisms may relate to health outcomes. Significantly, the consideration of mindfulness-based constructs predicting body-acceptance is of particular interest, given that people who are more accepting would show signs of more acceptance of their bodies. The present research aimed to identify a mechanism or motivation of change, explaining the utility of body-acceptance as a mediator. The significance of recognizing the role of body acceptance becomes evident when explaining how mindfulness-based concepts relate to body image among gay and bisexual men, as investigated by Regan et al. (2023). Therefore, the current study builds upon this foundation,

seeking to explore potential advantages for eating behaviours through four hypotheses:

1. Body acceptance will negatively relate to grazing, emotional eating, external eating and restrictive eating.
2. Body acceptance will positively relate to mindfulness, self-compassion and mindful eating.
3. Mindfulness, self-compassion and mindful eating will relate negatively to grazing, emotional eating, external eating and restrictive eating.
4. Body acceptance can exhibit a sequential mediating effect between mindfulness, self-compassion and mindful eating to grazing, emotional eating, external eating and restrictive eating.

Method

Participants

All participants ($n = 164$, $M_{age} = 34.5$, $SD = 10.4$; $M_{BMI} = 26.23$, $SD = 4.6$) were English-speaking, from the UK and self-identified as gay, bisexual or heteroflexible men (see Table 1 for participant demographic information). Participants were recruited through the research program 'Prolific'; a short advertisement denoting the aims, nature of the study and eligibility criteria was published on the site. Only participants with no diagnosis of an eating disorder within the past 2 years and were over the age of 18 were eligible to take part. Participants who met these criteria and who were interested could follow the link to the online questionnaire. According to Fritz and MacKinnon (2007), a sample size of 164 would allow observations of an indirect effect of a medium-sized alpha pathway coefficient (i.e. predictor to mediator) and a medium-sized beta pathway coefficient (i.e. mediator to criterion) at 80% power using bias-corrected bootstrapping estimating procedures.

Table 1 Participant demographic information

Variable	Participants ($n = 164$)
Sexuality	
Gay	102
Bisexual	55
Heteroflexible	5
Non-disclosure	2
Gender	
Trans-male	9
Cis male	136
Gender fluid	2
Gender non-conforming	3
Non-disclosure	14

Table 1 (continued)

Variable	Participants ($n = 164$)
Ethnicity	
White British	134
White Irish	3
Pakistani	2
Chinese	2
African	3
Caribbean	1
Non-disclosure	19

Materials

Participant Information Sheet

Participants were asked to report their age, gender, height, weight, ethnicity, smoking and exercise engagement.

The Self-compassion Scale (SCS; Neff, 2003) is a 26-item scale containing 6 sub-scales (self-kindness, self-judgment items, common humanity, isolation, mindfulness, over-identified). Responses are recorded on a 5-point Likert scale (1 = Almost Never and 5 = Almost Always) whereby higher scores relate to higher levels of self-compassion. Sample items include: 'When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people' and 'I try to be loving towards myself when I'm feeling emotional pain'. Cronbach's alpha for the SCS in the present research is 0.94.

The Dutch Eating Behaviour Questionnaire (DEBQ; Van Strien et al., 1986) is a 33-item scale containing 3 sub-scales (external eating, restrained eating and emotional eating). Responses are recorded on a 5-point Likert scale (1 = Never and 5 = Very Often) whereby higher scores relate to higher rates of external restrained and emotional eating. Sub-scales were used within the analysis; the restrained eating subscale contains 10 items, for example: 'Do you watch exactly what you eat?' and 'Do you deliberately eat foods that are slimming?'. Cronbach's alpha for the restrained eating subscale in the present research is 0.87. The emotional eating subscale contains 12 items, for example: 'Do you have a desire to eat when you are depressed or discouraged?' and 'Do you have a desire to eat when you are feeling lonely?'. Cronbach's alpha for the emotional eating subscale in the present research is 0.81. The external eating subscale contains nine items, for example: 'If you walk past the baker do you have the desire to buy something delicious?' and 'If you walk past a snackbar or a cafe, do you have the desire to buy something delicious?'. Cronbach's alpha for the external eating subscale in the present research is 0.85.

The Grazing Questionnaire (GQ; Lane & Szabo, 2013) is an 8-item scale aiming to assess grazing behaviours. Responses are recorded on a 5-point Likert scale (0 = Never and 4 = All of the time) whereby higher scores relate to higher rates of grazing eating behaviour. Sample items include 'Do you find yourself taking extra helpings or picking at extra food once you've finished your main meal?' and 'Do you find yourself picking at or nibbling food continuously?'. Cronbach's alpha for the GQ in the present research is 0.90.

The Body Image Acceptance and Action Questionnaire-5 (BI-AAQ-5; Basarkod et al., 2018) is a short form of the Body Image — Acceptance and Action Questionnaire (BI-AAQ-5) which aims to assess body image acceptance. The BI-AAQ-5 is a 5-item scale where responses are recorded using a 7-point Likert scale (1 = Always true and 7 = Never true) whereby higher scores relate to higher rates of body non-acceptance; scores were reverse-scored within the analysis to represent that higher scores relate to higher rates of body acceptance. Sample items include 'Worrying about my weight makes it difficult for me to live a life that I value' and 'I shut down when I feel bad about my body shape or weight'. Cronbach's alpha for the BI-AAQ-5 in the present research is 0.94.

The Mindful Behaviour Eating Scale (MEBS; Winkens et al., 2018) is a 20-item scale and has five subscales (focused eating, eating with awareness, eating without distraction, hunger and satiety cues). Responses were recorded using a four-point Likert scale (1 = Never to 4 = Usually) whereby higher scores relate to higher rates of mindful eating. Sample items include: 'It is easy for me to concentrate on what I eat', 'I notice flavours and textures when I'm eating my food' and 'I trust my body to tell me when to eat'. Cronbach's alpha for the MES in the present research is 0.84.

The Five Facet Mindfulness Questionnaire (FFMQ; Gu et al., 2016) is a 15-item scale, and comprises five subscales (observing items, describe items, acting with awareness items, non-judging items, non-reactivity items) whereby higher scores relate to higher levels of trait mindfulness. Responses were recorded using a 5-point Likert scale (1 = Never or very rarely true to 5 = Very often or always true), and sample items include 'I'm good at finding words to describe my feelings', 'I notice how foods and drinks affect my thoughts, bodily sensations, and emotions' and 'I find myself doing things without paying attention'. Cronbach's alpha for the FFMQ in the present research is 0.76.

Procedure

Participants were recruited via the online research platform 'Prolific' and were paid for their time in line with the national minimum wage, as outlined within the referenced ethics application. Upon following the link to the questionnaire, participants were presented with an online version of the Information Sheet and Consent form which had to be viewed and responded to before the questionnaire could be accessed. Upon the questionnaire's completion, participants were presented with the online Debrief form. This included information regarding the contact details of the researcher, further support and details of their right to withdraw their data from the study should they wish to do so at a later date. Data was collected in March 2022. Ethical approval was received from The Business Law and Social Sciences Ethics Committee at a West Midlands University in the United Kingdom (Regan/#10,149/sub2/R(B)/2022/Feb/BLSSFAEC).

Analyses

All statistical analyses were conducted using IBM SPSS 25. Bivariate correlation analysis (Pearson's) was used to assess the relationship between measures explored within the questionnaire. Mediation analyses were conducted using Hayes's (2017) PROCESS (Model 4) with a bootstrap sample of 5000. Confidence intervals (CI) do not cross zero and are considered significant when upper and lower boundaries are corrected to 95%. Body acceptance was used as a mediator to explore the effect on the relationship between mindfulness, self-compassion and mindful eating on grazing, external, restrained and emotional eating. A correction for multiple comparisons using the false-discovery-rate (FDR) method (Benjamini & Hochberg, 1995; Benjamini & Yekutieli, 2001), with a threshold of 0.20, was utilised with the intention to achieve a 20% probability of being a false discovery (reported as p_{Δ} in Table 3, indicating a change to non-significance from the significance observed in the uncorrected analyses).

Results

Correlation Analyses

Pearson's bivariate correlation coefficient was employed using significant values between variables (body acceptance, mindfulness, self-compassion and mindful eating, grazing, external, emotional and restrained eating), including means and standard deviations as shown in Table 2.

Table 2 Means and standard deviations of variables and bivariate correlations between body acceptance, mindfulness, self-compassion, mindful eating, grazing, restrained, external and emotional eating with all associated

Scales	1	2	3	4	5	6	7	8	<i>M</i>	<i>SD</i>
(1) BIAAQ									21.51	8.41
(2) FFMQ	.452**								45.78	7.44
(3) SCS	.536**	.616**							72.72	16.97
(4) MEBS	.528**	.488**	.420**						66.29	10.88
(5) GQ	-.551**	-.260**	-.300**	-.575**					21.81	6.74
(6) DEBQ-RE	-.569**	-.164*	-.376**	-.376**	.590**				31.57	7.34
(7) DEBQ-EX	-.558**	-.133	-.317**	-.329**	.569**	.787**			27.23	7.76
(8) DEBQ-EM	-.567**	-.122	-.237**	-.342**	.561**	.758**	.862**		35.57	8.21

Body acceptance — BIAAQ (Body image Acceptance and Action scale); Mindfulness — FFMQ (Five Facet Mindfulness Questionnaire); Self-compassion — SCS (The Self-compassion scale); Mindful eating — MEBS (Mindful Eating Behaviour Questionnaire); Grazing — GQ (The Grazing Questionnaire); Restrained eating — DEBQ-RE (Dresden Eating Behaviour Questionnaire, Restrained eating sub-scale); Emotional eating — DEBQ-EM (Emotional eating sub-scale); External eating — DEBQ-EX (External eating sub-scale) — Total scores

**Correlation is significant at the 0.01 level (two-tailed)

Significant negative associations were observed between body acceptance to grazing ($r = -0.551$, $p < 0.001$), external ($r = -0.558$, $p < 0.001$), emotional ($r = -0.567$, $p < 0.001$) and restrained eating ($r = -0.569$, $p < 0.001$), suggesting that with higher body acceptance, there is a decrease of problematic eating (grazing, external, emotional and restrained eating). Significant positive associations were observed between body acceptance, mindfulness ($r = 0.452$, $p < 0.001$), self-compassion ($r = 0.536$, $p < 0.001$) and mindful eating ($r = 0.526$, $p < 0.001$). The higher the body acceptance, the higher the scores in mindfulness, self-compassion and mindful eating are. Significant negative associations were observed between mindfulness to grazing ($r = -0.260$, $p < 0.001$) and restrained eating ($r = -0.164$, $p < 0.05$), suggesting that higher scores on measures assessing mindfulness relate to a decrease in grazing and restrained eating. Significant negative associations were observed between self-compassion to grazing ($r = -0.300$, $p < 0.001$), restrained eating ($r = -0.376$, $p < 0.001$), emotional eating ($r = -0.237$, $p < 0.05$) and external eating ($r = -0.317$, $p < 0.001$). The higher the scores of self-compassion, the lower the scores in grazing, restrained, emotional and external eating are. Significant negative associations were observed between mindful eating to grazing ($r = -0.575$, $p < 0.001$), restrained eating ($r = -0.376$, $p < 0.001$), emotional eating ($r = -0.342$, $p < 0.001$) and external eating ($r = -0.329$, $p < 0.001$). The

higher the scores in mindful eating, the lower the scores in grazing, restrained, emotional and external eating.

Mediation Analyses

Twelve mediation analyses are reported and presented in Table 3. These comprised assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to problematic eating behaviours (restrained eating; emotional eating; external eating; grazing) through their relationships to body acceptance.

Model 1

Model 1 comprised assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to restrained eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as the predictor variables and restrained eating as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 1 (Fig. 1).

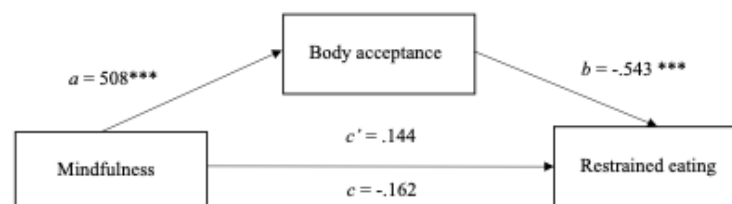


Fig. 1 The mediating effect of body acceptance in the relationship between mindfulness and restrained eating. All presented effects are unstandardised; *a* is the effect of mindfulness on body acceptance; *b*

is the effect of body acceptance on restrained eating; *c'* is the direct effect of mindfulness on restrained eating; *c* is the total effect of mindfulness on restrained eating. * $p < .05$; ** $p < .01$; *** $p < .001$

Model 2

Model 2 comprised assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to emotional eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as

the predictor variables and emotional eating as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 2 (Fig. 2).

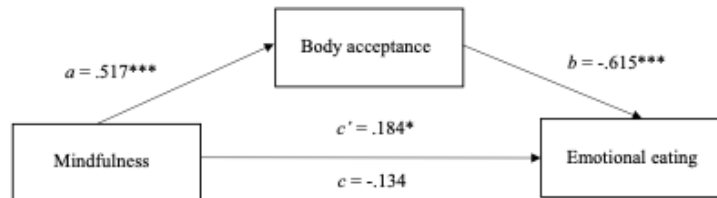


Fig. 2 The mediating effect of body acceptance in the relationship between mindfulness and emotional eating. All presented effects are unstandardised; *a* is the effect of mindfulness on body acceptance; *b*

is the effect of body acceptance on emotional eating; *c'* is the direct effect of mindfulness on emotional eating; *c* is the total effect of mindfulness on emotional eating. **p* < .05; ***p* < .01; ****p* < .001

Model 3

Model 3 comprised assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to external eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based

constructs as the predictor variables and external eating as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 3 (Fig. 3).

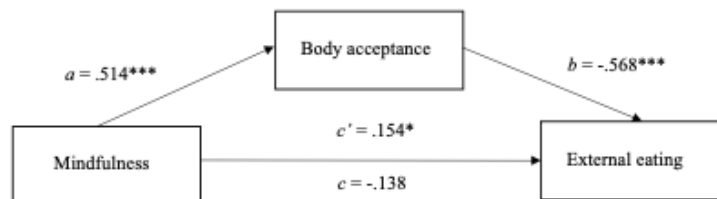


Fig. 3 The mediating effect of body acceptance in the relationship between mindfulness and external eating. All presented effects are unstandardised; *a* is the effect of mindfulness on body acceptance;

b is the effect of body acceptance on external eating; *c'* is the direct effect of mindfulness on external eating; *c* is the total effect of mindfulness on external eating. **p* < .05; ***p* < .01; ****p* < .001

Model 2

Model 2 comprised assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to emotional eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as

the predictor variables and emotional eating as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 2 (Fig. 2).

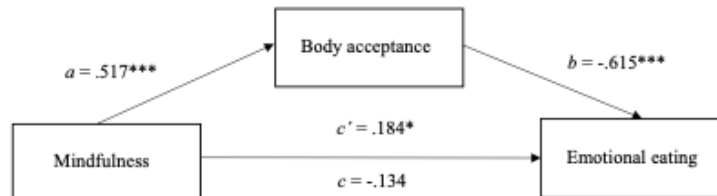


Fig. 2 The mediating effect of body acceptance in the relationship between mindfulness and emotional eating. All presented effects are unstandardised; *a* is the effect of mindfulness on body acceptance; *b*

is the effect of body acceptance on emotional eating; *c'* is the direct effect of mindfulness on emotional eating; *c* is the total effect of mindfulness on emotional eating. **p* < .05; ***p* < .01; ****p* < .001

Model 3

Model 3 comprised assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to external eating through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based

constructs as the predictor variables and external eating as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 3 (Fig. 3).

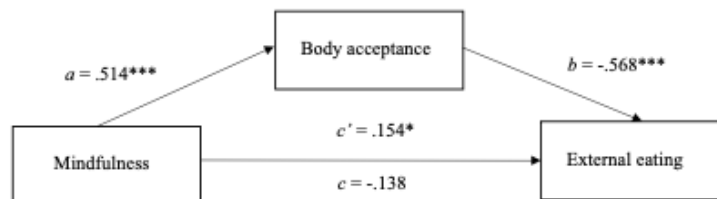


Fig. 3 The mediating effect of body acceptance in the relationship between mindfulness and external eating. All presented effects are unstandardised; *a* is the effect of mindfulness on body acceptance;

b is the effect of body acceptance on external eating; *c'* is the direct effect of mindfulness on external eating; *c* is the total effect of mindfulness on external eating. **p* < .05; ***p* < .01; ****p* < .001

Model 4

Model 4 comprised assessing the direct and indirect relationships of mindfulness-based constructs (mindfulness; self-compassion; mindful eating) to grazing through their relationships to body acceptance. Body acceptance was entered as the mediator, mindfulness-based constructs as

the predictor variables and grazing as the outcome variable. All mediations were significant whereby a 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that there was an indirect effect which was above zero. An example figure is presented, reflecting the direction of the mediating relationships highlighted within Model 4 (Fig. 4).

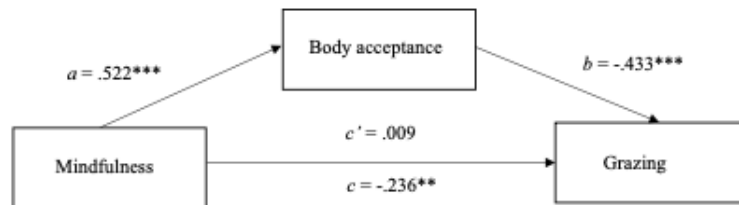


Fig. 4 The mediating effect of body acceptance in the relationship between mindfulness and grazing. All presented effects are unstandardised; *a* is the effect of mindfulness on body acceptance; *b* is the

effect of body acceptance on grazing; *c'* is the direct effect of mindfulness on grazing; *c* is the total effect of mindfulness on grazing. **p* < .05; ***p* < .01; ****p* < .001

Detailed results of each mediation for models 1, 2, 3 and 4 concerning each dependent variable showing the indirect effects are summarized in Table 3.

Discussion

The aim of this research was to explore the relationship between body acceptance, mindfulness, self-compassion,

Table 3 Total, direct, and indirect effects of mindfulness, self-compassion and mindful eating on grazing, restrained eating, emotional eating and external eating using body acceptance as mediators

<i>y</i>	<i>x</i>	<i>m</i>	<i>a</i> path coefficient	<i>b</i> path coefficient	Total effect	Direct effect	Effect (SE)	LCI	UCI
Model 1									
RE	MI	BA	.508**	-.543**	-.162	.114	-.275	-.3838	-.1781
RE	SC	BA	.263**	-.455**	-.151**	-.031	-.120	-.1746	-.0745
RE	ME	BA	.404**	-.447**	-.256**	-.075	-.181	-.2516	-.1171
Model 2									
EME	MI	BA	.517**	-.615**	-.134	.184 ^{ns}	-.318	-.4366	-.2123
EME	SC	BA	.266**	-.574**	-.113*	.039	-.153	-.2132	-.1004
EME	ME	BA	.408**	-.517**	-.256**	-.045	-.211	-.2991	-.1353
Model 3									
EXE	MI	BA	.514**	-.568**	-.138	.154 ^{ns}	-.292	-.4088	-.1886
EXE	SC	BA	.268**	-.463**	-.141**	.017	-.124	-.1786	-.0776
EXE	ME	BA	.407**	-.488**	-.233**	-.034	-.198	-.2781	-.1223
Model 4									
GR	MI	BA	.522**	-.433**	-.236**	-.009	-.226	-.3286	-.1374
GR	SC	BA	.268**	-.417**	-.118**	-.006	-.112	-.1660	-.0686
GR	ME	BA	.411**	-.273**	-.355**	-.243**	-.112	-.1743	-.0558

'RE' represents restrained eating (DEBQ, restrained eating sub-scale); 'EME' represents emotional eating (DEBQ, emotional eating sub-scale); 'EXE' represents external eating (DEBQ, external eating sub-scale); 'MI' represents mindfulness (FFMQ); 'GR' represents grazing (GQ) 'SC' represents self-compassion (SCS); 'ME' represents mindful eating (MEBQ); 'BA' represents body acceptance (BIAAQ-5) — total scores. *p*_Δ FDR, change to non-significance from the significance observed in the uncorrected analyses

LCI lower confidence interval, UCI upper confidence interval

p* < .05; *p* < .001

mindful eating and their relationship to grazing, restrained, external and emotional eating among gay and bisexual men. The potential mediating relationship of body acceptance on the relationship between mindfulness-based constructs to eating behaviours was also explored. Findings supported hypothesis (4), showing that body acceptance mediated the relationship between mindfulness to both grazing and restrained eating; self-compassion to grazing, restrained, emotional and external eating; mindful eating to grazing, restrained emotional and external eating. This relates to previous research that has highlighted the link between mindfulness (Egan et al., 2018; Mantzios & Egan, 2017), self-compassion (Rahimi-Ardabili et al., 2018) and mindful eating (Mantzios et al., 2018a, b) to problematic eating. These findings also align with previous research highlighting the importance of considering body acceptance when exploring body-related issues and mindfulness-based concepts among gay and bisexual men (Regan et al., 2023). This research shows the importance of body acceptance and the prominence of this construct when considering problematic eating among gay and bisexual men. A higher acceptance of one's body, including aspects one views to be 'unsatisfactory', relates to lower levels of problematic eating. Body acceptance also related positively to mindfulness-based constructs, which additionally relate to lower levels of problematic eating, reflecting the linearity of relationships within gay and bisexual men, when compared with more traditional literature exploring general and other specific populations (Dutt et al., 2019; Egan & Mantzios, 2018; Hussein et al., 2017; Mantzios & Egan, 2017; Mantzios & Wilson, 2015; Rahimi-Ardabili et al., 2018). It is important to note that following correction for multiple comparisons, two direct effect pathways were deemed non-significant (mindfulness to emotional eating and mindfulness to external eating). Future research should focus on exploring the potential relationship of mindfulness to emotional and external eating specifically to replicate the findings.

Correlation analysis showed that body acceptance related negatively to grazing, external, emotional and restrained eating and positively to mindfulness, self-compassion and mindful eating. These findings support hypothesis (1), further aligning with previous research exploring relationships between body acceptance and mindfulness-based constructs (Regan et al., 2023). Findings also showed significant positive associations of body acceptance to mindfulness, self-compassion and mindful eating, supporting hypothesis (2). Significant negative associations were observed between mindfulness to grazing and restrictive eating; further negative associations were observed between self-compassion and mindful eating to grazing, emotional, external and restrained eating, supporting hypothesis (3). Generally, these findings correspond with previous literature suggesting the negative association between mindfulness-based

constructs and problematic eating within general and more specific samples who have been found to experience problematic eating (adolescent females; health care professionals; individuals with a diagnosis of cystic fibrosis) (Egan et al., 2021; Hsu & Forestell, 2021; Spinoza et al., 2019). These findings, therefore, confirm the mirrored relationships of mindfulness-based constructs to problematic eating in gay and bisexual men, as highlighted in other populations. Future research should consider the relationship between mindfulness to emotional and external eating among gay and bisexual men as non-significant associations were observed.

The authors acknowledge the following limitations of this research. The cross-sectional nature of this study does provide some insight, although the greater depth of qualitative data should be explored to gain further insight into these constructs within gay and bisexual men. The representativeness of the sample should also be considered; the proportion of participants who took part who identified as 'White British' shows a significant lack of representation of minority ethnicities within this sample when compared with the UK population. Future research should endeavour to include greater representation of minority ethnic backgrounds within their samples to provide a more inclusive overview of insight into the eating of gay and bisexual men. The authors also consider the complexity of defining 'gay men' or 'bisexual men'. Non-binary, non-conforming and gender fluid individuals were included within this sample; the authors fully acknowledge these individuals may or may not be comfortable with the 'label', 'men'. The inclusion of gender minorities within this sample was to endeavour to provide a greater inclusion of queer experiences within psychological research and not to label or make assumptions about participants' gender. The authors also consider that gay and bisexual men are two identities inclusive of sexual minority men, although future research should consider exploration of eating behaviours and mindfulness-based constructs among other sexual minority men (e.g. pansexual, asexual).

Further research is needed to explore the nuanced role of body acceptance in explaining the relationship between mindfulness-based constructs and problematic eating among gay and bisexual men. Mindful and compassion-based interventions have been shown to be effective at reducing eating and body-related issues in the general and more specific populations. This research consolidates the importance of mindfulness and related constructs when considering problematic eating, which should be reflected in policy aiming to attenuate unhealthy eating in specific populations. Future policymakers should consider these findings when developing clinical practice guidelines or recommendations, indicating the potential usefulness of mindfulness and self-compassion-based interventions and/or incorporation of body acceptance (e.g. mindfulness-based cognitive therapy,

compassion focused therapy and acceptance and commitment therapy) in attenuating problematic eating among gay and bisexual men.

Author Contribution All authors contributed equally to the initial conceptualization of the study. The manuscript was written by HR and reviewed by all members. All authors read and approved the final manuscript.

Data Availability The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics Approval The study was approved by The Business Law and Social Sciences Ethics Committee at Birmingham City University (Regan/#10149/sub2/R(B)/2022/feb/BLSSFAEC) and was in accordance with the ethical standards of the institutional and/or national research committee, and with the 1964 Helsinki Declaration and its later amendments. This article does not contain any studies with animals.

Consent to Participate Informed consent was obtained from all individual participants included in the study.

Consent for Publication Participants signed informed consent regarding publishing their data. No identifying information is included in this article.

Competing Interest The authors declare no competing interests.

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