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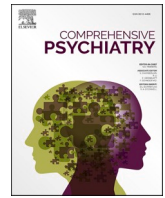
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Intersecting identities, diverse masculinities, and collaborative development: Considerations in creating online mental health interventions that work for men

ABSTRACT

Online mental health interventions have received attention for their potential to bypass barriers that stop men from seeking mental health help from a health professional. However, emerging data suggest that men's use of online mental health interventions is low, and when used, early attrition is common. In this commentary, we hypothesise that men's common lack of engagement with online mental health interventions may reflect limited attention being paid to the needs and preferences of potential users during their development. We outline a series of considerations that we believe are important to advance the development of acceptable, effective online mental health interventions for men: (1) men's diverse and intersecting characteristics, circumstances, and needs; (2) centring positive, progressive masculinities; and (3) listening to, learning from, and working in partnership with men to develop interventions. We also examine how existing online mental health interventions targeting men have engaged with these considerations. **Keywords:** men, male, mental health, e-mental health, digital health, online interventions.

1. Introduction

With almost half of all men expected to develop a mental health disorder by age 75 [1], men's significant rates of mental ill-health are in stark contrast with their low rates of professional help-seeking for these issues [2,3]. Men in western countries have cited issues including lack of privacy, embarrassment, fear, stigma related to help-seeking, a desire to look after themselves, and inconvenient appointment times and wait lists as barriers to accessing in-person mental health assistance [4–6]. Consequently, online mental health interventions (e.g., on websites or app-based) have gained traction as an alternate way for men to access help, primarily due to their potential to circumvent many of these barriers. Features of these interventions often cited as enablers include their perceived anonymity, capacity to access assistance when desired and without delay, greater autonomy and control over care, affordability, privacy, the ability to monitor symptoms over time, and no requirement to discuss their mental health with others [7–9]. However, despite their potential, emerging real-world (non-trial) data suggest that men are less likely than women to use online mental health interventions [10]. When they do engage, they are also more likely to stop using these programs prematurely [11].

Vial and colleagues [12] argue that limited uptake and engagement with online mental health technologies may reflect a lack of attention to user perspectives in their design. We consider that men's underuse of online mental health interventions may be particularly illustrative of this phenomenon. Most current interventions are gender blind – that is, they are not designed to consider men's particular needs, preferences, and circumstances, particularly those related to more progressive forms of masculinities and male identity. Men are frequently underrepresented in online mental health intervention trials and data from those who do participate are rarely analysed in a sex or gender-disaggregated manner [13]. Few studies have investigated what men want to see in online mental health programs [14]. As such, this commentary presents a series of considerations for advancing the development of acceptable and

effective online mental health interventions for men using a gender lens, highlighting promising programs from Canada, Australia, and the United States. Our aim is not to dichotomise men's and women's mental health needs [15], but rather to highlight that men's underrepresentation and under-consultation impede our understanding of their outcomes from these interventions and avenues to improve them, limiting their potential positive health and social impacts.

2. Considering men's diverse characteristics, circumstances, and needs

The World Health Organisation [16] states, “Health systems that are simply designed for everyone will be held back by being gender blind” (p. 4). We already know that sex and gender influence online mental health intervention user preferences, experiences, adherence, and outcomes [17–19]. Lack of attention to sex and gender in design, dissemination, and evaluation will likely result in interventions that do not meet the user's needs. This leads to poor intervention acceptability, reflected in low usage and poor adherence. Though male users often experience better outcomes from interventions specifically designed to suit their needs, wants, and circumstances [20], few online mental health interventions have been developed specifically for men [13,14]. However, developing these types of programs for men is complicated because men are not a homogenous group [21], and their online mental health intervention-related needs and desires will vary according to their individual experiences and circumstances. Gender, sex, and other aspects of men's identities and situations, including their age, ethnicity, cultural background, religion, sexual orientation, location, relationship status, and mental and physical health should be considered in efforts to develop acceptable, effective interventions for men [22].

The application of intersectionality is key to understanding how men's varying and intersecting characteristics and circumstances influence their expectations, experiences, and desires about online mental health interventions. Intersectionality examines multiple aspects of a

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man's identity that may work together to influence or disadvantage his health and wellbeing [23,24], proposing that roles and characteristics are inextricably linked and that examining these separately ignores their combined impact on factors such as social status, privilege, and marginalisation [25]. Although the burden of mental ill-health in men is often disproportionately concentrated in men from racial, ethnic, and sexual minority groups and those living with disability [23,26], there has been little research into online mental health interventions in marginalised communities [27]. This is sorely needed. Considerations of intersectionality may mean that it is most appropriate to develop entirely separate interventions that target different groups of men, based on their unique health, social, and cultural needs [21], such as in the United States-based Young Black Men, Masculinities, and Mental Health (YBMen) project [28,29] targeting young Black men and the Canadian MYBUZZ website [30] for men who sleep with men and use substances in a sexual context (Table 1). Men's preferences for online mental health interventions that suit their individual circumstances [31] suggests that their engagement is likely to be increased when information about the individual user is used to match intervention content, feedback, context, format, and/or delivery mode to their demographic, psychological, and behavioural characteristics and needs [32], both in interventions targeting 'men' more generally and those for specific populations. However, we also acknowledge the significant practical challenges (e.g., in content development, time, and monetary costs) often associated with tailoring online interventions in this manner.

Table 1
Promising programs.

Better Man: The Australian Better Man website (betterman.org.au) focuses on helping men make changes to build healthier relationships. The site includes self-assessments that generate goals and plans related to communication, values, and behaviour, as well as teaching practical communication strategies, investigating whether the user's actions in a relationship align with their values, and examining positive and negative aspects of their relationship. It was co-designed in focus groups with men's behaviour change program participants [63]. Pilot data suggest high acceptability and positive changes in intentions and confidence to seek help [64].

HeadGear: HeadGear is an Australian app using behavioural activation and mindfulness to reduce depressive symptoms in employees in male-dominated industries. Its main component is a 30-day challenge in which users complete one 5–10 minute activity per day (e.g., a mindfulness exercise); further content includes a risk assessment, mood monitoring, skills toolbox, and support helpline information [65]. Co-design workshops with workers in male-dominated industries (92% male participants) informed the language, design, and features [66]. Pilot data showed good acceptability and satisfaction [65], and a large trial (74% male) found a significant reduction in depression symptoms when compared to a control condition, but very high rates (84%) of trial attrition [67].

HeadsUpGuys: The Canadian HeadsUpGuys (headsupguys.org) website targets men with depression. It includes information and guidance for managing depression, a screening tool with feedback, men's stories about having depression, therapist directory, and information for family and friends. The site was developed by clinicians, researchers, and advocates using data from focus groups, surveys, and interviews with men with lived experience and was designed to "capitalise on men's desires for independence, autonomy, and preference for self-sufficiency". HeadsUpGuys had 1.7 million users in its first five years of operation [14].

MYBUZZ: MYBUZZ is a Canadian website-based short intervention (mybuzz.ca) for men who sleep with men and use substances in a sexual context. It contains a chat-based substance use self-assessment with feedback, access to online chat with a support worker, and information about local substance use services. The project was co-developed using a community research approach involving researchers, managers, stakeholders, and potential intervention users [30].

YBMen: The American-based YBMen Project (ybmenproject.com) focuses on young Black men's masculinity and mental health needs [29]. It is delivered as a 5–12-week, social media-based mental health education and social support program for young Black men. Daily "gender-specific, age-appropriate, and culturally sensitive prompts from popular culture" [29] related to mental health, manhood, and social support (e.g., lyrics, images, news headlines) are posted with questions to facilitate discussion, learning, skills development, and a supportive environment. The intervention is currently being adapted for Australian and Canadian contexts. Evaluations have shown reductions in depression symptoms and mental health stigma, increased mental health literacy and social support, and expanded masculine norms [28,29,68].

3. Centring positive, adaptive masculinities

We concur with others [33–37] that positive, progressive masculinities – i.e., those that work with men's diversity and strengths in advancing their mental health [34] – should be at the heart of psychological care targeting men. This includes online mental health interventions. Contemporary perspectives eschew the idea that there is one idealised form of masculinity that all men hold, unchanging, throughout their lives. Instead, it is acknowledged that men may align with multiple, diverse masculinities that can be fluctuating, flexible, and adaptive, with beliefs and behaviours changing over time and by situation [37–39]. Consideration of the diversity of men's needs, which reflect a range of masculine identities beyond traditional gender stereotypes, is crucial in developing online mental health interventions that will appeal to and engage specific groups of men, including those who are marginalised and disadvantaged [40].

Thus, interventions that attempt to appeal to men based on traditional masculine ideals or stereotypes such as aggression, dominance, risk-taking, or desire for status will hold limited appeal to diverse populations of men [34,40] and their potential harms have been highlighted [33,41]. A move away from unhealthy, restrictive notions of what men should be and do, to instead build and strengthen healthy and adaptive aspects of being a man is needed [42,43]. In this vein, various researchers have attempted to define potential components of 'healthier masculinities'. For example, Oliffe and colleagues [44] identified five health-related masculine values: selflessness, openness, well-being, strength, and autonomy. Kiselica and Englar-Carlson [37] specified ten positive aspects of traditional masculinity, including male ways of caring (caring for and protecting loved ones and friends) and male courage, daring, and risk-taking (using courage and sound judgement to take sensible risks and learning to avoid reckless behaviours). As demonstrated by Kiselica and Englar-Carlson [37], focusing on healthy, adaptive masculinities does not necessarily require deletion or demotion of the values and behaviours associated with 'traditional' masculinity. In some cases though, these ideas will need to be reshaped, by "disconnect [ing] (for instance) courage from violence, steadfastness from prejudice, ambition from exploitation" [45]. These concepts may be employed to promote men's engagement with interventions while avoiding reinforcing harmful ideas of what it is to be a man. Online interventions might also promote healthier, diverse masculinities by explicitly challenging unhealthy and maladaptive masculine stereotypes. Such 'gender transformative' approaches have garnered growing attention as a means for *reshaping* gender relations by actively challenging prevailing gender stereotypes and offering positive alternatives to effect lasting change in gender norms and health outcomes [46]. For example, the Canadian HeadsUpGuys website for men with depression (Table 1) includes content specifically busting myths about depression in men (e.g., "Myth: A guy with enough willpower should be able to 'snap out of it'. Reality: We wouldn't expect someone to fix a broken arm with sheer willpower. The same is true for depression – we have to develop new skills to beat it" [47]).

4. The importance of collaborative development

Given these considerations, we consider listening to, learning from, and working in partnership with men to be essential for understanding how intersections of identity may shape what is deemed an acceptable, effective online mental health intervention. 'Co' approaches to intervention creation and assessment (such as co-creation, co-design, co-production, and participatory design) have been increasingly utilised over the last five decades in areas including community development, public health, and health promotion [48]. Harnessing these approaches enables a move away from intervention development by academic 'experts', to interventions designed in meaningful, active collaboration with potential users [49,50]. The potential users act as experts in their own experiences and needs [51] and responsibility, power, skills, and

knowledge are shared by all participants [52]. Co approaches are underpinned by principles of empowerment, respect, collaboration, power redistribution, reciprocity, capability building, improving lives, and positive societal impacts [53,54]. In technology development, co approach work may involve understanding potential users' needs and preferences, designing and refining prototypes, discovering and fixing usability issues, and testing features and design [55,56], but will take a flexible, iterative, often non-linear approach that is driven both by the underpinning principles and the target outcome [52]. The importance of these approaches for developing online mental health interventions for men is reflected in recent guidelines for developing effective digital mental health technologies [57] and in the *5C framework* (co-production, cost, context, content, communication) for designing men's health programs [33]. The process for the development of the Australian Better Man website is a standout exemplar, with participants in men's behaviour change programs co-designing an intervention to support men in improving their relationships and communication styles. Similarly, the Australian HeadGear app for reducing depression in employees of male dominated industries was co-produced in workshops with people from this target population (Table 1).

Co approaches offer the potential to promote health equity in marginalised men, by engaging with the expertise of men whose voices are rarely heard and developing socially and culturally appropriate, trusted interventions for their use [58]. However, empowerment, equity, and meaningful benefits for the involved population must be at the forefront to fulfil those goals [53] and care must be taken to ensure that the processes of co-design do not perpetuate existing inequities [54]. For example, Butler and colleagues [53] found that optimal co-design with Aboriginal and Torres Strait Islander people required Aboriginal and Torres Strait Islander project leadership, a culturally grounded approach, mutual respect, benefit to Aboriginal and Torres Strait Islander communities, inclusive partnerships, and evidence-based decision-making. Though the use of co approaches is often associated with positive outcomes for researchers, user participants, and interventions [59], they can also require considerable time and money [60], may be challenging due to conflicting priorities and lack of linear structure [61], and care must be taken to ensure that participation is not tokenistic or burdensome [62].

5. Conclusion

In this commentary, we have outlined several important issues for developing acceptable and effective online mental health interventions for men: men's complex and intersecting identities, centring positive and progressive masculinities, and use of co approaches that engage men's own expertise and promote equity. This is certainly not an exhaustive list of considerations for these types of interventions. Instead, we aim to highlight several issues of significance and hope to stimulate further discussion between researchers, health professionals, those with lived experience, and others working in this area about creating online mental health interventions that work for men. We also recognise the recent important publication of guidelines for designing men's health programs [33] and digital mental health technologies [57], and encourage work building on these to develop best practices guides for developing acceptable and effective online mental health interventions for diverse populations of men.

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CRedit authorship contribution statement

Melissa J. Opozda: Conceptualization, Writing – original draft, Writing – review & editing. **Paul M. Galdas:** Writing – review & editing. **Daphne C. Watkins:** Writing – review & editing. **James A. Smith:** Supervision, Writing – review & editing.

Declaration of Competing Interest

None.

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