

Men's Perspectives of a Gender-Sensitized Health Promotion Program Targeting Healthy Eating, Active Living, and Social Connectedness

American Journal of Men's Health
2018, Vol. 12(6) 2157–2166
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DOI: 10.1177/1557988318799159
journals.sagepub.com/home/jmh

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Abstract

Men in high income countries have poorer dietary habits and higher rates of overweight and obesity than women. A major challenge with engaging men in health promotion is the perception that attention to one's health runs counter to masculine identities. Contemporary health promotion programs are believed to hold little “manly” appeal and often fail to engage and retain men. The HAT TRICK program was designed to engage men with their health by delivering an intervention in collaboration with a semi-professional ice hockey team. The program included 12 weekly sessions promoting healthy eating, active living, and social connectedness among men. Gender-sensitized elements were reflected in the program design, setting, content, and delivery. Semistructured telephone interviews were conducted with 23 men to explore perspectives of their participation in the gender-sensitized intervention. Participants were white (100%) with a mean age of 53 years ($SD \pm 9.9$), Body Mass Index (BMI) of 37 kg/m² ($SD \pm 6.8$), and waist circumference of 127 centimeters ($SD \pm 14.5$). Inductive thematic analysis revealed three overarching themes, including: (a) Harnessing nostalgia for past masculinities: “Closet athletes from 30 years ago,” (2) Offsetting resistance to change with sensible health advice: “Don't give up drinking beer, just have less,” and (3) Gendered social spaces for doing health: “A night out with the guys.” The findings support the value of gender-sensitized approaches to men's health promotion. Further research is needed to identify which gender-sensitized elements are critical to engaging men in healthy lifestyle changes.

Keywords

masculinity, men's health, physical activity, healthy eating, qualitative

Received May 4, 2018; revised July 25, 2018; accepted August 13, 2018

Physical activity (PA), healthy eating, and maintaining a healthy weight are associated with improved overall health including reduced risk of cardiovascular disease, type 2 diabetes, and cancer (Brown, Winters-Stone, Lee, & Schmitz, 2012; Lee, Sui, Hooker, Hebert, & Blair, 2011). While an estimated 70% of chronic health conditions can be prevented through lifestyle modification, men have less knowledge about health-related topics and are less likely than women to access, interpret, and apply information about health behaviors to maintain or improve their health (Galadas, Cheater, & Marshall, 2005). This issue is amplified by men's tendency to engage in behaviors that increase their risk of chronic diseases, such as higher alcohol consumption and poor dietary habits (Baker, 2003; Kohl et al., 2012; Wardle

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et al., 2004). The prevalence of obesity, a risk factor for many chronic conditions, continues to be higher in Canadian men compared to women (Belanger-Ducharme & Tremblay, 2005).

While PA and diet modifications are important modifiable risk factors for promoting improvements in health and reduction of chronic disease (Caperchione et al., 2012), only 24% of men in Canada meet the recommended guidelines for PA (150 minutes or more of moderate intensity PA per week) to obtain health benefits (Colley et al., 2011; Kohl et al., 2012; Tremblay et al., 2011). Contemporary health promotion programs hold little “manly” appeal and have therefore failed to engage and retain male participants (Courtenay, 2000). It has been postulated that this lack of engagement stems from the belief that attention to one’s health contradicts traditional performances of masculinity and ideals of strength, self-reliance, and independence (Courtenay, 2000; Sloan, Gough, & Conner, 2010). Bottorff and colleagues (2015) conducted a systematic review to identify PA programs involving men between January 2010 and August 2014. Studies that were included had diverse designs (e.g., RCT, pre-post, quasi-experimental, etc.) and involved male participants only or provided data disaggregated by sex. Notably, of the 31 programs identified, only 12 were explicitly tailored for men by aligning considerations related to place (i.e., the setting of the program) and product (i.e., program content, design, etc.) with men’s values and interests to advance health behaviors. Bottorff and colleagues postulated that using a gender-sensitized approach to intervention development, taking account of men’s interests and preferences, may improve engagement, retention, and outcomes.

The delivery of lifestyle interventions to men through professional sports teams/clubs has been particularly successful (Hunt, Gray, et al., 2014; Wyke et al., 2015). Such a strategy has been recognized as powerful due to the familiar and comfortable male environments within these teams/clubs and the sociocultural connections men often make with particular teams in terms of loyalty, identity, and belonging (Gray et al., 2013). Professional/elite sport clubs and settings also offer a unique opportunity to support men’s health because they provide health promoters with a potentially large captive audience of men in an environment that plays to masculine values and virtues (Brady, Perry, Murdoch, & McKay, 2010; Hunt, McCann, Gray, Mutrie, & Wyke, 2013). A small but growing number of programs have utilized concepts of organized sport and being a fan to increase men’s PA and promote various health behaviors (Brady et al., 2010; Hunt, Wyke, et al., 2014; Pringle et al., 2013; Sealey, Twomey, Pringle, Cheffins, & Gupta, 2013; Zwolinsky et al., 2013). Originating in Scotland with a focus on soccer (Football Fans in Training; Hunt, Wyke, et al., 2014; Wyke et al.,

2015), this model has since been expanded into other European countries (van Nassau et al., 2016) and adapted for use with rugby (Gray et al., 2014). Results from these studies have demonstrated cost-effectiveness (Brady et al., 2010; Hunt, Wyke, et al., 2014), high levels of acceptability among overweight and inactive men, positive outcomes in weight loss, increased steps per day, and improvements in diet and perceptions of health compared to controls in pilot (Gray et al., 2013; Petrella et al., 2017) and full-scale trials (Hunt, Wyke, et al., 2014; Wyke et al., 2015). The success of these and other studies suggests that men can be engaged in adopting health-promoting behaviors when appropriate approaches to engagement are utilized. Given the potential of this approach, there have been beginning attempts to develop similar gender-sensitized health promotion programs for Canadian men drawing on their interest in ice hockey (Caperchione et al., 2017; Gill et al., 2016). In addition to assessing the outcomes of these programs, it is important to understand men’s perspectives of their participation in these programs to inform future program development.

All men in the current study had participated in a gender-sensitized healthy living program, HAT TRICK, offered in collaboration with a major junior ice hockey team. This analysis builds on previous research regarding the development of gender-sensitized interventions (Bottorff et al., 2016, 2017; Caperchione et al., 2015; Gray et al., 2013; Hunt et al., 2013). The purpose of this research was to conduct a formative evaluation of the gender-sensitized health promotion intervention for men adapted to the sport of ice hockey. This was accomplished by exploring men’s perspectives of their participation in the program.

Setting and Context

HAT TRICK is a health promotion program for overweight (BMI $>25\text{kg/m}^2$, pant size $>38''$) and inactive (accumulate <150 minutes of MVPA) men age 35+ years. A detailed protocol has been reported elsewhere (Caperchione et al., 2017). HAT TRICK is a 12-week face-to-face intervention focused on PA, healthy eating, and social connectedness. Each 90-minute weekly session consists of a locker room component including information regarding PA, healthy eating, and behavior change techniques (i.e., goal setting, self-monitoring), as well as a progressive (i.e., increased duration and intensity over time) group-based PA program. Weekly PA and healthy eating challenges are introduced to encourage men to integrate what they learned during the locker room sessions into their daily life. Throughout the program, facilitators aim to enhance social connectedness by utilizing group activities and promoting friendly competition. Time is allowed for friendly banter and off-topic

conversations, allowing participants to develop a sense of teamwork and camaraderie. All participants are provided with a FitBit Charge HR™ and a HAT TRICK Playbook, an informational resource with tailored messaging and weekly PA and dietary tracking logs drawing upon the authors previous research using such materials to engage men (Bottorff et al., 2016, 2017; Caperchione et al., 2015) and to some degree on the Football Fans in Training (FFIT) program materials (Gray et al., 2013). HAT TRICK was delivered in collaboration with a major junior ice hockey team in the Canadian Hockey League (CHL).

A gender-sensitized approach is used in HAT TRICK and reflected in the design, setting, content, and delivery of the program. The **design** aligns with participant identities as ice hockey fans and men. Central to the design is the hockey-themed context, woven throughout all aspects of the program and the materials, anchored by the partnership with the community-based team. Gender-related strategies reported to be successful in influencing men's health behaviors are also integrated into the design of the program including men's preferences for activity-based approaches, self-monitoring, autonomy and friendly competition, and the inclusion of only men (Morgan, Warren, Lubans, Collins, & Callister, 2011; Robertson, Douglas, Ludbrook, Reid, & van Teijlingen, 2008). The **setting** (i.e., ice hockey arena) draws upon masculine values and interests in sport and has been identified to be a highly effective tool for engaging men in health-behavior change (Hunt, Gray, et al., 2014). The **content** utilizes hockey-related themes and analogies to frame health-related topics and reflects principles of men's health promotion (e.g., strength-based messaging, skill-based, and action-oriented strategies that appeal to masculinities such as independence, self-reliance, and mastery; Robertson et al., 2008). The **delivery** simultaneously promotes enjoyment and increased social connectedness using male-specific engagement strategies (e.g., group-based format with male facilitators and role models), interactive activities, frank and realistic communication, and opportunities for generating discussion, positive banter, and humor (Morgan et al., 2011; Robertson et al., 2008; Sabinsky, Toft, Raben, & Holm, 2007). Time is allotted to foster group support, teamwork, comradery, and normalize practices related to health.

Methods

The study was conducted using a qualitative descriptive design (Colorafi & Evans, 2016; Sandelowski, 2010). This qualitative approach was used because of its ability to provide a comprehensive account of the perspectives of participants. Ethical approval was granted by the Behavior Research Ethics Board at the University of British Columbia Okanagan (H1600736).

A sub-sample of HAT TRICK participants were purposefully selected to include men that reported a range of program outcomes and attended at least 50% of the sessions (i.e., 6 of 12 weekly sessions) so that they had adequate experience with the program components and could provide informed feedback. Eligible participants were contacted by email upon completion of the program and invited to take part in a one-on-one telephone interview at a mutually convenient time. A total of 26 men were contacted; three did not respond.

Data Collection

Data were collected utilizing semistructured telephone interviews to gain in-depth information from participants regarding their perceptions of and experiences with HAT TRICK. Semistructured interviews are useful for exploratory research because they are an effective method for eliciting relevant program experiences and feedback from participant perspectives (Leavy, 2014). Telephone interviews have been identified as effective in providing rich qualitative data and are both time and resource efficient (Hunt et al., 2013; Short et al., 2014), particularly where rapport has already been established. The development of the semistructured interview guide was informed by research literature and the authors' experience with conducting qualitative interviews with men (Bottorff et al., 2017; Hunt et al., 2013; Oliffe et al., 2017). Specifically, these interviews were designed to understand motivations for taking part in the program, barriers to PA and healthy eating specific to men, and how they may have been addressed through HAT TRICK, as well as to gather information about men's experiences and feedback related to the gender-sensitized components of the program.

All interviews were conducted by a trained researcher (PS) who has previous experience in qualitative data collection. As the lead program facilitator, PS had met and worked with all the men throughout the 12-week HAT TRICK intervention. Written informed consent was obtained prior to the start of the intervention and renewed verbally at the time of the interview. Interviews lasted approximately 60 minutes, were audio recorded using a digital Sony™ recorder (ICD-PX333), and transcribed verbatim. All identifiable information was removed to ensure anonymity and confidentiality following transcription.

Analysis

Data management software (NVivo11™) was used to manage the data. Inductive thematic analysis (Braun & Clarke, 2006) was chosen for the present research as: it allows for a wide range of analytic options; can generate unanticipated insight; can highlight similarities and differences in a data set; and offers a thick description of the

data (Braun & Clarke, 2006). Each of the interview transcripts were read several times by PS and selected transcripts were read by coauthors (JB, CC, LD) to allow detailed discussion of the data, coding, and interpretation. Two trained research staff (PS, LD) independently coded and categorized the various responses to facilitate a systematic approach to the coding of data. This involved inductively generating initial codes by identifying important and interesting features of the data that were relevant to the study objectives (Braun & Clarke, 2006). For example, references in the data to social support, motivation to change, or masculinities were identified and each became a data-driven code used in this study. Using this process, a coding framework was developed and the entire data set coded. Coded data were then examined for similarities, grouped, and refined to identify potential themes (Braun & Clarke, 2006). Data extracts for each potential theme were reviewed to identify patterns in men's experiences with gender-sensitized interventions. As detailed and consistent descriptions of each theme were developed, refinements were made, and representative quotes used to provide evidence of the themes within the data.

Results

Sample Characteristics

Twenty-three HAT TRICK participants were interviewed. Interview respondents' baseline characteristics are displayed in Table 1. The average attendance rate was 84% with the majority of men ($n = 14$, 61%) attending at least 10 of the 12 sessions during the program. The remaining men ($n = 9$, 39%) attended between seven to nine sessions.

Themes

Three overarching themes were identified that reflect men's responses to the gender-sensitized components of the program: (a) Harnessing nostalgia for past masculinities: "Closet athletes from 30 years ago," (b) Offsetting resistance to change with sensible health advice: "Don't give up drinking beer, just have less," and (c) Gendered social spaces for doing health: "A night out with the guys."

Harnessing Nostalgia for Past Masculinities: "Closet Athletes from 30 Years Ago"

The importance of the hockey-themed design and setting was a prominent theme in the data. Participants described how the systemically integrated ice hockey theme and imagery in HAT TRICK and its resource materials helped to engage and retain their interest in the program by

Table 1. Participant Characteristics at Baseline ($N = 23$).

	n (%) or mean (\pm standard deviation)
Age (years)	53 (± 9.9)
Body mass index (kg/m^2)	37 (± 6.8)
Waist circumference (cm)	127 (± 14.5)
Perform PA that makes you sweat (weekly)	
Often	0 (0)
Sometimes	10 (43)
Never/rarely	13 (57)
Cultural identity	
White	23 (100)
Highest level of education	
High school diploma	2 (9)
Some post-secondary	2 (9)
College or technical diploma or certificate	9 (39)
University degree	10 (43)
Marital status	
Married/domestic partnership	21 (91)
Single/never married	1 (4)
Divorced	1 (4)
Employment status	
Full time work	18 (78)
Retired	5 (22)
Income (\$)	
Less than 75,000	6 (26)
75,000 to 99,999	6 (26)
100,000 or more	11 (48)

Note. *Numbers may not add to 100% due to rounding.

appealing to their sense of identity and belonging associated with the game. In their narratives, they drew on nostalgic connections to youthful aspirations of becoming an athlete as well as their current ice hockey fandom. One participant described the overarching contextual relevance and its association with his childhood dreams of being an athlete:

Most guys my age and my situation in life are sports fans and were closet athletes from 30 years ago. There is that athlete inside, we say the athlete inside is still trying to come out. As we get older and older, you never view yourself as old; you just view yourself with a few extra pounds and out of shape. You don't realize that you are physically deteriorating over time; you always view yourself as when you were at your best. For me, that's when I was 16 or 17 playing hockey and if I could turn the clock back to any point in my life that's where I'd turn it back to. [Participant 102, age 50]

The relevance of ice hockey was reflected in the way they described the appeal of the physical setting of the ice hockey arena as well as the program materials. Specifically relating to the ice hockey arena, one participant described

how the sensory stimulus provided a feeling of familiarity and comfort, bringing back visions of his younger self, an aspiring professional player: “I grew up in the hockey rink so just hearing the practice in the background and the sounds and smells of the hockey rink it’s just a comfortable place, so much better than the gym atmosphere. It was really good that way” [Participant 210, age 45]. The design of the HAT TRICK program and materials appeared to reframe contemporary views of health and fitness programs into something that engaged and resonated with participants.

A lot of the draw of it for me was that [the program] was hockey-based. Hockey guys in the hockey rink, it just sounded like something that I’d love, something that’s gonna help me through things that I’m not good at which is the exercise and the nutrition. This is something different, doing workouts in the stands of the hockey rink and doing the pushups, it’s just a real cool setting. [Participant 210, age 45]

Even for men that did not necessarily grow up playing ice hockey, the program materials provided a point of relatability and familiarity to health-related information that was otherwise considered foreign and unapproachable. Particularly relating to the program manual, referred to as the “Playbook,” one 43-year-old participant described how he was nervous before the program started, but connected with the imagery used throughout the resource:

It’s a little intimidating, especially the first night before I got there, because I wasn’t sure what to expect, but then as soon as I saw the Playbook with hockey guys on it I’m like “I’m in!” It made me feel at ease, “Oh hockey, I’m good.” You have something to relate to. [Participant 211, age 43]

The ice hockey references and setting also signaled specific language and activities as central to the program. One participant explained how each hockey-themed chapter, used to frame a specific healthy eating or active living topic, presented information in a way that was understandable and synonymous with how a coach would explain a play to his team.

Myself, I’m a huge hockey fan, I’m a Rockets fan, I’m Canucks fan, and I could understand it [the information presented in the program materials]. I noticed that for a lot of the guys that was it too. We know about the power play, and the man down, and that kind of thing. You guys are like the coaches and we are the players, it’s almost a perfect fit. [Participant 214, age 52]

Offsetting Resistance to Change with Sensible Health Advice: “Don’t Give Up Drinking Beer, Just have Less”

During the program, emphasis was placed on the importance of making small and manageable changes. Instead

of mandating or prescribing a wholesale lifestyle overhaul, participants were encouraged to apply health-related principles to their own life taking into consideration their personal circumstances and environment. Implicit and explicit references were made to how this approach provided men with flexibility and autonomy. One 45-year-old man stated: “One thing I really appreciated that you guys would say, ‘Listen, don’t quit drinking beer altogether!’ I noticed right off the bat that it was practical and realistic” [Participant 210].

Another participant explained that he appreciated how the information provided was not prescriptive and that this made the recommendations offered in the program feel more sustainable:

It was something tangible to focus on and it allowed you to look at it and say okay, I can handle this. Instead of “quickly change your diet and only eat this. Don’t do this and don’t do that!” Your reinforcement of these small lifestyle changes was great. It allowed us to be a lot more thoughtful. Instead of dumping everything on us in one day, it was like “try this,” “try that.” And because of that there were things that everyone appreciated and worked for them. It wasn’t ‘Here is the cauliflower diet approach to healthy eating!’ It gave us lots of good positive hints and tips that were sustainable. [Participant 119, age 54]

Progressive step challenges based on incremental increases from baseline values, as well as healthy eating goals designed to incorporate key messages from that week, were introduced each week. Participants were encouraged to apply a healthy eating principle to their everyday practices (e.g., choose water instead of sugary drinks) so that changes could be fitted into their lifestyle, and continued to be incorporated and built upon: “All the challenges I tried to do myself, I tried to implement that stuff into my life, like okay, let’s do 500 more steps, 1500 more steps, it’s the small things, drink more water!... If you need an extra 20 steps, get it done. Don’t make excuses, just do it” [Participant 214, age 52]. As the men reflected on their experience during HAT TRICK, they recognized that by making small and manageable changes, their perspectives shifted and they were more likely to try new things. For example, one participant explained how he believed small progressions had brought him to a place where he was willing to experience new things that may have once run counter to his masculine perspectives and preferences:

Six months ago, put a yogurt in front of me, bleh, I don’t think so man...[Making small changes] opens up your eating habits to things that you wouldn’t be caught dead eating before. Just by way of example, spaghetti squash. My wife has been trying for a while to get me to eat spaghetti squash and using it instead of noodles. I thought that was sacrilege. You can’t play with spaghetti noodles, it’s a man staple! I

tried it and I thought, 'Son of a bitch, this tastes pretty good!' I think it just opens it up to all kinds of things and now I'm looking for the healthier choice. I'm reading the labels. Before, I just picked up something and threw it in the shopping cart. Now I'm looking at the label saying how much sugar is it in and trying to figure out how they have disguised the sugar or the fat content and a lot of times I will put it back and get a healthier choice. [Participant 206, age 63]

Gendered Social Spaces for Doing Health: "A night Out with the Guys"

Participants identified important intervention components relating to program delivery and how these components contributed to their experiences in HAT TRICK. Prominent among participant responses was the importance of the program being delivered to a group of men that were "like them." For example, one participant stated:

It was focused on men, you are sitting in a room with a bunch of guys, everybody had the same challenges, between the balance of work, your personal life, even trying to balance your own guy time where you don't have to deal with kids or marriage or whatever. It was good to be in a group of guys that all have the same challenges so if you had a question you didn't feel out of place. [Participant 219, age 46]

Being with a group of men that had common interests, values, and struggles provided points of connection that allowed for a sense of comradery to develop during the program and made participants feel accountable. Participants described how they did not view the program as a chore that they needed to attend, but rather a time to look forward to, equivalent to a social outing with friends: "I looked forward to Thursday; it was kind of my guys' night out type thing" [Participant 214, age 52].

In the sessions, men were encouraged to discuss in a nonjudgmental setting how they had been successful or unsuccessful so far in applying the program principles. By hearing and sharing strategies with similar others, participants explained they were more likely to feel comfortable enough to speak openly with others:

If you have a bunch of fat guys in a room, nobody is too concerned about being the only fat guy in the room, do you know what I mean? I thought it was good way to do it. I think just looking about and listening to some of the other guys; they all felt pretty comfortable and were speaking pretty openly. I did as well. [Participant 107, age 63]

Participants explained that their interactions with each other made the PA portion of each session more enjoyable:

When we were just jogging laps around the [arena], everybody's bullshitting about the playoffs and just chatting

at the same time. So you're able to do that with the physical component at the same time...I've only ever hiked or jogged alone...When you're out with a bunch of guys and you're all chatting and whatever it just goes by a lot quicker and I found that really worked. [Participant 210, age 45]

Participants pointed to the role of the facilitators in creating a comfortable space for open conversation and camaraderie in the group. Being credible, relatable, and likable were viewed as particularly important in facilitating the group. Facilitator relatability was described by one participant as associated with an ability to speak freely, and even utilize the occasional profanity.

The first time I heard [facilitator] say a swear word I was like "Awe sweet, he relates to all of us!" Like you guys [facilitators] are kind of one of us and we can talk easy and if we said the wrong answer you weren't mean or anything. [Participant 211, age 43]

Further, the use of frank and honest communication was important to participants: "You guys answered our questions when you could and when you didn't have an answer you straight up told us, and said 'I don't have the answer but will get it for you.' And then you did it" [Participant 103, age 41].

Discussion

Men have been considered a hard-to-reach population for health promotion interventions based on low recruitment and retention rates at generic health promotion programs (Baker, 2012; Sinclair & Alexander, 2012). Qualitative reports have indicated that participation in health-promoting behaviors runs counter to masculine norms related to independence and self-resilience (Courtenay, 2000, 2007; Sloan et al., 2010). The success of recent tailored interventions has demonstrated that, through careful consideration of the approach, at-risk men are indeed willing and able to make healthy behavior changes (Bottorff et al., 2016, 2017; Caperchione et al., 2015; Gray et al., 2013; Hunt et al., 2013). Understanding men's views of gender-sensitized health promotion programs is important to guide and enhance future programs. Herein, men's perspectives of their participation in HAT TRICK, a gender-sensitized intervention leveraging Canadian men's interest in ice hockey, targeted at healthy eating, active living, and building social connectedness are explored. The findings, in line with others (Bunn, Wyke, Gray, Maclean, & Hunt, 2016; Hunt, Gray, et al., 2014; Wyke et al., 2015), build on the importance of accounting for gender-related influences in intervention development and implementation in health promotion programs for men, and highlights for

the first time how the sport of ice hockey holds potential for engaging men in health promotion.

Though the current study findings affirm the efficacy of work in the UK with soccer (Bunn et al., 2016; Hunt, Gray, et al., 2014; Wyke et al., 2015), the Canadian context was clearly at play in the men's endorsement of HAT TRICK. As Connell (Connell, 2005; Connell & Messerschmidt, 2005) suggested, the intersections of culture and gender are ever present, wherein the current study revealed deep ties to ice hockey to the extent that it provided familiar language and by extension health literacy within a unique environment and milieu. In and of itself, this finding might be argued as unsurprising; however, in the broader context of the participants clearly being in need of some routine and strategies around physical activity and connectedness to men with similar challenges reminds us of the need to be culturally sensitive in how as well as where men's community-based health programs are offered. While Connell (1995) asserted the ethnographic moment was likely over more than 20 years ago—it is clear that amid globalization dominant cultural norms (in this case hockey) have strong masculine currency—which should be fully explored and exploited in advancing the PA of men. Unique to the study reported here is also the addition of tailored resources (the HAT TRICK Playbook) which goes beyond the materials utilised in programmes such as FFIT, by integrating health behavior change information with hockey-related terminology, metaphors, and imagery throughout the design and presentation of the resource. Informed by previous research (Bottorff et al., 2016, 2017; Caperchione et al., 2015), and the responses of men in the current study, these resources have potential for increasing the relatability of health behavior information and strategies, thereby acting to increase engagement and retention of male participants.

Morgan and colleagues (Morgan, Young, Smith, & Lubans, 2016) postulate that program development should begin with a deep understanding of the target audience and their characteristics to ensure sociocultural relevance. An understanding of norms related to gender roles, identities, and relationships for target populations and sub-groups is a key part of this assessment and critical to the design and delivery of gender responsive programs. There is increasing interest in the importance of considering context in the design and evaluation of health-related interventions (Craig, Di Ruggiero, Frohlich, Mykhalovskiy, & White, 2018). These understandings should then inform decisions related to every aspect of the intervention, including the design of content and materials, recruitment, and delivery, to maximize participant engagement and program outcomes. These findings suggest that the gender-sensitized approach, represented in the design, setting, content and materials, and delivery, acted to engage and retain men in healthy lifestyle changes. Participants' responses indicated high

levels of acceptability toward the program's gendered components and materials, which appeared to help reduce common barriers to men's involvement in health programs by reframing contemporary views of health practices (Robertson et al., 2008). For example, instead of masculine identities of independence and self-resilience running counter to health-promoting behaviors, masculine values were embraced and harnessed to make positive health behaviors contextually relevant. These findings support the notion of working *with* prevalent social constructs of masculinity, including strength, resilience, and independence, as distinct from being focused on *changing* these masculinities (Bunn et al., 2016; Hunt et al., 2013).

Relating to HAT TRICK program content, participants highlighted the importance of focusing on small and manageable changes as well as the accessibility of principle-based approaches. Researchers in the field of obesity management have suggested that a small change approach may promote clinically significant weight loss among obese individuals, wherein small nutritional and PA behavior changes are made relative to baseline values (Lutes et al., 2012). The evidence presented suggests that approaches to garnering small, manageable, and sustainable health behavior changes may resonate with men because they provide flexibility and support men's autonomy. In the program, men were encouraged to apply these principles with particular consideration to their individual situations, as in the FFIT program (Gray et al., 2013). By providing men with the support to implement recommendations in their own way, the risk of failure was minimized because the impetus was placed on how the strategy fit within one's life, and not on men's ability to implement the strategy.

In line with the seminal research conducted in this area (Hunt, Gray, et al., 2014), these findings highlight the importance of program design, centred on sport and sport fandom. This design clearly provides an entry-point and a hook to begin the conversation about health-related behaviors. Expanding on this, and unique to the present research, was the integration of the sport-related theme (i.e., related to ice hockey) throughout the content of the program and its materials, including the use of language, images, and metaphors to relay information in a relatable manner. Men's response to the gender-sensitized content, delivery, and presentation of the materials was unanimously positive, reporting that it helped to validate their participation in the program and further engage them with the program recommendations. This occurred despite the fact that participants in HAT TRICK were not required to have any experience in playing ice hockey and the PA portion of the program did not include playing ice hockey. Nevertheless, ice hockey is a highly valued sport in the study setting, and men's professional and

semi-professional ice hockey teams have a particularly strong fan base.

The focus on ice hockey garnered nostalgia for many men and afforded pause to reflect on their changing health behaviors and life circumstances at different periods in their life may have taken the men away from PA. Researchers have suggested that the association with a sports team enhances masculine capital through both the symbolical and physical connection to the team (Bunn et al., 2016; Hunt et al., 2013). Men in this study specifically identified the sensory stimuli within the arena, including both sound and smell, as an important nostalgic and innate draw to the program. This familiarity as well as the memories invoked by being at and working within a professional ice hockey facility clearly lobbied many participants to begin to address changes in their health and lifestyles.

The importance of performing healthful behaviors with similar others is well documented in the literature (Bunn et al., 2016; Hunt et al., 2013; Hunt, Gray, et al., 2014). Men in the present research referred to the importance of being in a male-specific program designed for and limited to overweight and inactive men. Both implicitly and explicitly, connections were reported with other participants as being both like-minded and like-bodied. As in the FFIT program (Bunn et al., 2016; Hunt et al., 2013; Hunt, Gray, et al., 2014), this relatability built trust, comradery, and teamwork within the group. Ultimately, the gendered social space shifted from a classroom or educational setting to one of a relaxed social setting that did not require, but facilitated, personal sharing and health-related discussions. Evident here was the permission to talk about health and life in authentic ways, albeit without the pressure to over disclose private details. In essence, the connections were contextually based on shared challenges, and the work of the program amid the ice hockey backdrop.

The evidence presented here is almost universally positive, despite prompting men specifically in the interviews to raise any negative experiences. Limitations notwithstanding, it is important to note the existing relationship between the interviewer and participants. In a dual role, the researcher involved in conducting the interviews had also been the primary facilitator during the program. While this relationship may have encouraged participants to discuss more openly and freely, some participants may have been reluctant or unwilling to share negative aspects of, or experiences with, the program. It may be argued that interviews would be better conducted in person. Previous qualitative research conducted with men has highlighted that telephone interviews are feasible, cost-effective, and efficient (Donnachie, Wyke, & Hunt, 2018; Donnachie, Wyke, Mutrie, & Hunt, 2017; Hunt et al., 2013). While this research represents findings from a broad age range of men, the sample was primarily

White and educated, with a relatively high household income. In part, this may be because the region in which the research was conducted is quite affluent and known as a holiday and retirement destination. With regards to generalizability, the parallels with findings from similar men's health promotion programs, delivered in various contexts and countries worldwide, suggest that this model may be highly transferable.

While the programs discussed in the introduction have highlighted the health benefits that can be accrued through men's engagement in gender-sensitized interventions, it remains unclear which specific aspects of gender-sensitization are most important for engaging and retaining men. More needs to be done to fully understand gender-related influences and how they should be incorporated into the design and delivery of tailored health promotion programs for different sub-groups of men. In addition, a better understanding of what gender-informed components work, for whom and in what circumstances is needed to guide the development of future programs. Developing a deeper understanding of gender-informed approaches to engage and retain men may have implications for other health behaviors, including smoking cessation and mental health programs.

Authors' note

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Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by Canadian Cancer Society Research Institute (grant # 704230).


Registration


This trial is registered with clinicaltrials.gov (NCT03059199) and the International Clinical Trials Registry Platform (ISRCTN43361357).

Ethics approval

Ethical approval for this trial was obtained from the University of British Columbia Okanagan Behavioral Research Ethics Board (#H1600736).

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References

- Baker, A. H., & Wardle, J. (2003). Sex differences in fruit and vegetable intake in older adults. *Appetite*, 40(3), 269–275. doi:S019566630300014X
- Baker, P. (2012). Current issues in men's health. *Trends in Urology & Men's Health*, 3, 19–21.
- Belanger-Ducharme, F., & Tremblay, A. (2005). Prevalence of obesity in Canada. *Obesity Reviews*, 6(3), 183–186. doi:10.1111/j.1467-789X.2005.00179.x
- Bottorff, J. L., Oliffe, J. L., Sarbit, G., Caperchione, C. M., Clark, M., Anand, A., & Howay, K. (2017). Assessing the feasibility, acceptability and potential effectiveness of an integrated approach to smoking cessation for new and expectant fathers: The Dads in Gear study protocol. *Contemporary Clinical Trials*, 54, 77–83. doi:10.1016/j.cct.2017.01.002
- Bottorff, J. L., Oliffe, J. L., Sarbit, G., Sharp, P., Caperchione, C. M., Currie, L. M., ... Stolp, S. (2016). Evaluation of quitnow men: An online, men-centered smoking cessation intervention. *Journal of Medical Internet Research*, 18(4), e83. doi:10.2196/jmir.5076
- Bottorff, J. L., Seaton, C. L., Johnson, S. T., Caperchione, C. M., Oliffe, J. L., More, K., ... Tillotson, S. M. (2015). An updated review of interventions that include promotion of physical activity for adult men. *Sports Medicine*, 45(6), 775–800. doi:10.1007/s40279-014-0286-3
- Brady, A. J., Perry, C., Murdoch, D. L., & McKay, G. (2010). Sustained benefits of a health project for middle-aged football supporters, at Glasgow Celtic and Glasgow Rangers Football Clubs. *European Heart Journal*, 31(24), 2696–2698.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brown, J. C., Winters-Stone, K., Lee, A., & Schmitz, K. H. (2012). Cancer, physical activity, and exercise. *Comprehensive Physiology*, 2(4), 2775–2809. doi:10.1002/cphy.c120005
- Bunn, C., Wyke, S., Gray, C. M., Maclean, A., & Hunt, K. (2016). 'Coz football is what we all have': Masculinities, practice, performance and effervescence in a gender-sensitised weight-loss and healthy living programme for men. *Sociology of Health & Illness*, 38(5), 812–828. doi:10.1111/1467-9566.12402
- Caperchione, C. M., Bottorff, J. L., Oliffe, J. L., Johnson, S. A., Hunt, K., Sharp, P., ... Goldenberg, S. L. (2017). The HAT TRICK program for improving physical activity, healthy eating and connectedness among overweight, inactive men: Study protocol of a pragmatic feasibility trial. *BMJ Open*, 7(9), e016940.
- Caperchione, C. M., Sharp, P., Bottorff, J. L., Stolp, S., Oliffe, J. L., Johnson, S. T., ... Lamont, S. (2015). The POWERPLAY workplace physical activity and nutrition intervention for men: Study protocol and baseline characteristics. *Contemporary Clinical Trials*, 44, 42–47. doi:10.1016/j.cct.2015.07.013
- Caperchione, C. M., Vandelandotte, C., Kolt, G. S., Duncan, M., Ellison, M., George, E., & Mummery, K. W. (2012). What a man wants: Understanding the challenges and motivations to physical activity participation and healthy eating in middle-aged Australian men. *American Journal of Men's Health*, 6(6), 453–461.
- Colley, R. C., Garrigué, D., Janssen, I., Craig, C. L., Clarke, J., & Tremblay, M. S. (2011). Physical activity of Canadian adults: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. *Health reports*, 22(1), 7.
- Colorafi, K. J., & Evans, B. (2016). Qualitative descriptive methods in health science research. *HERD: Health Environments Research & Design Journal*, 9(4), 16–25.
- Connell, R. W. (1995). *Masculinities*. Cambridge, MA: Polity Press.
- Connell, R. W. (2005). *Masculinities*. Cambridge, MA: Polity Press.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & society*, 19(6), 829–859.
- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: A theory of gender and health. *Social Science & Medicine*, 50(10), 1385–1401. doi:S0277953699003901
- Courtenay, W. H. (2007). Making health manly: Norms, peers, and men's health. In L. Cohen, V. Chavez, & S. Chehimi (Eds.), *Prevention is primary: Strategies for community wellbeing*. San Francisco, CA: Jossey-Bass.
- Craig, P., Di Ruggiero, E., Frohlich, K. L., Mykhalovskiy, E., & White, M., on behalf of the Canadian Institutes of Health Research (CIHR)–National Institute for Health Research (NIHR) Context Guidance Authors Group. (2018). *Taking account of context in population health intervention research: Guidance for producers, users and funders of research*. Southampton: NIHR Evaluation, Trials and Studies Coordinating Centre.
- Donnachie, C., Wyke, S., & Hunt, K. (2018). Men's reactions to receiving objective feedback on their weight, BMI and other health risk indicators. *BMC Public Health*, 18(1), 291.
- Donnachie, C., Wyke, S., Mutrie, N., & Hunt, K. (2017). 'It's like a personal motivator that you carried around w/you': Utilising self-determination theory to understand men's experiences of using pedometers to increase physical activity in a weight management programme. *International Journal of Behavioral Nutrition and Physical Activity*, 14(1), 61.
- Galadas, P. M., Cheater, F., & Marshall, P. (2005). Men and help-seeking behaviour: Literature review. *Journal of Advanced Nursing*, 49(6), 616–623.
- Gill, D. P., Blunt, W., De Cruz, A., Riggan, B., Hunt, K., Zou, G., ... Petrella, R. J. (2016). Hockey Fans in Training (Hockey FIT) pilot study protocol: A gender-sensitized weight loss and healthy lifestyle program for overweight and obese male hockey fans. *BMC Public Health*, 16(1), 1096. doi:10.1186/s12889-016-3730-5
- Gray, C. M., Brennan, G., Maclean, A., Mutrie, N., Hunt, K., & Wyke, S. (2014). Can professional rugby clubs attract English male rugby supporters to a healthy lifestyle programme: The Rugby Fans in Training (RuFIT). *European Journal of Public Health*, 24(Suppl 2), 166.
- Gray, C. M., Hunt, K., Mutrie, N., Anderson, A. S., Leishman, J., Dalgarno, L., & Wyke, S. (2013). Football fans in training: The

- development and optimization of an intervention delivered through professional sports clubs to help men lose weight, become more active and adopt healthier eating habits. *BMC Public Health*, 13, 232. doi:10.1186/1471-2458-13-232
- Hunt, K., Gray, C. M., Maclean, A., Smillie, S., Bunn, C., & Wyke, S. (2014). Do weight management programmes delivered at professional football clubs attract and engage high risk men? A mixed-methods study. *BMC Public Health*, 14, 50. doi:10.1186/1471-2458-14-50
- Hunt, K., McCann, C., Gray, C. M., Mutrie, N., & Wyke, S. (2013). "You've got to walk before you run": Positive evaluations of a walking program as part of a gender-sensitized, weight-management program delivered to men through professional football clubs. *Health Psychology*, 32(1), 57–65. doi:10.1037/a0029537
- Hunt, K., Wyke, S., Gray, C. M., Anderson, A. S., Brady, A. J., Bunn, C., ... Treweek, S. (2014). A gender-sensitized weight loss and healthy living programme for overweight and obese men delivered by Scottish Premier League football clubs (FFIT): A pragmatic randomised controlled trial. *The Lancet*, 383(9924), 1211–1221. doi:10.1016/S0140-6736(13)62420-4
- Kohl, H. W., Craig, C. L., Lambert, E. V., Inoue, S., Alkandari, J. R., Leetongin, G., & Kahlmeier, S. (2012). The pandemic of physical inactivity: Global action for public health. *The Lancet*, 380(9838), 294–305. doi:10.1016/S0140-6736(12)60898-8
- Leavy, P. (2014). *The Oxford handbook of qualitative research: Oxford library of psychology*. New York, NY: Oxford University Press.
- Lee, C. D., Sui, X., Hooker, S. P., Hebert, J. R., & Blair, S. N. (2011). Combined impact of lifestyle factors on cancer mortality in men. *Annals of Epidemiology*, 21(10), 749–754. doi:10.1016/j.annepidem.2011.04.010
- Lutes, L. D., Daiss, S. R., Barger, S. D., Read, M., Steinbaugh, E., & Winett, R. A. (2012). Small changes approach promotes initial and continued weight loss with a phone-based follow-up: Nine-month outcomes from ASPIRES II. *American Journal of Health Promotion*, 26(4), 235–238. doi:10.4278/ajhp.090706-QUAN-216
- Morgan, P. J., Warren, J. M., Lubans, D. R., Collins, C. E., & Callister, R. (2011). Engaging men in weight loss: Experiences of men who participated in the male only SHED-IT pilot study. *Obesity Research & Clinical Practice*, 5(3), e239–e248. doi:10.1016/j.orcp.2011.03.002
- Morgan, P. J., Young, M. D., Smith, J. J., & Lubans, D. R. (2016). Targeted health behavior interventions promoting physical activity: A conceptual model. *Exercise and Sport Sciences Reviews*, 44(2), 71–80. doi:10.1249/JES.0000000000000075
- Oliffe, J. L., Bottorff, J. L., Sharp, P., Caperchione, C. M., Johnson, S. T., Healy, T., ... Errey, S. (2017). Healthy eating and active living: Rural-based working men's perspectives. *American Journal of Men's Health*, 11(6), 1664–1672.
- Petrella, R. J., Gill, D. P., Zou, G., De Cruz, A., Riggins, B., Bartol, C., ... Bunn, C. (2017). Hockey fans in training: A pilot pragmatic randomized controlled trial. *Journal of American College of Sports Medicine*, 49(12), 2506–25016.
- Pringle, A., Zwolinsky, S., McKenna, J., Daly-Smith, A., Robertson, S., & White, A. (2013). Effect of a national programme of men's health delivered in English Premier League football clubs. *Public Health*, 127(1), 716–726.
- Robertson, L. M., Douglas, F., Ludbrook, A., Reid, G., & van Teijlingen, E. (2008). What works with men? A systematic review of health promoting interventions targeting men. *BMC Health Services Research*, 8(1), 141. doi:10.1186/1472-6963-8-141
- Sabinsky, M. S., Toft, U., Raben, A., & Holm, L. (2007). Overweight men's motivations and perceived barriers towards weight loss. *European Journal of Clinical Nutrition*, 61(4), 526–531. doi:10.1038/sj.ejcn.1602537
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in nursing & health*, 33(1), 77–84.
- Sealey, R. M., Twomey, J., Pringle, F. A., Cheffins, T., & Gupta, S. (2013). A 12-week lifestyle intervention for middle-aged, overweight men who are supporters of local sporting clubs. *The Aging Male*, 16(3), 118–122.
- Short, C. E., Vandelanotte, C., Dixon, M. W., Rosenkranz, R., Caperchione, C., Hooker, C., ... Duncan, M. J. (2014). Examining participant engagement in an information technology-based physical activity and nutrition intervention for men: The manup randomized controlled trial. *JMIR Research Protocols*, 3(1), e2. doi:10.2196/resprot.2776
- Sinclair, A., & Alexander, H. A. (2012). Using outreach to involve the hard-to-reach in a health check: What difference does it make? *BMC Public Health*, 12(2), 87–95. doi:10.1016/j.puhe.2011.11.004
- Sloan, C., Gough, B., & Conner, M. (2010). Healthy masculinities? How ostensibly healthy men talk about lifestyle, health and gender. *Psychology & Health*, 25(7), 783–803. doi:10.1080/08870440902883204
- Tremblay, M. S., Warburton, D. E., Janssen, I., Paterson, D. H., Latimer, A. E., Rhodes, R. E., ... Zehr, L. (2011). New Canadian physical activity guidelines. *Applied Physiology, Nutrition, and Metabolism*, 36(1), 36–46.
- van Nassau, F., van der Ploeg, H. P., Abrahamsen, F., Andersen, E., Anderson, A. S., Bosmans, J. E., ... Wyke, S. (2016). Study protocol of European Fans in Training (EuroFIT): A four-country randomised controlled trial of a lifestyle program for men delivered in elite football clubs. *BMC Public Health*, 16, 598. doi:10.1186/s12889-016-3255-y
- Wardle, J., Haase, A. M., Steptoe, A., Nillapun, M., Jonwutiwes, K., & Bellisle, F. (2004). Gender differences in food choice: The contribution of health beliefs and dieting. *Annals of Behavioral Medicine*, 27(2), 107–116.
- Wyke, S., Hunt, K., Gray, C. M., Fenwick, E., Bunn, C., Donnan, P. T., ... Treweek, S. (2015). Football Fans in Training (FFIT): A randomised controlled trial of a gender-sensitized weight loss and healthy living programme for men-end of study report. *Public Health Research*, 3(2), 1–129. doi:NBK273998
- Zwolinsky, S., McKenna, J., Pringle, A., Daly-Smith, A., Robertson, S., & White, A. (2013). Optimizing lifestyles for men regarded as "hard-to-reach" through top-flight football/soccer clubs. *Health Education Research*, 28(3), 405–413.