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"It's gym, like g-y-m not J-i-m:" Exploring the role of place in the gendering of physical activity

Abstract

Physical activity is a highly gendered health behaviour, with women less likely than men to meet internationally accepted physical activity guidelines. In this article, we take up recent arguments on the potential of indoor spaces to illuminate processes shaping health, together with social theories of gender, to conceptualize the place of the gym as a window into understanding and intervening in wider gender disparities in physical activity. Using a triangulated strategy of qualitative methods, including semi-structured interviews, drawing, and journaling with men and women in a mid-sized Canadian city, we examine how gender influences exercise practices and mobilities in gym environments. Results of our thematic analysis reveal three socio-spatial processes implicated in the gendering of physical activity: 1) embodying gender ideals, 2) policing gender performance, and 3) spatializing gender relations. A fourth theme illustrates the situated agency some individuals enact to disrupt gendered divisions. Although women were unduly disadvantaged, both women and men experienced significant limitations on their gym participation due to the presiding gendered social context of the gym. Gender-transformative interventions that go beyond engaging women to comprehensively contend with the place-based gender relations that sustain gender hegemony are needed. While gyms are potentially sites for health promotion, they are also places where gendered inequities in health opportunities emerge.

Key words: gender, gyms, health inequities, physical activity, place

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1. Introduction

Women in North America are less likely than men to meet guidelines for the minimum levels of physical activity required to attain a measurable health benefit (Colley et al., 2011; Statistics Canada, 2015). This gender disparity holds across muscle strengthening recommendations (Caspersen, Pereira, & Curran, 2000; Centers for Disease Control and Prevention, 2006; Chevan, 2008) and moderate to vigorous levels of physical activity (Colley et al., 2011; Grzywacz & Marks, 2001) where the greatest health benefits are accrued (Tremblay et al., 2011). There are also significant differences in the types of leisure-time physical activities practiced by women and men (Coen, Subedi, & Rosenberg, 2016; Gilmour, 2007), leading some to argue that generic or composite measures of physical activity obscure the specificities or magnitude of gender differences (Livingstone et al., 2001; Pascual, Regidor, Martínez, Calle, & Domínguez, 2009).

Geographies of physical activity have rarely attended to this gender gap, favouring instead a focus on 'obesogenic environments' and neighbourhood walkability—an emphasis that has drawn recent critique for veering uncomfortably close to environmental determinism (Andrews, Hall, Evans, & Colls, 2012; Blacksher & Lovasi, 2012; Colls & Evans, 2014; Rosenberg, 2016). While some of this work reports empirical differences by sex, it fails to undertake the type of comprehensive gendered analyses that can illuminate processes contributing to gendered health inequities. Moreover, the neighbourhood scale does not tell us about the micro built aspects and social dynamics *within* physical activity places.

Here, we take up calls to examine the very sites and facilities where physical activities are undertaken (Andrews, Sudwell, & Sparkes, 2005; Hopkins, 2008). Given the centrality of the indoors in our everyday lives, Biehler and Simon (2010, p. 174) caution that "the pervasive fallacy of enclosure and the privileging of the Great Outdoors" leaves us with an incomplete

picture of the spaces and processes implicated in shaping health. Indoor environments hold potential to provide insight into and transform human-environment relations across multiple scales because of their intimate location in the ecology of human health. While indoor places, such as the home or retail locales, may seem bounded or internally coherent, they are permeably linked to what happens beyond, making them potentially fluid environments (Biehler & Simon, 2010). Taking this argument onboard, it is possible to imagine how interventions targeting everyday physical activity places have the potential to reshape gendered inequities more broadly.

We conceptualize the *place* of the gym as an under-explored potential window into understanding and intervening in the processes underlying wider gender disparities in physical activity. Gyms are common places to engage in physical activity, but they may also potentially reinforce and routinize gender differences. Evidence points to the significance of gendered factors in shaping gym-related behaviour and opportunities. Motivations for gym attendance have been tied to weight loss for women and enhancing muscularity for men (McCabe & James, 2009) and cardiovascular exercise and weight training spaces can be typecasted as feminine and masculine, respectively (Brace-Govan, 2004; Dworkin 2001, 2003; Johansson, 1996; Johansson & Andreasson, 2016; Johnston, 1996; Salvatore & Marecek, 2010; Sassatelli, 2010). Johnston (1996), for example, although focusing on how elite women bodybuilders negotiate gendered bodily boundaries, conceives of the gym as an environment that re-figures bodies within a feminine/masculine binary. Gendered body ideals have been linked to women’s limited engagement with weightlifting (Brace-Govan, 2004; Dworkin, 2001, 2003; Salvatore & Marecek, 2010)—what Dworkin (2001) has called a glass ceiling on women’s strength. The gym itself can be perceived as a hyper-masculine institution (Craig & Liberti, 2007; Johansson, 1996; Pridgeon & Grogan, 2012), which can be a barrier to exercise adherence for both women and

men (Pridgeon & Grogan, 2012). Still, little is known about the socio-spatial processes in gyms that might contribute to the inclusion or exclusion of people from various workout spaces and practices. In this study, we examine how gender disparities and differences in physical activity participation are (re)reproduced, reinforced, and challenged within gym environments by focusing on how gender influences women's and men's gym-based exercise practices and mobilities; that is, what people do and how they move through and inhabit gym spaces. In doing so, we aim to advance a more critical geography of physical activity that contends with the micro-level socio-spatial processes implicated in gendering physical activity participation and thus, health

2. Gender, health, and place

Theories of gender and health posit that "'doing gender' is, in effect, 'doing health'" (Dyck, 2003, p. 366; Saltonstall, 1993). Saltonstall (1993), Courtenay (2000), and others have argued that everyday health-related behaviours—be it eating, drinking, accessing health services—are social practices that take on meanings as power-laden signifiers of masculinity and femininity (Connell, 2012; Galdas, Cheater, & Marshall, 2005; Lyons, 2009). Connell's (1987) concept of *hegemonic masculinity*, a culturally ascendant form of masculinity that subordinates femininities and other masculinities, has been especially important to understanding how gender operates as a structural influence on health (Bottorff, Oliffe, Robinson, Carey, 2011; Connell, 2012). For example, hegemonic masculine ideals have been shown to encourage men to adopt health-damaging or risky behaviours. Although typically 'bad' for men's health, this form of masculinity still rewards men's privileged social status because it is predicated on rejecting feminine ideals—ideals conventionally tied to health-promoting and protecting behaviours, such

as care-taking and asking for help (Courtenay, 2000). From this perspective, although this relationship is inverted when it comes to physical activity, men's overall greater uptake of physical activity can be understood in light of masculine ideals linked to physical strength. Much of this work has been influenced by what Connell (2012) refers to as relational gender theory—to which we subscribe in this article—that "gives a central place to the patterned relations between women and men (and among women and among men) that constitute gender as a social structure" (p. 1677).

Yet, gender and health has as much to do with places as with people. Places of work or leisure, provide localized resources that people draw upon to 'do' gender in contextually 'appropriate' ways (West & Zimmerman, 1987). This view of gender is particularly relevant to considering the gym as a place with its own stock of resources for doing gender and norms for what is gender-appropriate or transgressive. Not only is gender 'done' or 'performative' (Butler, 1990) contextually, but these enactments iteratively feed back into place (Bondi & Davidson, 2005; Massey, 1994). Gender is thus both social category and social structure—a social product of the interactions and activities in particular places and spaces that, at the same time, shapes those very places and spaces (Bondi & Davidson, 2005; Connell & Messerschmidt, 2005; Schippers, 2007). Places are also not isolated gender islands, but are rather composed of the overlap of wider scales of gender and social relations in space and time—what Massey calls power-geometries (Massey, 1994, p. 265; see also Connell & Messerschmidt, 2005; Connell, 2012). This scalar concept is important to conceiving how gendered processes within indoor places, as per Biehler and Simon (2010), are connected to the wider ecology of human health. Institutions, organizations, and places may have particular *gender regimes* (institutional-level

gender structure) (Connell, 1987) that operate locally, yet relate to and draw from the broader gender orders in which they are situated (Connell, 2012; Massey, 1994).

Using this relational approach to gender and place, it is possible to conceive of the gym as a type of place with a particular gender regime. Despite localized differences in specific facilities, ethnographic research suggests there are striking similarities across sites that characterize the gym as a "specialized place" (Sassatelli, 1999, p. 230; Sassatelli, 2010). Sassatelli (1999), in her work on Italian gyms, attributes this to a shared "spatio-temporal organization which works at the work of the body" through which "the gym is thus constructed as a world in itself, a domain of action which has its own rules and meanings" (p. 233). Socio-cultural studies have shown that gyms can function as hierarchical and informally (and formally) regulated social environments with particular norms, etiquette, and systems of informal surveillance (Andrews et al., 2005; Crossley, 2006; Frew & McGillivray, 2005; Markula & Pringle, 2006; Pridgeon & Grogan, 2012; Sassatelli, 1999; Sassatelli, 2010). More recent work in Australia (Johansson & Andreasson, 2016) and Japan (Andreasson & Johansson, 2017) supports the notion that gyms—even in very diverse settings—are subject to an increasing 'McDonaldization' (standardization) process, while at the same time exhibiting distinct local cultural adaptations. Moreover, even cost, one potential differentiator of gyms, may not always be significant (Sassatelli, 2010). McLaren and co-authors (2012), in their study of 45 gyms in Calgary, Canada, found that most exhibited low levels of exclusivity according to three measures (economic, symbolic, appearance). They also found, however, that several gyms considered economically inclusive ranked high on symbolic and appearance dimensions of exclusivity. As such, while low-cost facilities may ease access, they can also simultaneously reinforce other aspects of social difference (McLaren, Rock, & McElgunn, 2012). This suggests there is nothing

inherently more in/exclusive about any specific gym based on cost alone. In this way, we position the gym as a particular type of place for physical activity with shared institutional features, despite any site-specific distinctions.

Following the work of Kath Browne, we conceptualize how seemingly unremarkable places in our daily lives, such as the gym, play an important role in how gender is (re)produced and becomes 'common-sense.' Browne's work on microlevel 'othering' processes and encounters in public toilets (2004) and restaurants (2007) has illuminated how mundane institutions are implicated in naturalizing dichotomous differences in gender and sexuality. She uses the term 'genderism' to refer to "(often unnamed) discriminations that are based on not conforming to the rigid categorisation of man/woman, male/female" (p. 343). By policing gender transgressions, 'genderist' processes demarcate who is in/out of place, including, we suggest, in ways that may constrain health and health opportunities. This is important because intervening in gender relations and regimes can be a way to improve health (Connell, 2012) and, by extension, health equity.

3. Methods

3.1 Data collection

This study was carried out in a mid-sized Canadian city that, at the time of data collection, was home to 11 gyms. Participants (n=52) were recruited using print flyers and a paid Facebook advertisement over a 4-week period in January/February 2015. Eligibility criteria included: (1) identifying as a regular gym user, (2) holding a current co-ed gym membership, (3) engaging in exercise routines that included use of the weight and/or cardiovascular ('cardio') training areas, and (4) being between ages 25 to 64. This age bracket was selected to focus on the working age

population while accounting for the local city context with a large undergraduate university and college population, a group with arguably distinct social circumstances.

Our research design incorporated three forms of qualitative data. First, semi-structured interviews, averaging 51 minutes in length, focused on participants' relationships with the gym, their gym environments, their experiences in the weight and cardio areas, and their own views on gender in the gym. Second, at the conclusion of each interview, participants were invited to draw in response to the question "how do you feel in the gym?" and then to orally describe their drawing as a continuation of the interview. Only one participant declined to draw, instead verbalizing her response. As a method that breaks the question-response dynamic of interviews and offers a stepping stone for talk (the finished drawing), we employed drawing to facilitate critical reflection about aspects of the gym that might be perceived as commonplace and thus not immediately raised by interviewees (Coen, 2016; Guillemin, 2004). We treated participants' descriptions of their drawings as textual data rather than performing a separate compositional or visual analysis of the images, consistent with auteur theory which holds the maker's intention as the authoritative interpretation (Rose, 2001). Third, all participants were invited to complete one-week 'gym journals' documenting their thoughts before using the gym, activities in the gym, and negative and positive aspects of their gym experiences. This method aimed to capture more immediate observations and reflections on the micro-geographies of exercise experiences not necessarily possible in interview recall (Filep et al., 2015). Forty-nine interviewees expressed interest and accepted journals; thirty-seven journals were returned. Journal excerpts are presented as written, including any typographical errors and shorthand. All participants also completed a brief questionnaire to provide socio-economic details. In recognition of sharing their time and experience, interviewees received a $20 CDN gift card to a

local shopping centre and those completing journals received an additional $30 CDN gift card. This study was granted clearance according to the recommended principles of Canadian ethics guidelines and Queen's University policies by the University's General Research Ethics Board.

3.2 Analysis

Interviews, drawing descriptions, and journals were inter-linked in a triangulated strategy for rigour in which we interrogated areas of commonality and contrast across data types and within participant responses (Baxter & Eyles, 1997). In line with our critical approach, we conceptualized this technique, not as a form of independent validation, but as a robust way to gain additional insights about the data (Smith & McGannon, 2017). We used thematic analysis to systematically identify patterns and meanings in a three stage coding process (Braun & Clarke, 2006). Informed by Connell's (1987, 2012) relational theory of gender, we inductively identified the aspects of gender that mattered for gym practices and mobilities through our analysis of participants' experiences. First, we formed broad categories of data corresponding with the research questions from the larger project of which this study is a part to create the dataset for this analysis. We separated men's and women's responses, recognizing that in order to interrogate dominant gender structures we needed to account for their possibility and engage with them in our analysis. Second, within this dataset, we iteratively performed fine-grained open coding to identify micro-level repeating ideas (Auerbach & Silverstein, 2003). Third, we purposefully drew our gender-specific codes into conversation with each other to identify similarities and differences between and among women and men, in line with a relational approach. Here, we identified relationships among our repeating ideas to form meta-level concepts (Auerbach & Silverstein, 2003) identifying the socio-spatial gendering processes of the

gym. We acknowledge that there is a methodological tension between a fluid conception of gender and our use of dichotomous terms, like men and women. We accept the limitations of this language, with the same concession as Browne (2004, p. 334), that “in order to make sense of [participants’] narratives and to stress the problems associated with not fitting dichotomous sexes, it is necessary to use these sexed terms.’”

The quotes presented in our results section are selected as examples of specific codes included in our themes. We use language such as “for example” and “for instance” to indicate that quotes are illustrative of our codes and concepts. We discuss the quotes in terms of the meaning of the code and the nuance of each particular quote in ways that are commonly used in qualitative research.

3.3 Sample characteristics

Thirty-four participants self-identified as women and eighteen as men. Reflective of the study location, our sample was relatively ethnically homogenous with most identifying as white Canadians, five identifying with visible minority groups, and three self-describing as being of mixed ethnic heritages. Participants were overwhelmingly heterosexual; one man identified as gay and five women as lesbian or pansexual. Our sample was more socio-economically diverse, with participants employed in a range of occupations including: managerial or supervisory positions (13%); professional or skilled occupations (33%); clerical or technical jobs (13%); and students (20%). Three individuals were receiving social assistance (public disability or unemployment insurance), two of whom were accessing free gym memberships through a municipal program. In terms of education, 35 percent had a graduate degree, 33 percent had undergraduate degrees, 23 percent had earned a college diploma, and 10 percent had completed

high school. Of the 11 gyms in the area, participants were members of 10, including two gyms associated with major educational institutions (21%), two municipal gyms run by the city (27%), three YMCAs (international non-profit community centres with fitness facilities) (21%), and three locations of a national commercial chain gym (31%). Participants averaged 40 years old, spanning the full 25 to 64 age range. All names used are pseudonyms.

4. Results

4.1 Embodying gender ideals

Participants made direct connections between their desires to attain particular gendered ideals and their chosen gym activities. For instance, Gary, a 58-year-old man attending one of the municipal gyms, linked his preference for heavy weightlifting to his sense of strength as a masculine trait: “We like to be able to pick up heavy objects, you know [laughs]. It’s a manly kind of thing I suppose, you know. So, yeah, I think that, that, uh, yeah, my gender, you know, predisposes me to wanting to do more of the heavy lifting kind of stuff.” Similarly, Leah, a 30-year-old woman, described how she specifically designed her weightlifting routine in a way that she believed would yield her preferred physique, explaining that “because I don’t wanna build too much muscle, I just wanna tone, I kind of stick to the lower weights.” Even when men and women distanced themselves to varying degrees from the influence of dominant masculine and feminine ideals, many were nonetheless affected by them in determining their exercise practices. Helen (age 48), for instance, was quite adamant that gender did not affect her exercise practices, yet contemplated in her journal how she used a piece of equipment because it was “good” for a body part associated with feminized aesthetics:

> I began with the side glide machine (still don’t know what it’s called.) I did this for 5 min. and asked myself ‘why do I pick this machine’ because I really don’t like it. Then it dawned on me—someone told me it was good for my inner thighs. (Feb. 18, 2015)

This illustrates the scalar dimension of how gender in the gym operates, connecting individual-level practices in specific places with wider socially constructed images of desirable masculinity and femininity.

The consequence of gender ideals crystallized when participants were asked to imagine whether they would do things differently in the gym if they were of a different gender. Many women pointed to the stereotype of adopting a more exclusive focus on strength training, in particular heavy lifting; whereas men pointed to the likelihood of aligning their activities with stereotypically feminine practices, such as stretching. Vivian, a 52-year-old woman with a gym history spanning more than 30 years, conceded that “I might feel if I was male, I might feel like I had to, like I wouldn’t feel good doing light weights.” Some women also spoke of *how* they would perform exercises differently if they were men, such as increasing levels of intensity or vocalizing effort (the spatiality of sound is a point we return to in section 4.3). Thirty-eight-year old Sabrina, for instance, pointedly reflected on how gender is embodied in an oppositional fashion in the gym, remarking on her own self-realization of the pervasive and performative effect of gender as she spoke hypothetically about the strength that a masculine body might confer: “I’d probably work out—so funny that I can’t even believe it would come out of my mouth—I’d probably work out harder. Which is ridiculous as soon as it comes out, because what is, what is—a penis won’t make me work harder.”

Even men and women who did not identify as subscribing to traditional gender norms in their own practices envisioned conforming to conventional gender stereotypes when asked to

imagine embodying another gender in the gym. Nathan, a man in his 20s who worked as a fitness professional and prided himself in engaging with the full spectrum of gym activities in conscious defiance of gendered patterns, reflected that "hypothetically from a female perspective, I think I would probably fall into that exact same… just doing cardio." When asked why he might feel more susceptible to gendered pressures if he were to imagine himself as a woman, he was not exactly sure why but mused on the point: "Come to think of it, yeah absolutely. No, it's true, I think I would. That is interesting, yeah, the more I think of it." The acceptance on the part of many participants that they would simply do things differently if they were of a different gender highlights how pervasive and incipient body ideals and gender norms are in the gym for regulating exercise behaviour in place.

4.2 Policing gender performance

Many participants experienced perceived—and sometimes overt—social sanction by others for crossing what one woman called "the gendered lines"—the social and material boundaries separating men's and women's activities and spatialities in the gym. Participants overwhelmingly confirmed these gendered lines are known and experienced; several even used unprompted gendered language to refer to different areas, such as "feminine sections" or the "male area." Joel, a 56-year-old gym-goer for over 25 years simply put it: "you've got all the guys on the weight side and the girls are on the cardio side." Women and men understood these gendered lines to delineate "a separation where women are supposed to be and where men are supposed to be" (Marie, woman, age 27).

Men and women responded to pressures to conform to more normatively gendered behaviours in the gym by limiting the range of activities and spaces they were prepared to

engage in. These participants engaged in self-policing by circumscribing their gym practices to conform to more normative expressions of masculinity and femininity. Tom, for example, a 26-year-old man who began using the gym as a teenager, was keenly aware of the limits of his masculinity in the gym:

> Gender definitely defines the stereotypes of what people do at the gym. Um, you could even go as far as to say what people are *allowed* to do at the gym, depending on what the norm is. I try not to constrain myself to those things, but there are, you know, typical female exercises or activities that I don't—I don't want to do. But it's not because I don't want to do them. I wouldn't mind doing them. But, uh, it's just because I feel like I can't. (his emphasis)

Tom expressly chose not to partake in seemingly feminized activities, despite any potential interest in doing so, citing his identity as a man and the socially inscribed boundaries on his behaviour. Dev, the only gay-identified man in this study, echoed the notion that there is "an accepted form of working out" (his words) for men when he described a stark instance of overt policing when his activities seemingly contravened hegemonic masculine gym practices: [These guys] made some sort of snide remark about like a group of three gay guys doing circuit training. […] I guess what we were doing was kind of out of the ordinary." Likewise, Annie, a 33-year-old woman who self-described as "pretty confident" in the gym, was attuned to how the limitations of femininity affected her engagement with particular exercises:

> I think of the, like, the pull up machines that, I would say that I don't try that very often because, uh, because I, I feel like that's not something women are good at, or I feel like a woman trying to do that would draw attention because you never see women, or very rarely, see women doing those types of things.

This form of self-gender policing was a mechanism through which gender operated as a constraint, leading men and women to avoid or refrain from attempting certain activities. At the same time, this avoidance reinforced normative masculinities and femininities in the gym by reifying the divide between what men and women were observed doing.

Femininities also presented a double liability in the gym whereby women were policed both for breaking with and conforming to normative gendered practices. With regards to the former, several women talked about social repercussions for challenging traditional feminine practices in the gym. Most women were not overtly sanctioned—although this did happen—but rather this policing was experienced as perceived judgements by others. For example, Emily (age 27) spoke of how if she were enact a masculine display of confidence in navigating the gym or show authority by correcting breaches in gym etiquette, she would be negatively categorized in gendered terms:

> I watch even my male friends walk into the gym and their shoulders are back and their heads tall and they walk up to a rack—and if they’re unhappy with how things are going, if people are being like disorganized, they’ll go and call them out… But if I were to do this, I would be a bitch.

Despite being one of the few women who lifted heavy weights, Emily disclosed how these potentially punitive consequences qualitatively affected the way she moved through the gym, often in a manner that emphasized conventional feminine characteristics: “I find myself like tip toeing around and like almost apologizing.” This comportment strategy to minimize potential gender transgression contrasts with Emily’s more characteristically masculine exercise practice (heavy weightlifting). This underscores the gender-precarious position of femininities in the gym

because engaging in a seemingly more masculine practice does not confer other privileges, like ease of mobility or access to equipment.

The other prong of this double feminine liability was that women were also subject to sanction *by other women* for conforming seemingly too closely to normative feminine activities or stereotypes in the gym. Women could be highly critical of other women whom they perceived to be participating in the gym for aesthetic reasons alone or not visibly exerting effort, as Leah put it, "I don't wanna say princess, but I guess that's the best way to describe it. Just to get the look." Highlighting the incipiency of this form of intra-gender policing, Vanessa (age 25) realized when describing her drawing for this study that she was essentially policing herself within a negative feminine stereotype (Figure 1): "As I was drawing it I was like, 'I look like a cardio bunny.' And then I thought, 'Oh, that's a totally a gendered thing.' Men aren't really called cardio bunnies if they go on the cardio'." 'Cardio bunny' connotes a woman more concerned with appearance than physical effort, typically performing 'excessive' cardiovascular exercise. Although Vanessa is happy doing what she is doing on her "side," she feels her legitimacy in the gym is "a bit judged" by the man in her drawing "for not being as involved as he is," as well as by herself in the moment when she approximates herself to a hyper-feminine stereotype. These dual forms of gender sanctioning indicate how the boundaries of femininity in the gym can be narrow and rigidly policed.

[Figure 1 approximately here – see page 34]

4.3 Spatializing gender relations

Collectively, men and women engaged in a constellation of spatial practices that reinforced a gendered hierarchy in favour of a hegemonic form of masculinity. Men described avoiding or

366 leaving spaces where hegemonic masculinity was at play, while women described experiences of
367 being crowded out of spaces by masculine performances as well as actions they undertook to
368 minimize their consumption of time and space in the gym. The net effect of these spatial
369 practices was to cede spatial privilege to hegemonic masculinity in a way that had an
370 exclusionary effect on some gym users.

371 Men and women described how gym space became hyper-masculinized in ways that
372 made it unappealing to use and sometimes inaccessible. Men often spoke of a type of amplified
373 masculinity emerging among groups of men that gave the space an intense quality that, for some,
374 triggered an urge to abandon their workout or "get it done as quick as possible and then leave"
375 (Eric, age 30) or altogether avoid "where the big guys generally hang out at" (Frank, age 57).
376 Brad, a self-described "burly man who's 6'1 and 240" explained how this quality was an affront
377 to his workout experience:

378 Nice guys. But they're strong and it's intense. So it kind of changes the mentality in there
379 and I'm a little, ok, well, I'm not intimidated, but I'm kind of, it's busy and there's a lot
380 of energy…It kind of makes me want to turn around and leave, to be honest. I kind of just
381 want to get out of there. I don't want to deal with it, to be, yeah, to be completely honest.

382 The fact that a man who might be perceived by others to embody hegemonic masculinity himself
383 was negatively affected underscores both the power of this form of masculinity and its capacity
384 to exert exclusionary effects among a diversity of people.

385 Relatedly, women often perceived that men were disproportionately "taking up space"
386 (Lillian, age 57). In particular, women spoke of how men consumed more space than women
387 materially in terms of the exercises performed (bigger exercises with bigger weights) and
388 sonically in terms of exerting sounds of effort or noises from the weights themselves (hitting the

floor or stack). Amy (age 49) summated this as, "when you go in there and there's a bunch of guys standing around, you know, or grunting and groaning, it's, you know, [laugh] it's not as—I don't necessarily want to stick around there as long." This, along with the perception that men tended to "hog a piece of equipment" (Shawna, age 50), left many women feeling crowded out.

In counterpoint to men's consumption of space, many women undertook strategies to take up less time and space in the gym, particularly in the presence of men and individuals perceived to possess greater expertise. A number of women echoed Linda's (age 55) sentiment that "my attitude is stay over out of their way and then I don't feel like I'm a nuisance." Janine (age 41), whose tight schedule working three jobs was already a time constraint, reflected in her journal how she felt obliged to compromise the pace of her own workout in deference to others: "It is intimidating, particularly when you are the only women there and you are lifting sml weights compared to everyone else there. It makes me feel like I need to rush cause I don't want to be holding up equipment others may want to use and makes my workout feel rushed." (Feb. 12, 2015). This shrinking of women in space and time works to maintain power imbalances in the gym. Paradoxically, women engaged in these strategies in response to men's consumption of space, yet these very practices permit men's consumption of space to go unchecked.

Women additionally described what amounted to a series of micro-aggressions on the part of men that could literally crowd or rush them out. One type of micro-aggression was refusal or reluctance to share equipment or space, at times resulting in women abandoning activities or spaces. In a stark example, Paula (age 52), a gym-goer for all of her adult life, recounted in her journal how she felt compelled to relocate when a man in the gym directly obstructed her access to equipment:

> […] male moved my weights & workout bench to the side & arranged the area for himself. I approached & stated I was partway thru a circuit—his response was he was on a time limit & his workout was more important than mine could possibly be—to find another area of the gym to do my girl exercises in. Yes—no kidding. Rather than have a huge scene—I moved to a different area. (Feb. 11, 2015)

It is noteworthy that this individual feminizes Paula’s workout in a pejorative way to delegitimize her right to the equipment. In a second form of micro-aggression, women perceived that men seeking access to equipment approached women prior to approaching men in the same space. This resulted in some women feeling pressured to complete their exercises quickly, as Emily did frequently: “I will have just gotten on to a squat rack or the bench and there’ll be other guys on all the other racks or whatever, I’m the only one approached and asked how much longer I have. So there’s this pressure to get off.” A third form of micro-aggression occurred when men offered unsolicited advice or critique to women, effectively demoting women’s status in the gym. Marie, who was a regular in the weight room, explained that

> [U]sually it’s guys who will come up and like say, ‘don’t do it that way,’ so it’s more annoying than de-motivating, but it is a little bit like, you know, which I think is the reason why women don’t like to go lifting because they’re scared that, you know, all the guys are gonna be scrutinizing them and like criticizing their techniques and go and give unsolicited advice.

Finally, some women cited sexualized gazes and interactions as intruding upon their workouts and mobilities within the gym. Liz made clear the extent to which this intrusion is normalized in the gym when she described relocating to avoid a man who was looking at her:

> If I have to go and take, you know, 15 minutes in the change room to just sit and chill out and maybe, you know, ponder around on my phone and just kill time [until he's moved on], yeah it's unfortunate but I think that's kind of the role that women—not the role—but it's just something that we have to deal with. It's like an occupational hazard.

Together, these micro-aggressions were a reductive force on women's time and space in the gym.

4.4 Breaking gender binaries

A contingent of women, and a handful of men, consciously, and sometimes vigorously, rejected the gendered lines of the gym and configured their practices and mobilities to this end. For some women, breaking binaries involved embracing aspects of both traditional femininity and alternative femininities to express their gendered selves in more complex and nuanced terms. Emily, for example, enthusiastically described how she planned to perform a 315-pound deadlift wearing a tutu as a way to celebrate the multiple dimensions of her femininity and reclaim the derogatory notion "you lift like a girl" with the response, "'yes, I do, and I lift 315 pounds'." For other women, breaking gender binaries involved an active political challenge—an attempt to discredit, reject, dissociate from stereotyped ideas of femininity, as Angela (age 32) explained, "I want to move beyond gender—and you know, just be as strong as possible without my gender being a part of it." Later, writing in her journal, Angela noted that she deliberately refrained from engaging in a seemingly feminized activity as a challenge to gender conformity: "Was going to do the elliptical, but hate to use it because of its connotations with 'cardio bunnies', lack of fitness + being seen as a 'woman's' workout machine" (Jan. 25, 2015). A few men spoke of the potential for gender fluidity in the gym and distanced themselves from the dictums of hegemonic

masculinity. Tom, for example, explained how he located himself in-between the binaries: "I think if I was way more toward the masculine side, if it's a spectrum, then I would be doing more the man, masculine type activities or exercises in the gym. Likewise, the, the feminine side. I think I'm somewhere in the middle, roughly." For the men who unsubscribed from hegemonic norms, doing so was often less of a political statement, but rather reflected interests, shifting exercise goals, and changing relationships with dominant masculine ideals through the life-course.

5. Discussion

Overall, we argue that socio-spatial processes within gym environments help to set the stage for the normalization of gender differences in exercise participation in the gym, and possibly beyond. Collectively, the three processes we identified—embodying gender ideals, policing gender performance, and spatializing gender relations—demonstrate that the gender regime of the gym (re)produces and reinforces wider gender disparities and differences in physical activity. Importantly, the gendering processes we identified are not detectable at the neighborhood level, evidencing the need to unsettle the spatial privilege afforded to obesogenic environments (Andrews et al., 2012; Colls & Evans, 2014). Indeed, without looking *indoors*, geographies of physical activity miss significant gendering processes altogether. This speaks to the importance of continuing to disrupt the "fallacy of enclosure" and venture inside everyday physical activity places to advance equity in health opportunities (Biehler & Simon, 2010).

Embodying gender ideals was a key driver dichotomizing the gym participation of women and men, in line with other studies (Brace-Govan, 2004; Dworkin, 2001, 2003; McCabe and James, 2009; Salvatore & Marecek, 2010; Sassatelli, 2010). The fact that participants were

quick to imagine conforming to gender norms when asked if they would do anything differently in the gym if they were of a different gender underlines the magnitude of this effect in place. Since 'doing' physical activity in the gym is clearly inseparable from 'doing' gender (Courtenay, 2000; Dyck, 2003), our findings suggest that efforts to address gender inequities need to account for this synonymy. Moreover, the materialization of these wider gendered body ideals in the gym's gender regime articulates a power-geometry of inter-scalar social relations (Massey, 1994). This connectivity highlights the potential in Biehler and Simon's (2010) proposal that interventions at the indoor level can transcend other scales of impact for health.

Gender also operated as a constraint on participation in the gym through the policing of gender performance. The external and internal regulation of gender-norm adherence reinforced men's and women's gym participation expressed as a duality—occupying distinct spaces and equipment in a form of oppositional gender relations. Participants in this study described instances of social sanction, akin to Browne's (2004) concept of genderism, whereby participants' performance of masculinities and femininities was punitively regulated. Genderist processes worked to embed hierarchical gender relations in the gym environment in ways that directly impeded what participants did and where they went. For some, the *potential* of social sanction alone kept them from participating in certain activities, such as Tom who refrained from so-called feminine exercises because he felt it was not permissible as a man. Both women and men restricted the scope of their exercise practices to remain within the bounds of 'acceptable' masculinity and femininity. Femininities, however, were doubly policed in the gym, as women also felt scrutinized for being *too feminine* if their activities aligned with stereotypically feminized practices. This made women's place in the gym even more precarious by narrowing the range of 'acceptable' femininities.

Exclusionary processes were further ensconced in a set of spatial practices which, in concert, yielded spatial power to hegemonic masculinity. Both men and women avoided spaces or altered workout practices to avoid encountering hegemonic masculinity, but women additionally performed a series of more deferential practices to further minimize their consumption of space in the gym. Women’s diminutive role in the process of spatializing gender relations can be seen as a pre-emptive response to potential genderist sanctions; however, these manoeuvers to avoid encountering hegemonic masculinity had the unfortunate effect of reinforcing its power by forfeiting space. Women were also on the receiving end of micro-aggressions that effectively crowded them out. The additional dimension of spatial disadvantage experienced by women makes sense in light of Connell’s theory of gender relations where, although some men are marginalized by hegemonic masculinity, women are always subordinated by patriarchy. Indeed, the way that some women accepted spatial displacement as an “occupational hazard” speaks to the common sense status of these gendered power imbalances within the gym (Browne, 2007).

Importantly, a fourth theme—although reflective of a smaller group of participants—demonstrated the agency some women and men enacted in re-drawing gendered lines. Several women in particular engaged their gym practices as a way to consciously contest traditional femininities and express their gender identities on their own terms. While we are critical of the notion that genderist processes, as a source of negative reinforcement, might act as a back-handed impetus to change the gendered bifurcation of physical activity, there is certainly evidence in our research that it is the rejection of these very processes that motivated some individuals to actively (re)negotiate the gendered bounds of their participation. This agency, however, was not without constraints. Recall Emily who, despite engaging in traditionally

masculine heavy weightlifting, behaved on the understanding that she would be enacting a form of 'pariah femininity' (Schippers, 2007) threatening the gender order if she asserted herself with regards to equipment sharing. Likewise, Angela refrained from engaging in a feminine stereotyped activity in rejection of gender categories, but in doing so paradoxically imposed limits on her own participation—perhaps even conforming to new and shifting ideals, such as 'strong is the new skinny.'[1] These tensions highlight the situated nature of this agency in that while participants consciously pushed back against the gendered structures of the gym, they were not entirely autonomous of them (Gregson & Rose, 2000; Nelson, 1999).

This study makes clear that mitigating gender inequities in physical activity is not as simple as women versus men. Men also experienced significant limitations on their gym participation due to the presiding gender regime of the gym. Interventions for gender equity in the gym therefore need to go beyond engaging women to comprehensively contend with the sets of situated gender relations that sustain gender hegemony. This requires thinking further than fitting women into so-called men's spaces or merging men into spaces of hegemonic masculinity. Likewise, gender-specific gyms or women's only training spaces in co-ed gyms are not a sufficient solution for gender equity. Such approaches leave hegemonic gender relations intact rather than transforming the gender relations that come to define those spaces (cf. Salvatore & Merecek, 2010). While women-only environments undoubtedly play a valuable role for some women, they may more widely reinforce gender stereotypes about what activities women, and men, should be doing. Despite our focus on co-ed gyms, a number of women recalled unsatisfactory past women's-only experiences, often emphasizing a lack of equipment, as Hannah (age 32) put it: "I think that's really ridiculous that a woman shouldn't be able to go

[1] We thank an anonymous reviewer for this observation.

and do the weight workouts she needs to do at a gym because apparently they've decided that women don't need those weights."

We therefore suggest that interventions following from our findings take their cue from gender-transformative approaches to health—adopted with success in fields such as HIV/AIDS and gender-based violence—that seek to reshape health-damaging aspects of gender relations to improve equity and health for women and men (Dworkin, Fleming, & Colvin, 2015; Gupta, 2000). It would be crucial for such initiatives to avoid co-opting aspects of masculinities and femininities in ways that reinforce harmful stereotypes, in particular the potential pitfall of framing men as 'bad guys' in the gym (Fleming, Lee, & Dworkin, 2014). This work could involve, for instance, communications campaigns—on-site or on social media—grounded in experiential accounts of the gym that aim to de-hierarchize masculinities and femininities by drawing attention to some of the commonalities and aspects of shared experience articulated in our findings here. Another intervention could be to spatially challenge 'the gendered lines' by interspersing traditionally gendered activities throughout the gym, as suggested by two participants, to "allow men and women to sort of merge a little bit more" (Tom). Back to Biehler and Simon (2010), transformations *in*doors have the potential to transform society-environment relations *out*doors because "ecologies *in* indoor spaces seldom stay there" (p. 186). Thus, by unsettling the routine embeddedness of gender difference within gyms and other physical activity places, further down the line, there could be scope for shifting how individuals and communities engage in physical activity. Indeed, a gender-transformed gym may be more welcoming to participants who previously disengaged precisely due to these very gender dynamics. A recent systematic review of barriers and facilitators of adhering to exercise referral schemes for inactive individuals found participant perceptions of gym environments as uncomfortable and

intimidating to be a significant barrier (Morgan et al., 2016). This highlights the importance of taking the experiential dimensions of physical activity settings into account in physical activity promotion and intervention design.

There are four main limitations to this study. Reflective of our research setting, our sample was relatively ethnically homogenous and did not include many participants with diverse sexualities or any with gender-diverse identities. The fact that substantially more women participated in our research than men might also have affected our findings to the extent that a more critical reading of the gym from the perspective of men who react negatively to the gendered nature of the gym is possibly understated. Relatedly, our study focuses on the gender regime of gyms in a Western English-speaking context and localized nuances within other cultural milieus should be considered, particularly to inform tailored gender-transformative interventions. In Japan, for instance, Andreasson and Johansson (2017) found that the culturally-specific body ideal of ‘cuteness’ was important to understanding gendered use of the gym. Given that exercise class environments have been shown to operate as distinct micro enclaves unto themselves (Crossley, 2004, 2006), gym-goers engaging only in instructor-led group classes (i.e., not using the individual training (weight/cardio) sections of gyms) were excluded from this study. These limitations only underscore the need for future research that purposefully samples a more diverse population to permit a more intersectional analysis, as well as exploring other physical activity settings, to inform gender-transformative place-based interventions.

6. Conclusions

Although gyms are potentially sites for health promotion, they may also be places where gendered inequities in health opportunities emerge and are sustained. Our findings demonstrate

593 that micro-level processes at the scale of the everyday exercise environment work to routinize
594 gender disparities and differences in physical activity. Public health efforts to close the gender
595 gap in physical activity must account for the socio-spatial processes that reproduce, as well as
596 challenge, gender hegemony in everyday physical activity places such as the gym.
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598 **7. References**

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Figure 1. Drawing by a participant that prompted her to reflect on how her femininity is implicated in the policing of her practices and spatial presence in the gym