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'Transing' fitness and remapping transgender male masculinity in online message boards

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ARSTRACT

There has been a recent growth of events and discourses related to transgender men's health and fitness, including bodybuilding competitions, Olympics participation and appearances in Men's Health Magazine. In addition, transgender men have formed Internet collectives to share information and support about fitness and transitioning. Based on a content analysis of a Reddit message board on transgender men's fitness and interviews with transgender men, this paper argues that fitness is a 'trans practice', or means through which people may modify their bodies, personal identifications and genders. Transgender men engage in strategic fitness habits to pursue their ideals of the 'male' and 'masculine' body, illuminating both the stronghold and malleability of sex and gender norms. Simultaneously and recursively, they may share resources in virtual collectives, creating narratives that reflect and augment their 'offline' experiences, and transcend boundaries of space and time. This paper remaps transgender male masculinity by positioning online terrains as spaces in which sex, gender and the body are co-constructed. In addition to structural interventions to protect transgender people's health and safety, I gesture towards possibilities in which all people may choose alternatives beyond institutionally and culturally defined borders of sex, gender and the 'fit' or 'healthy' body.

ARTICI F HISTORY

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Sex; gender; embodiment; fitness; virtual technologies

Introduction

We are in a unique time and place for transgender men's health and fitness, both physically and virtually. In 2015, Aydian Dowling, a white transgender man, was a frontrunner for Men's Health Magazine's 'Ultimate Guy' contest. As the first transgender man to appear in the publication, Dowling, described by NPR (2015) as 'ripped' with 'sharply defined muscles', said he stayed fit with a bodybuilding-style routine. Amidst broader policies, lawsuits and institutional arrangements related to transgender athletes, 1 transgender men have also used online platforms (e.g. Reddit, Instagram and YouTube) to share information, media and support about fitness, often unavailable in mainstream physical and digital settings. By viewing fitness as a practice that can shift our flesh, senses of self and social power, this paper turns the attention towards how the physical and virtual worlds may shape one another – particularly with regards to sex, gender and the muscular body.

Although fitness is a personal and embodied experience, it has also been read as an institutional 'technology' (Pronger, 2002) that manages populations based on hierarchical ideals of sexuality, sex and gender (Dworkin & Wachs, 2009). Dating back to Grecian times, males have been socialized to build 'certain muscular shapes and tensions, certain postures and ways of moving', which can grant them social power and privilege² (Connell, 1995, pp. 52–53). Women, on the other hand, have historically been excluded from sports, deemed a risk to their emotional and reproductive health (Cahn, 1994, p. 167). They have not only faced a 'glass ceiling on strength' (Dworkin, 2001) through policies such as Title IX, but also cultural scripts that have designated they be thin and slender (Bordo, 1993). How then might transgender men, who were born and socialized as female, interact with and/or resist hierarchies of sex, gender, embodiment and fitness? What is their relationship to the institutional technology of fitness and its fluid cultural norms?

Another thread of literature, especially in feminist science and technology studies (STS), has argued that technology shapes and is shaped by the social world (Casper & Morrison, 2010; Clarke, 2005; Haraway, 1991; de Lauretis, 1987; Puar, 2012; Sassen, 2006). Research has specifically shown how online communities and technologies – from 'mommyblogs' to electronic support groups (ESGs) – can shape a person's health, illness experiences, and gender practices and ideals (Barker, 2008; Connell, 2013; Conrad & Stults, 2010; Fox, Ward, & O'Rourke, 2005; Friedman, 2013; Lupton, 2013, 2015; Smith & Stewart, 2012). With the advent of FitBits, food scales and a unifying 'FitFam' hashtag,³ how might online fitness communities reflect and shape people's experiences with sex, gender and the 'fit' body? Especially for transgender people who may lack access to culturally competent health care and are often excluded from health and scientific research, what role might online communities play in their everyday experiences with health, transitioning and fitness?

Through a content analysis of a Reddit message board about transgender men's fitness and interviews with eight transgender men, this paper analyses the coalescing digital and physical worlds of sex, gender and fitness. Queer and transgender theories have created pathways to understand how all people, not just those who are transgender, may modify their bodies using various technologies or 'trans practices', such as tattoos, piercings and surgical procedures (Sullivan, 2006, 2008). This paper expands the paradigm of what we may consider trans practices by theorizing physical fitness as a technology that allows one to alter their embodiment, sex, gender and personal identification. Simultaneously, the use of virtual message boards enables individuals to share information, motivation and resources which might be non-existent or inaccessible in mainstream settings. By bridging queer and transgender theories with feminist STS, this paper remaps transgender male masculinity by positioning online terrains as significant spaces in which sex, gender and the body are co-constructed, showing how daily lives are augmented and archived through virtual technologies. In addition to policy and structural interventions to make health care and scientific research inclusive of and accessible for transgender people, I gesture towards alternatives in which all people may transcend institutionally and culturally defined borders of sex, gender and the 'healthy' or 'fit' body.

Sex, gender and 'Trans-ing' fitness

Poststructural, queer and transgender theories have understood the body as a 'sociocultural artifact' imbued in and constructed by its broader social context (Grosz, 1994, p. 115). Perhaps most foundational is the work of Butler (1993) who analysed how shared social institutions, political and cultural contexts shape the meanings assigned to and 'acts' of bodies even before a person is born. At birth, an infant, according to Butler (1993, pp. 7, 8) 'shifts ... from an "it" to a "she" or a "he", and in that naming, the girl is "girled", brought into the domain of language and kinship through the interpellation of gender....' In particular, Western scientific and medical establishments have created a binary of 'male' and 'female' sexes by regulating and intervening on 'non-conforming' bodies (Reis, 2009, p. 8) that do not meet scientific anatomical standards. Rather than allowing for an 'infinitely malleable continuum' of sex (Fausto-Sterling, 1993, p. 21), the Western medical institution has established rules and boundaries to categorize sex, emerging from cultural meanings. We all become gendered subjects when we are classified as male or female through social institutions and practices such as medicine which sustain the 'cultural need to maintain clear distinctions between the sexes' (Fausto-Sterling, 1993, p. 24).

In addition to the medical institution, research has shown how sport and fitness⁴ are sites through which sex and gender relations are constructed and sometimes resisted (Brace-Govan, 2004; Bunsell, 2013; Coles, 1999; Connell, 1995; Dworkin, 2001; Dworkin & Wachs, 2009; Halperin, 1995; Hunter, 2013; Messner, 1988; Richardson, 2008; Schippert, 2007; Shea, 2001; Shilling & Bunsell, 2009). Dating back to ancient Greece, male athletes competed naked in sports to show they were not female, drawing boundaries between biological men and women, and sex testing in the Olympics has done its part to make sure bodies conform to rigid standards of anatomical, genital and chromosomal 'normalcy' (Cavanagh & Sykes, 2006, p. 80).

While in Western culture muscles have come to symbolize masculine strength and power, research has unpacked the 'naturalness' of male strength by explicating underlying institutional arrangements as well as social and economic conditions that have literally shaped bodies. For instance, the female 'hourglass' aesthetic (constructed through tools such as corsets), contained women in the domestic sphere where they were deemed most 'useful', and in the 1960s that aesthetic shifted to a leaner, more androgynous female form to symbolize women's participation in the male-dominated professional world (Bordo, 1993, pp. 181, 206–208). Despite women's contemporary participation in sports, muscular and athletic women are still often read as defiant of mainstream femininity (Hunter, 2013; Messner, 1988; Shilling & Bunsell, 2009) and a 'superhero physique' is just not as attractive or culturally acceptable for female-bodied people (Richardson, 2008, p. 292). Within the context of standardized bodybuilding competitions, cisgender female bodybuilders are interpreted as a 'paradox' (Shea, 2001) who are physically hard and lean but also adhere to heterosexual ideals and dominant norms of docility and hyperfemininity due to the institutional rules and norms.

At its core, this research has illuminated how the meanings of bodies and muscles are co-constructed by institutional arrangements and cultural norms of sex and gender. But what if masculinity was not always tied to maleness or muscles and femininity was not always already opposed as a binary? Muscular people are not socially neutral, culturally static or fixed entities, and the power accrued by muscles varies depending on time, place and a person's race and sex. Given that research has mostly focused on cisgender people, it is important to understand how transgender people interact with and/or resist societal norms and practices related to fitness, sex and gender so that we might better understand the technology of fitness. How might transgender men engage with and reshape cultural associations and institutional hierarchies of biological male sex, masculinity and muscular embodiment?

As a theoretical framework, 'transing' offers a way to understand the ways in which bodies and subjectivities are constructed through various practices such as sport or fitness (Stryker, Currah, and Moore 2008; Sullivan, 2006, 2008, 2009a, 2009b; Yep, 2013). Similar to sociological research on gender, technology and embodiment (Hoang, 2014, 2015; Pitts-Taylor, 2009), research in transgender studies has argued that bodily modification practices, including but not limited to sex reassignment surgeries, take place within a certain hierarchical context and can shift a person's embodiment and construct gendered meanings onto the body (Aizura, 2009; Sullivan, 2006, 2008, 2009a, 2009b; Steinbock, 2012; Stryker, 2006; Yep, 2013). Cultural boundaries define acceptable and productive bodies and also shape the ways that certain tools are made available and utilized. For transgender people in particular, some of their 'explicit, visible and transformational procedures' (Sullivan, 2006, p. 561) take place within the context of the medical institution's classification of transgender identity as a mental illness.⁵ In order to gain the diagnosis of gender dysphoria, which allows access to gender-affirming health care procedures such as sex reassignment surgeries and hormone therapy, transgender people must adhere to medical guidelines and may have to 'tailor their stories to fit limited ideas of sex-gender and trans sexualities in clinical contexts...' (Latham, 2016, p. 363). Stryker (1994, p. 92) has argued that the medical governance of gender causes us to 'choose neither our marks nor the meanings they carry'.

Dominant descriptions of transgender identity describe it as a 'journey', an arrival 'home', and feeling of 'being trapped in the wrong body' (Prosser, 1998, pp. 69, 83). Research has called for a broader understanding of sex reassignment surgeries beyond the 'complete, pathological rearrangement of identity', instead viewing procedures as another 'way of organizing your body to suit your image of yourself' (Halberstam as cited by Sullivan, 2006, p. 553). People have also come out 'against a trans narrative'

(Rosskam, 2008) constructed through health care, medicine and cultural hierarchies, since not all transgender people seek surgeries or use medical technologies to transition. In addition, Latham (2016, p. 349) has called for a way to understand transgender experiences beyond 'clinical logic'. Transitioning is not a linear process to a reach a certain endpoint but can instead move 'forward, backward, sideways, tangential' (Carter, 2013, as cited by Horak, 2014, p. 580).

Separately, health and fitness pursuits are commonly referred to as a 'journey', and research has even analysed how some female bodybuilders underwent'a metamorphosis' in how they experienced themselves and their surroundings, becoming 're-born' through their gym experiences (Shilling & Bunsell, 2009, p. 156). Given that there are multiple possibilities to transition and various ways to be and become one's gender(s), this paper theorizes fitness as a trans practice to analyse how transgender men might cross boundaries of sex, gender and the body – especially outside of formal medical spaces. I turn our attention towards the mechanisms, both physical and virtual, that transgender men use to shape their bodies, genders and senses of selves.

Methods

While feminist research has shown how physical 'place' matters for gender, sex and sexuality (Brown-Saracino, 2015), limiting research to 'traditional' physical spaces occludes the ways in which 'everyday life for much of the world is becoming increasingly technologically mediated' (Murthy, 2008, p. 849). As virtual spaces have created new possibilities for individuals to self-identify and make meaning of their life experiences, digital ethnographic methods have been used to examine the 'culturally embedded, multilevel, and multisided phenomena associated with constructions of identity' (Smith & Stewart, 2012, p. 972).

Research has focused on the role of Internet communities – from 'mommyblogs' to 'fat fashion' blogs – in co-constructing sex and gender, while research in medical sociology and cultural studies has shown how ESGs and message boards play a role in individual's health outcomes, fitness activities and gender ideals (Barker, 2008; Smith & Stewart, 2012). For instance, in a Bourdieusian-inspired analysis of an online forum for cisgender male bodybuilders, participants in the 'virtual social field' shared their goals of muscular growth and masculinity within their 'brotherhood of iron' (Smith & Stewart, 2012, p. 978). Using critical discourse analysis, Friedman (2013) analysed how mothers narrated their experiences in ways that suggested multiple, diverse and atemporal iterations of motherhood. Online forums are generative sources of data because they shed light on personal information that might not otherwise be revealed in face-to-face settings. As non-mainstream texts, online forums might also represent viewpoints of multiple participants whose voices are not always amplified.

In order to understand transgender men's relationships to fitness, sex, gender and virtual technologies, I conducted a critical discourse analysis of 38 publicly available, user-generated message threads about fitness from a Reddit message board for transgender men, which I will refer to as the 'TransMan' message board. Created four years ago, the TransMan board has over 9300 subscribers and includes separate fitness-related threads for users to 'get advice/brag/give advice on all things exercise and sports'. The fitness threads, written between October 2015 and June 2016, took the format of discussions amongst multiple users, spanning in length from two comments to upwards of thirty. To analyse each thread I used grounded theory which involves modifying theoretical frames as data are collected (Glaser & Strauss, 1967). Similar to a content analysis of fitness magazines by Dworkin and Wachs (2009), I analysed the online discourses within the context of hierarchies of sex, gender, health and fitness in order to examine the 'cultural assertions underlying the text of articles and imagery' (Dworkin & Wachs, 2009, p. 25). After gaining an initial sense of patterns and themes related to gender, sex, the body and fitness, I conducted automated searches for posts related to particular body parts ('pecs', 'chest', 'hips', 'shoulders', 'arms', 'biceps', 'legs'), testosterone use, packing, binding, surgery, masculinity and the gym.

Virtual studies can also incorporate multi-method triangulation such as qualitative interviews to better understand individual's perspectives and everyday experiences (Hine, 2008). I conducted seven interviews with transgender men who subscribed to an offshoot of the TransMan message board, which I will refer to as 'TransMan Fitness' and was specifically devoted to transgender male fitness. The

TransMan Fitness board was less active than the broader TransMan forum but interviewing its participants allowed me to reach people who were explicitly invested in the topic of fitness. In addition to participants of TransMan Fitness, I interviewed Aydian Dowling, who granted permission to be identified by name and who first gained popularity documenting his transition on YouTube. Recently, Dowling has created greater visibility and attention to transgender men in virtual communities and offline through his appearance in Men's Health Magazine and transgender-friendly clothing line and online portal.

Interviews were conducted both via Skype and email. Participants were asked about their experiences with fitness, transitioning and involvement in online communities. For interviews taking place via email, I sent participants a list of questions and followed up with several to clarify or expand on a point. Skype interviews lasted about an hour and were semi-structured in format. Interviews were audio-recorded to ensure accuracy and transcribed verbatim. They were coded for themes that emerged related to sex, gender, transitioning and the body. All participants completed a demographic survey and I have used pseudonyms to ensure respondents' anonymity. All participants were transitioning from female to male and I have used their self-identified gender. All but one participant were white, and ages ranged from 21 to 29.

There are several caveats and ethical concerns to this work. Research has discussed the 'digital divide' (Friedman, 2013, p. 17) and 'digital stratification' in that Internet access is not universal and studying online communities excludes those who lack access (Murthy, 2008, p. 848). This methodology limits my sample to transgender people who have the time and resources to use virtual communities and to those who are able and willing to become involved with fitness. The content on websites is not representative of all transgender men nor does it suggest a unified 'community' or cohesive set of transgender male experiences.

This paper follows in the footsteps of scholars who have confronted issues related to exoticization of transgender people by straightforwardly accepting their privileges, positionality and self-reflexively acknowledging how that has shaped their data collection (Connell, 2010, 2013; Najmabadi, 2013; Ochoa, 2014; Schilt, 2006; Valentine, 2007). Ochoa (2014) has expressed concern about research that focuses solely on the production of gender for transgender people since it positions them as exotic, when in fact gender is produced and regulated for all people. Similarly, Halberstam (1998, p. 291) has long contested the notion of 'transsexual specificity' since 'many subjects, not only transsexual ones, feel trapped or unsettled in their bodies'. However, transgender people throughout the world face distinct inequalities and it is important that more research focus on their experiences so that structural and cultural shifts can occur. In addition, the Internet was integral to the formation of the transgender collective in the United States in the 1990s, making it a ripe location to understand contemporary issues and dynamics (Valentine, 2007; Wilchins, 2011). As I will later discuss, this paper can hopefully serve as a launch pad to understand intersecting issues of race, sex, gender, sexuality, class, geography and ability.

In the following sections, I analyse how some transgender men modify their bodies and senses of self through fitness, focusing on their pursuit of overall size/strength, chest size, lean body mass, reducing hip size, 'feeling' more masculine through fitness and describing their experiences in gyms. I then analyse how physical experiences and fitness goals are augmented and archived in virtual spaces. I conclude with implications and directions for future research.

Fitness as a trans practice

Muscles ... become agents of magical potency. They possess power of transformation: they are able to bring you, or make you, what you desire. (Davidson, 1998, p. 39, as cited by Cavanagh and Sykes, 2006, p. 92)

Gaining size, strength and 'Crossing Thresholds' through fitness (and hormones)

Interviews and online discourses revealed that many transgender men aimed to achieve size, strength and a bodily structure traditionally associated with cisgender men (Dworkin & Wachs, 2009; Smith

& Stewart, 2012). All interview respondents expressed that they wanted to build a more 'masculine' physique which they collectively defined as broad shoulders, a large chest, deemphasized hips and thighs ('less curves'), visible muscles and a low body fat percentage. Shay, a 21-year-old white male, stated in an interview that 'if we agree that transmen are men, then they will encounter the same insecurities that many cis men face – and being insecure about size is a rather common fear for cis men'.

Participants on Reddit shared tips to achieve their bodily goals, such as workout routines to achieve a'V shape' which symbolizes broad shoulders and a tapered waist (and was also a common trope found in men's fitness magazines) (Dworkin and Wachs 2009, p. 81). They also shared celebrations of muscle growth by posting images of biceps and other body parts, with one user writing: 'Guys. I have traps. For the first time in my life I can actually see that muscle. It feels f---ing amazing'.

In conjunction with fitness practices, testosterone use offered a positive interaction for transgender men aiming to gain physical size and musculature. For James, a 29-year-old Latino non-binary transmasculine male, his decision to take testosterone was partially influenced by his experiences strength training. James describes:

It was kind of this weird moment where I was looking at myself in the mirror and I was proud of how far I had come because I had lost a bunch of weight and there was muscle definition and stuff. But then I figured out when I looked in the mirror that I was never going to look like the guys on the cover of Muscle and Fitness or Men's Health because the end result as a woman being muscular – I just wasn't going to look like that...

While acknowledging 'how far [he] had come', muscle-building without hormones, testosterone would allow him to transcend looking like a muscular woman. Transgender men who used hormones described certain changes in their bodies, such as one Reddit user's neck growing almost three inches thicker – 'with no effort' – since starting testosterone.

Transgender men's experiences building strength also demonstrated how they, according to one Reddit user, 'crossed the threshold' from being strong compared to women to becoming a 'novice' male lifter. Another participant wrote he was '[f]inally outlifting a few guys in [his] gym'. Even though he said that the cisgender men in his gym were 'newbies' to weightlifting, he added that he himself was 'relatively new to having testosterone in [his] body'. Transgender men utilized fitness and testosterone to transform from what one Reddit user called being a 'hulky woman' to a man.

Building a chest

Cisgender men have historically been linked to a strong upper body, deemed 'cerebral' and logical, while women are tied to the lower body and reproduction, stigmatized as less rational (Dworkin & Wachs, 2009, p. 80). Many interviewees attested that much advice on the message board revolved around building a strong upper body. Interviews and online discourses also demonstrated that many transgender men involved in fitness aimed to build a large chest but faced difficulties in terms of binding, top surgery and chest dysphoria. In interviews and on the forum, transgender men discussed the problems in wearing a binder when performing exercise. They also described how wearing a sports bra causes chest dysphoria, a barrier for many to use a public gym or engage in fitness altogether. Online, they traded information about strategies such as wearing multiple sports bra or good binders to use while exercising.

Posts and interviews also addressed the technicalities of building a muscular chest before and after top surgery. Users exchanged specific strategies to eliminate fat in the chest before top surgery in order to help with surgical outcomes, as well as advice about how long to wait after top surgery to perform exercise and the best routines. James stated that the forum was a place to talk about 'looking like a dude with boobs until top surgery', as users could explicitly discuss physical and emotional issues with their chests and fitness, sharing solutions and support.

Transgender men's discourses and experiences with top surgery and fitness revealed how surgical and non-surgical trans practices might intersect and even clash on an everyday level. As I will discuss



in the Implications, their virtual knowledge exchange fills a crucial gap in broader social supports and research on transgender men's experiences with transitioning, health and fitness.

De-emphasizing the hips, 'Feminine' fat, and managing weight gain

In addition to gaining strength and muscularity in a 'traditional' male shape, interviewees and online discourses explicated that fat loss, especially in the hip area, was a key area of concern. Tim, a 22-year-old white male said that the first 5 months he began testosterone he was focused on losing the 'feminine pattern' of fat deposits on his body, specifically his hips. According to Bordo (1993, p. 181), fleshy breasts and hips were symbols of a 'domestic, sexualized ideal of femininity' in the nineteenth century. While cisgender women were trained to address the size of their hips and lower bodies (Bordo, 1993, p. 208), transgender men also negotiated negative and dysphoric feelings about their hip size, a body part entrenched in cultural meanings of the female sex and femininity.

Max, a 21-year-old white male, stated that his hips and waist felt 'too curvy' on the day of the interview: 'I've spent a few minutes this morning mucking around with my shirt, but I can't get a straight line there. [It] makes me want to eat some protein and do a lot of burpees.' Max's response to his discomfort about his hips was to engage in the physical activity of burpees and eat protein (a pillar of muscle growth), implying that certain physical practices would either physically or emotionally offset his discomfort with his hips. Posts on Reddit addressed 'good exercises to get rid of butt/hip curves.' One user offered the advice: 'You could also try gaining size in your quads and calves, de-emphasize the fat and just make it look like your lower body is just big.' Another post echoed this technique, stating: 'You can't really spot reduce fat. If you want to de-emphasize your butt/hips, you have two options: (1) lose weight overall or (2) work your shoulders and back to make them larger and wider.'

By increasing the size of other body parts such as the back/shoulders or lower body, one's hip size is 'de-emphasized'. This discourse illuminates the malleability of the body's physical structure as well as the cultural meanings assigned to certain body parts. Bodies are read male if they take a particular shape and some transgender men can augment their body parts to obtain this figure. Physicality is flexible, fluid and sometimes a strategic visual illusion.

The technology of fitness aids in rendering a body male and masculine through strategic growth and muscle-building. Through their emphasis on managing hip size, transgender men showed how 'gender and corporeality are strategically produced in certain parts of the body' (Dworkin & Wachs, 2009, p. 78). Although cisgender male participants in an online bodybuilding community referred to their 'love handles' (Smith & Stewart, 2012), instead they were seemingly unbothered by their fleshy hips and said they would not cut weight until their strength increased. Transgender men who experienced dysphoria with regards to their hips sought strategies to lessen the prominence of this body part.

'Cutting' fat: leanness and 'Good Weight'

Participants also expressed their desires for low body fat and muscular mass, categorizing weight as 'good' and 'bad'. Several posts addressed maintaining a lean physique, as one Reddit user wrote: 'About 10% more body fat to cut and I'll be a chiseled Adonis!' Sarcastic or not, becoming a lean Greek God represented a pinnacle of maleness and masculinity. Within the context of broader public health and cultural discourses that frame fat as socially undesirable (Bordo, 1993; Brewis, Wutich, Falletta-Cowden, & Rodriguez-Soto, 2011; Kwan, 2009), some transgender men echoed an association between 'good' weight, comprised of muscle and 'bad' weight, comprised of fat. One post read: 'I avoid the scale now. I saw I gained 16 lb since starting T and [in] my mind I was like "OMG WTF NO" even though it's muscle'. Avoiding the scale is a deliberate strategy to counter internal negative beliefs – capitalized for emphasis – about weight gain. Another user posted: 'Couple more months and then I can shift focus to getting rid of some of this fat. Bleh, both at the fat, and at all the cardio [I] have to do to cut it'. The user's disgust at the fat – 'bleh' – signals how fat is unwanted, a component of the body that must be 'cut'. The discourse of 'cutting' fat intersects with Stryker's (2006) attention to the centrality of surgical



'cuts' for transgender people. Now we see how 'cutting' fat through diet and exercise becomes a way for people to reveal musculature, and for transgender men specifically to feel and become male and more masculine.

Participants and discourses also expressed the emotional difficulties in gaining weight, particularly through the combination of testosterone and weightlifting. For instance, James described his 'panic' after gaining 15 pounds:

... I don't know why – it probably has to do with being socialized as a woman where women are expected to be small and take up not very much space ... but I started taking testosterone and I was eating appropriately to gain muscle but when I stepped on the scale I was like, 'Holy shit am I getting fat?' Which is terrible because I'm not a fat person. But you can't help it when you gain ... I don't know why I was surprised because I was eating like 2500 calories a day and lifting. I wanted to gain weight, and it was good weight. But I remember just being like, 'Oh my god.'

James said he turned to the TransMan Fitness board and asked if others had dealt with similar experiences. Similar to how participants in the cisgender male bodybuilding forum aspired for leanness except at the expense of losing muscle or strength (Smith & Stewart, 2012), James said he received numerous posts suggesting that he take advantage of his 'new gains' in muscular growth and to continue his diet and exercise routine. Transgender men learned to recalibrate their negative beliefs about weight gain, whether by embracing or ignoring the increased number on the scale. Assured by other users on the message board, James found relief in his experience with weight gain by understanding the scale number as consistent with his goals of muscle growth, maleness and masculinity. Similar to how female bodybuilders learned to increase their diets to build muscle and managed societal expectations of food intake (Brace-Govan, 2004), transgender men collectively learned to reframe their internal scripts as people born female who were socialized to be small, replacing it with the desire for 'good' muscle mass.

Interviewees and online discourses underscored transgender men's difficulties in figuring out proper diet and nutrition as far as knowing when, as Tim phrased it, to 'switch ... over to the male statistics', in terms of metabolic rate and strength standards. One Reddit user addressed the biological differences in weight loss between cisgender and transgender men (even those on testosterone, like himself) stating: 'I'm about 20% of the way to my goal weight, but can't stop thinking that if I were cis, it'd be going a hell of a lot faster'.

Beyond the body: 'Feeling' more masculine through fitness

Online discourses and interviews revealed how physical practices and outcomes in strength and muscularity transcended the physical body and impacted the ways transgender people felt about their own maleness and masculinity. For instance, participating in what Max deemed 'male-coded' practices of 'taking control of one's body' – such as strength training, consuming protein shakes, 'eating big to lift big' – opposed what he called 'cardio', 'dieting' and 'healthy eating'. Tim said that one of his first fitness goals was to complete a single pull-up, which he said would make him 'feel more masculine'. When asked why a pull-up would make him feel more masculine, he laughed and responded: '... [T]o me, traditionally men have more upper body strength ... I always saw the kids and they did the Presidential Fitness Test. The guys would always be able to do pull-ups without trying. It meant something to me'. The President's Challenge, a US Government-sponsored assessment that awards youth for completing physical benchmarks, served as an apparatus that socialized Tim to view and make meaning of the 'natural' physical differences between boys and girls.

Participating in 'male-coded' activities, which resulted in physical shifts in muscular growth, led to transgender men's external and internal affirmation. Although many interview participants reflected on the problematic aspects of 'passing', which narrowly defines male and female bodies, they acknowledged that interacting with others is only comfortable when they are seen and treated as male. By building muscle in a traditionally male (and therefore masculine) shape, transgender men were also more likely to be read by others as male and masculine. James also stated in an interview that gaining muscular size affirmed the way others see him as male. He said:



[B]eing small – that's generally ascribed to women – so I would like to have the six pack abs and a huge chest and sort of portray that hypermasculine physique because then there is much less chance for people to misgender me.

James' statement indicates that stereotypes about small and slender female bodies and big and strong male bodies are pervasive even as he said he tries to resist broader societal norms that assign physical characteristics to men and women. However, his physical goals have allowed him to gain affirmation of his gender identity.

In the gym

Gyms are not neutral spaces and particular forms of self-presentation, dress, actions and vocalizations are gendered (Brace-Govan, 2004). With cisgender men often controlling the gym space (particularly the weight room), ethnographic research found that cisgender women were treated differently based on hierarchical social expectations of strength (Brace-Govan, 2004, p. 523). While many people experience 'gymtimidation', transgender men faced unique challenges in accessing and using the gym. Several posts on Reddit expressed concern about coming out in gym membership applications. 'Will I have to put "F" on the signup sheet if they want to see ID? Will anyone mention anything if I go into the men's [locker room]?' Another wrote: 'Just got my name change approved, so I'm very close to having ID with my name on it that I'll be comfortable signing up at a gym'. For these individuals, enrolling at a gym brought up concerns about disclosure.

The gendered practices and infrastructures within gyms was also a topic discussed in online discourses and interviews. For instance, Max, a 21-year-old white male, spoke to the difficulties in using the women's changing room at his gym, stating: 'I feel out of place, and it torpedoes my chances of passing as male in the gym itself'. Before transitioning to male, James used to attend a women's-only lifting hour at his gym but 'never felt like [he] fit in' or belonged there. He also stated that women were 'hostile' when he used the women's locker room. As alternatives to the gym, many transgender male interviewees and Reddit participants said they felt more comfortable exercising from home.

Addressing their structural and interpersonal discomforts in the gym setting, Reddit users offered one another support in entering and using the gym. One author wrote: I know to many people, walking over to the free weights section of the gym for the first time can seem intimidating since that's where dudes who look like people-colored versions of the Hulk hang out, but no one should be judging you. In addition to the barriers, transgender men reflected on their positive experiences at the gym, such as using the men's locker room with no problems, explaining their transition status to a non-judgmental personal trainer and being gendered correctly.

Virtual transitions

Timelines

Transgender men's physical transitions through fitness (and other technologies) are distinctly augmented through their use of virtual technologies such as the TransMan message board. Previous research has focused on how transgender people have used YouTube to create virtual archives of their lives and transitions, specifically through hormone use. Using techniques such as time-lapse videos, transitions are represented as 'linear' and 'smooth' in videos (Horak, 2014, p. 580). Viewers can see the 'otherwise imperceptible processes' of how 'trans bodies morph as if by magic, drawn inexorably toward their felt gender' (Horak, 2014, p. 578). In a similar way, many people document their 'fitness journeys' achieved through diet and exercise by sharing side-by-side photographs labelled with the dates and often their weight.

Many Reddit participants described the helpfulness of timeline videos in learning about other people's progress both with fitness and testosterone. For instance, Shay said he tries to post progress photos every three months to display the changes he has made through hormone use and weightlifting in order to motivate and support others. He added: 'I know that when I first started hormones I was relieved to

find this community because other guys had posted timelines of how long it took for certain aspects of their bodies to change. Tim said that when he first started transitioning he consistently watched YouTube videos by transgender men and began making his own – including a one-year timeline video – to help other people. Through the process, he said: 'It's interesting because you don't even realize how much you change.' Videos allowed not just others but oneself to see their own transformations and the small changes.

Online discourses also allowed people to reflect on older versions of themselves and their future goals, restructuring time so that the past, present and future intersect. One Reddit user wrote '... I was looking at older photos, and it's kinda funny that I honestly thought I had good muscle mass back then (which is not that long ago anyway) ... And then you see this: [link to before/after photos of author flexing biceps] :D :D'The author, a self-reported 24-year-old queer non-binary person who was taking testosterone, referred to a time 'back then' and 'not that long ago'. The written ellipses offers readers an extended pause to reflect and think back with him to a moment in time, and he then transports us 'back' through his 'before' image. He wrote that he can almost complete 10 pull-ups and his 'next goal is one good-form muscle-up, but [he's] not quite there yet'. The post suggests the process of 'anticipating different future possibilities' (Latham, 2016, p. 355) – existing in the present while simultaneously in motion towards the future. Similarly, another Reddit participant, after describing his exercise routine that day, wrote he was '[p]atiently waiting for any chest or back development to show up'. Even when the body is at rest, one waits for its growth and muscular development.

Becoming a body, a self, is an always unfolding and constantly shifting endeavour. Bodies also flow across time and space in a digital 'afterlife' (Peterson, 2011, p. 587) as selfies, progress pictures and timeline videos circulate. In her analysis of mommyblogs, Friedman (2013) posited that the body was absent from online interactions, yet it seems that bodies are often central in virtual transgender fitness message boards, rendered in pixels or implied in the topics of conversation. Time is also restructured as physical transformations are neatly captured in adjacent frames. Our 'online selves' live beyond and within us as '[c]yberspace is the data archive of the body' (Lupton, 2013, p. 9).

Virtual motivation, discipline and monitoring

Transgender men found motivation and discipline to exercise in virtual spaces. US historian Irving (2008) has argued that much research on transgender issues elides the context of neoliberal economic conditions that shape transgender subjectivities. The fitness industry is entrenched not only in hierarchical cultural norms but also global labour hierarchies and consumerism, and the athletic body is one that represents health and productive citizenship (Dworkin, 2001, p. 334). Fit bodies are disciplined bodies who will themselves to work hard and therefore contribute to postindustrial capitalist ideals. Individuals hold each other and themselves accountable and virtual interactions altered their fitness practices, discipline and everyday life, and research has analysed the trend of 'social fitness' which can involve online social networks to motivate health promotion (Lupton, 2015).

On Reddit, one user posted a photo of himself at the gym with the title that he passed. While one person commended the author for looking 'very manly', another comment read: 'I thought I was too under the wind and lazy to go to the gym today. Guess I have to go now' while another user wrote, 'Just motivated me to go back to the gym hardcore hahah'. Similar to how female bodybuilders relied on the sub-cultural support they found in the gym (Shilling & Bunsell, 2009), transgender men have used online spaces to share motivation and find discipline to work out. Shay said that he checked online communities daily and is more likely to make the gym a priority when his 'feed is filled with trans guys who are in shape'. He added: 'I love being able to monitor other people's progress'.

Examples of fit transgender men in online communities had a ripple effect on users. According to Shay: 'The community has just impacted my thoughts on masculinity by reinforcing the idea that transmen are just as capable as cis men. I know I can have the body I want eventually because many transguys before me have accomplished even more impressive feats'. Cam, a 24-year-old white male, echoed how he is motivated and inspired by seeing other transgender men involved in fitness and those

'who push themselves daily'. For Oscar, a 24-year-old white transgender man, using the fitness message board to motivate others had a cyclical effect on his own physical habits. By documenting his training on the forum, he said he 'wants people to be able to rely on [his] presence' which means he actually has to do the training so he can post updates. This practice speaks to broader patterns in which people 'invite their followers and friends to participate in their self-examination and self-surveillance strategies' around health (Lupton, 2015, p. 9). Online platforms transform how people may narrate, archive and share their transitions (both fitness- and gender-related) with words, photos, videos and timelines. And in online communities, people found encouragement, motivation and discipline to reach their physical goals – even if, as Shay put it, that goal is to 'look good naked'.

As I will now discuss, the social hierarchies currently imbued in fitness can complicate how we see fitness as a fully empowering trans practice.

A fractured empowerment through fitness and virtual communities

This paper has argued that fitness is a trans practice that enables some transgender men to achieve a more harmonized sense of self in accordance with their ideals of maleness and masculine embodiment. Interviews and online discourses revealed that many transgender men involved with fitness and online fitness communities sought a bodily structure and masculinity tied to size and strength. Transgender men aimed to reduce the size and appearance of their hips, reflecting the broader cultural association that links female bodies with hip size and fat with femininity. Their strategies to 'de-emphasize' hip size by enlarging other body parts reflects the creative and proactive processes of bodily modification; physicality, sex and gender are illusions, constructed through the cultural meanings attached to physical configurations.

Both fitness practices and involvement in online communities may elucidate how people achieve a fractured empowerment that both reifies and resists hegemonic cultural and institutional ideals of sex and gender. In order to become and embody their authentic selves, transgender men might simultaneously reify and resist hegemonic cultural and institutional hierarchies of sex and gender. In conjunction with other technologies – from hormones to haircuts – transgender men may use fitness as a way to not only reconstruct their bodies but also reflect and solidify their internal senses of self. By building their bodies to align with contemporary shapes and ideals of (male) sex and (masculine) gender, they may find relief from dysphoria. Yet aspiring to reach particular norms of the male and masculine form also reflect the ways that fitness is a regulatory technology that disciplines people to conform to hegemonic cultural ideals (Pronger, 2002). Akin to how beauty is 'organizationally produced and situated in place' (Mears, 2014, p. 1340), transgender men's ideals of male and masculine embodiment are also steeped in institutions and norms of health and fitness, emerging in an increasingly commodified and hierarchical context. Fractured empowerment underscores the embodied and social tensions in both upholding and dismantling sex and gender norms.

And as fitness practices can offer some people transformative healing, so too does their involvement in online communities. Transgender men found and shared information and support related to their specific experiences with fitness, gyms, hormones, packing, binding and passing. Users spoke to the importance of 'progress photos' and 'timelines' for fitness and transitioning, showcasing linear growth towards the perpetual goal of maleness and masculinity. Online collectives provided for transgender men examples of fitness that are more relevant to their bodies and experiences. According to Dowling:

It's just an outlet so you're not feeling like you're constantly comparing your body to these cismen who are not born biologically the same ... [T]hat doesn't mean we can't, be as strong ... [W]e're just different bodies, and just like I think women look up to other women, transmen are going to look up to and look for advice from other transmen.

In the same way that YouTube videos offered 'individualized narratives of success' (Horak, 2014, p. 581) instead of many mainstream representations that flatten or hyperbolize transgender subjects, online message boards allow for a diverse and first-person representation of experiences with transitioning and fitness. In conjunction with the 'life-saving work' of video blogs (Horak, 2014, p. 581), online forums

offered users an ability to archive physical transformations and learn from the changes they saw in other people. Tim summarized it: 'The internet is such a beautiful thing. I cannot imagine doing this without it'.

Social media sites such as Reddit served a unique purpose in filling a gap in research and broader knowledge about transgender health. As Tim said: 'I couldn't go to a gym and ask a personal trainer this stuff because they wouldn't know. Like, they're not going to have any idea. They're going to take their best guess but...' With a lack of data on the relationship between transitioning through hormones and fitness, this paper underscores the need for more inclusive scientific research and applied work on transgender people's experiences with health and fitness.

Flexing new norms of sex, gender and the body

Although participants and online discourses largely upheld the 'traditional' linkage between male bodies, masculinity, strength and muscularity, they also remapped linear associations between cisgender men, masculinity and muscularity. Masculinity does not 'belong' to chromosomally male bodies, nor does strength or muscularity. Transgender men may complicate the rigidity of biology, sex and gender and make room for further disruptions of the sex/gender binary. Perhaps there exist pathways to delink cisgender female bodies from static notions of femininity that position them as small or lean, and it seems that cisgender women may already be doing this work in their own online fitness communities such as by claiming the label of 'mermaid', or someone whose thighs touch.⁷

Perhaps all people can redefine strength as a human characteristic rather than inherently physical, male or masculine. Feminist disability theory and fat studies would illuminate more about the relationship between physicality, sex/gender and social power, particularly for people who are not cisgender. Future research can continue to analyse and dismantle the association between physical strength, leanness and 'good' bodies, making room for and embracing fatness and people across the ability spectrum. Critical race studies would offer an intersectional understanding of how racial hierarchies are produced and/or resisted within the gendered context of fitness. Scholarship on gender, sex and sexuality can also take a more integrative approach to understand the Internet as a place in which gendered meanings unfold and rebound across sites, both physical and virtual. Participant observation would also enhance these findings by showing how transgender men navigate and confront structural and interpersonal biases in physical places such as gyms. Comparative research with cisgender people, transgender women, and gender non-conforming individuals would also elucidate more about the production of sexed and gendered norms in relation to health and fitness.

This paper underscores the need for research, social policies and infrastructures to protect transgender people's health, safety and welfare – in medical sites, gyms, schools, airports, workplaces, bathrooms and beyond. Despite the medical institution's power as gatekeeper of norms and procedures for transgender people, there is a significant lack of scientific and health research that includes transgender people. It is beyond the scope of this paper – as well as the current state of biological research – to analyse the interactions between transgender men, testosterone use and health/fitness. All people who exercise can undergo physiological shifts and 'biochemical rewards' (Smith & Stewart, 2012, p. 976) including heightened heart rate, increased blood flow and release of feel-good endorphins. How do physical shifts and transitioning interact for transgender men, especially for those whose biologies are changing through testosterone?

This paper has broad implications about the social and technological construction of sex and gender through hierarchical institutions such as health and fitness. It also suggests how daily life is restructured for all people through technologies such as online communities. Based on virtual interactions, individuals may alter their most personal experiences such as eating and exercising as life is narrated and archived through hashtags and status updates. Through the lenses of fitness and virtual technologies, the co-constructed experiences of sex, gender and embodiment for all people is illuminated.

There is more still to learn more about the contours of our digital flesh, the rhythm of our virtual heartbeats, and how the histories we create and archive through social media reverberate in and reflect our physical worlds. This paper has steered research towards deeper understandings of how online



technologies foster new interactions and meaning-making about health, fitness, sex and gender. Rather than assuming that sex and gender are ever static, this paper underscores how bodies, sex and gender are co-constructed within the context of shifting cultural hierarchies, institutional arrangements and online technologies.

Notes

- 1. For instance, Chris Mosier was the first transgender athlete to make the US men's Olympic team and was featured in a Nike advertisement in 2016. FTM Fitness World, a non-profit organization in Atlanta, has held annual transgender fitness conventions and male bodybuilding competitions since 2014.
- 2. Except in the cases of 'big' African-American men who are targeted by police; in these instances, size and strength do not afford a man privilege and can instead shape unequal interactions between state authority, leading to undue violence or death (Jones, 2016).
- 3. Users of social media platforms can use the hashtag 'FitFam', an abbreviation of 'Fitness Family' to label their fitness pursuits and connect with others.
- 4. 'Sport' and 'fitness' are interrelated but distinguishable terms. 'Sport' has historically been studied by sociologists as a conglomeration of discourses, practices, people and institutions that comprise organized activities. While fitness has been associated more with femininity, Dworkin and Wachs (2009, p. 95) found that men's health magazines stated that strength, speed, endurance, power and agility were the 'five pillars of fitness' and featured male athletes across different sports. This signals the interrelationship between the two terms and their associated practices, discourses and technologies.
- 5. Gender dysphoria is a psychological condition currently categorized by the Diagnostic and Statistical Manual of Mental Disorders, a handbook used by the American Psychiatric Association (2013), as 'strong desires to be treated as the other gender or to be rid of one's sex characteristics, or a strong conviction that one has feelings and reactions typical of the other gender'.
- 6. The process of 'cutting' is commonly used in fitness and bodybuilding communities to describe dieting to reveal a more muscular body, particularly after 'bulking', which refers to the act of eating in caloric excess to gain muscle.
- 7. This discourse counters a common trope of the 'thigh gap'.

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