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Specific detriment: barriers and opportunities for non-binary inclusive sports in Scotland

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Abstract

While non-binary gender identities have become increasingly visible in recent years, little research currently exists on the experiences that non-binary people have in sport, where most opportunities to participate are limited to two, mutually exclusive female and male categories. This paper provides a starting point for addressing this gap, by reporting findings from a participatory scoping study that explored the barriers that non-binary people face in accessing sporting spaces, communities, and competitions. The study also identified strategies through which these barriers could be overcome, and non-binary inclusion facilitated. Taken together, these strategies suggest that genuine inclusion entails not only new ways of thinking about how gender operates in sport, but also alternative ways of thinking about the meaning and value of sport itself.

Key words

Non-binary, Gender, Sports, Barriers, Inclusion

Non-binary gender identities that are not exclusively or consistently man/male or woman/female have become increasingly visible in recent years. A growing body of literature now documents the experiences of non-binary people across various spheres of life (e.g. Bolton, 2019; Nicolazzo, 2016; Rankin & Beemyn, 2012; Richards et al., 2016; Richards, Bouman & Barker, 2017; Yeadon-Lee, 2016; Valentine, 2016; Vincent, 2019, 2020). Little research currently exists, however, on non-binary people's experiences and challenges they face in sport, where most opportunities to participate are divided into two, mutually exclusive male and female categories. Nonetheless, some sports organisations have begun to offer a third, non-binary gender category.

A notable example is a 2019 policy introduced by Scottish Athletics (SA), the regional governing body of athletics in Scotland, which made it compulsory for all SA championship events to include a non-binary category in addition to male and female categories (SA, 2019). SA has been licencing events with a non-binary category since 2017 with the hope of sending "a strong message" that the SA "fully support and encourage any Race Organiser who wishes to include a third gender category" (SA, 2019). The 2019 SA policy aimed to take this further, by mandating that "all ... championship events, including those external events hosting a championship on our behalf, must include a non-binary category within the event entry options" (SA, 2019). This new policy is contextualised by a recent Scottish Government

proposal and consultation initiative to legally recognise non-binary gender, mirroring similar efforts in other countries including New Zealand and Australia.¹

Yet, in response to campaigns calling for legal recognition of non-binary identities, the UK Ministry of Justice (2015) declared that while “we recognise that a very small number of people consider themselves to be of neither gender,” “we are not aware that that results in any specific detriment” and, consequently, non-binary people need no specific (legal) protection. In response to this statement, a surge of non-binary activism in the UK followed that was focused around the “specific detriment” hashtag campaign on social media, where non-binary people shared their experiences of the many specific detriments they face due to being non-binary (Bergman & Barker, 2017). Relatedly, the Scottish Transgender Alliance conducted a survey of non-binary people’s experiences in the UK to investigate the extent to which the Ministry of Justice statement was true. The results demonstrate that non-binary people face extensive barriers that are specific to this population but intersect with other axes of marginalisation, and provides initial evidence that sport is a context where this specific detriment is particularly experienced (Valentine, 2016).

Building on these initial findings, we conducted an exploratory study to provide insight into the specific detriment that non-binary people experience in sport. Focusing on Scotland, the study aimed to identify barriers to non-binary people’s participation and ways to facilitate non-binary inclusion in sports, using a community-based participatory research workshop that brought together key community stakeholders. Most participants were members of major Scottish sports and activist organisations, including non-binary athletes and activists, queer sports activists, and non-binary inclusive sport organisers. Focusing on sporting spaces, communities, and competitions, we explored the following questions: what barriers do non-binary people face in sports participation, and what are the barriers to organising non-binary inclusive sports? How could these barriers be overcome, and how can non-binary people’s inclusion in sports be facilitated? An additional aim was to co-develop a research agenda for non-binary sports.

By reporting the findings of this study, this paper contributes to the emerging body of literature on non-binary people’s experiences, providing a starting point for addressing the gap around non-binary people’s sports participation. In what follows, we consider, in turn, the barriers, and strategies through which these barriers could be overcome, that pertain to non-binary people’s access to sporting spaces, communities, and competitions. We then consider future directions and argue that genuine non-binary inclusion entails, not only a radical re-thinking of the operation of sex and gender in sport, but also alternative ways of participating and experiencing sport that entail a re-thinking of the meaning of sport itself.

Background

The vast majority of sports are divided into two separate, mutually exclusive male and female participation and competition categories. This binary gender division is foregrounded by the broader cross-societal sex and gender division of individuals into female or male, girl or boy, and woman or man categories. The empirical manifestations of sex and gender, however, undermine this binarisation. Among the most significant challenges to the binary system, in relation to both the organisational structures of sports and more broadly, is posed by non-binary gender identities that exist between, move across or beyond binary gender categories.

Gender expressions, roles, and identities that transgress binary gender norms, practices, and embodiments have existed across time and throughout the world in different cultures and geographical regions, examples including the Hijra in India, Kathoey in Thailand, and two spirit identities in Native American communities (Feinberg, 1992; Herdt, 1993; Vincent & Manzano, 2017). While “non-binary,” as a label for an identity category and a specific, principally Western movement of gender activism, has only reached critical mass during the last decade (Bergman & Barker, 2017), the myriad historical and cross-contextual realities of gender diversity bring into question the idea that gender is a binary constant (Vincent & Manzano, 2017).

In this paper, we focus principally on non-binary gender identities, understood to entail an articulation of one’s identity in terms that are not exclusively or consistently limited to the binary “woman” or “man,” “female” or “male” categories. This includes, among others, people who incorporate aspects of both femininity and masculinity or man and woman into their gender identity (e.g. mixed gender), identify between two or more genders (e.g. gender-fluid) or with a specific additional gender (e.g. third gender) (Barker & Richards, 2015). While we focus on non-binary specifically as an identity, using the term as an umbrella encompassing all gender identities that do not conform to the binary (man/woman, female/male) framework, this focus and definition of non-binary is, importantly, contextually framed. It reflects the Scottish and wider UK context, where “non-binary” is the identity framework through which political, identity claims are currently made. Yet, all identity categories, including non-binary, enact their own exclusions: firstly, the very notion of “non-binary” gender relies on the existence of the gender binary as the initial organising framework, as “non-binary” only makes sense as the negation of “binary.” In enacting this negation, the “non-binary” notion can reinforce the idea that the gender expressions and identities of “women” and “men” are binarised (performing femininity and masculinity, respectively) in more straightforward ways than they are, which can flatten complexities in how people identifying as women enact masculinity and men femininity, for example (Enke, 2012). Secondly, conceptualising gender variance even within Scotland with reference to the non-binary/binary framework can result in a loss of cultural context (especially for people with different cultural diasporas) as different contexts give rise to highly varied gender articulations (Vincent & Manzano, 2017). With these

issues in mind, while we use “non-binary” to frame our analysis, the term should be understood as a problem concept that is, itself, limited in important ways.

Thirdly, the concept of non-binary suggests a zero-sum relationship with “binary people,” risking a “non-binary/binary binary” (Vincent, 2020). Individuals may relate differently to the gender binary at different times but also in different places/social contexts, or may dissolve the logic of fixed and natural categories (Carrera et al., 2012) through articulations of non-binary man- and woman-hood. This is analogous to the limitations of the cis/trans binary in capturing the complexities of identity and interpersonal interactions (Enke, 2012). Like many do, we will use the term “cis” to refer to women and men who identify with the gender they were assigned at birth, because “cis” challenges the common implicit exclusion of trans people from the wider “men” and “women” categories, avoiding the positioning of cis gender as the implied norm against which “trans” can be used as a qualifier, signifying deviance (Vincent & Manzano, 2017). Yet, the cis/trans distinction enacts a conceptual border of its own that silences the ambiguities of gender identities and expressions that sit at the boundary between “cis” and “trans,” including some non-binary gender articulations that cut across “cisness” and “transness.” Concurrently, “cisness” is a form of privilege “most commonly conferred and achieved when the appearance of normative race, class, and ability are also achieved, along with a host of other normative mobilities” (Enke, 2012: 70).

Relatedly, “non-binary” overlaps with “transgender,” which refers, broadly, to people whose gender identities differ from the sex they were assigned at birth, and is often principally associated with people assigned female at birth transitioning to male, and vice versa, less than with non-binary people. However, the term, which has become common in the West since the 1990s, was initially used by scholars like Lesley Feinberg (1992) to imply the defying of binarised gendered and sexed embodiment, collating all those who are “gender outlaws” (see also Bornstein, 1994). Many continue to define transgender along these lines, as a term encompassing all “gender-complex people” (Munro, 2007). While acknowledging the overlap between transgender and non-binary, we use non-binary rather than the broader conceptualisation of transgender, for two reasons. Firstly, while transgender and non-binary significantly overlap, they are not synonymous: many transgender people identify as non-binary but not all do, and many non-binary people identify as transgender, but not all do (Valentine, 2016). Secondly, while “transgender” can be and often is understood as an umbrella category encompassing non-binary people, non-binary identities give rise to specific challenges that can be different (though often overlapping) than those faced by transgender women and men, and it is these specific challenges that are our primary focus here. Henceforth, we also use “trans” as shorthand for transgender, but also with an awareness that some people identify as transsexual rather than transgender: “trans” is inclusive of transgender, transsexual and other ways of conceptualising trans individuals’ gendered

selves, histories, and relationships to embodiment. When using the trans term in this paper, our aim is principally to acknowledge trans people who identify as women or men but not as non-binary, yet readers should be aware of the overlap between the two throughout. All of the gender categories we use should, then, be taken with a pinch of salt.

While non-binary and trans are generally used to refer gender identities, sex difference itself is not restricted to binary manifestations of femaleness and maleness but can more accurately be understood as a cluster of characteristics that may or may not present in this binary way (Fausto-Sterling, 2000). Indeed, the anglophone distinction between sex and gender has long been subject to debate within gender scholarship, including because it reinforces an understanding of sex as a binary biological reality manifesting as femaleness and maleness, existing independently of socially, culturally, and historically contingent gender norms and power relations. Gender scholars have shown that biological conceptualisations of sex are mediated by wider gendered and racialised norms that direct the social roles and positions ascribed to different women and men.

As McClintock (1995) and Lugones (2007) among others have demonstrated, contemporary Western conceptualisations of binary sex and gender difference have roots in colonial evolutionary narratives that constructed “pure” sex dimorphism as a characteristic of the “human” subject, while sex(al) blurring was seen as “primitive,” belonging in the human evolutionary past. Pure dimorphism, in turn, was seen to be evidenced by clear cultural separation (of the European, middle-class form) between males and females as masculine men and feminine women, in accordance with reproductive roles: appropriately feminine women, for example, were seen to belong to the “weaker sex” and be unsuited to physical efforts. Imperfect sex differentiation, on the other hand, was evidenced by a blurring of these gender roles. The colonised and racialised “others” of white Europe were not only understood to be lower down in the evolutionary hierarchy but also to exemplify “primitive” sex(al) blurring: colonial imaginaries projected sex(ual) deviance onto racialised bodies, and especially racialised women, who were (unlike white middle-class women) seen as well suited to physical labour, which seemed to show that they did not belong to the “weaker sex” (Vertinsky & Captain, 1998). This also resulted in what Eckert (2009) has called racialised “intersexualisation,” where bodies have been understood to be *inter* sex, or between binarised sex, in ways that pre-established some bodies, especially racialised “others,” as insufficiently sex and gender differentiated.

Today, “intersex” is often used to denote people who have sex characteristics that do not conform to binarised sex development models and everyday assumptions about femaleness and maleness, but some people prefer the recent term “differences of sex development” (DSD), usually because “intersex” is associated with an identity position that one has (i.e. “I *am* intersex”). DSD displaces this by emphasising a medical condition one has

whatever their identity position (i.e. “I have DSD”) (see Dreger et al., 2005). When discussing individuals, we will use both terms in this paper.

The history of intersex(ualised) bodies is structured by racially mediated medicalisation, where white intersex bodies or people with DSD have been subjected to normalising medical interventions, usually in infancy and without consent, while black ones were seen as “confirming the essential biological difference between whites and blacks” (Magubane, 2014, p. 781): the medical normalisation of white deviant bodies “reflected a concern with ... heterosexual reproduction and highly specific gendered habits and behavior codes,” while perceived insufficient “social and biological differentiation between men and women” was what “marked blacks as black” (Magubane, 2014, p. 770).

Contemporary conceptualisations of sex as binary biological reality are centrally foregrounded by the above discussed colonial legacies through which “pure” sex differentiation has been defined in terms of Western white gendered heteronorms. The effect of this continues to be that racialised subjects (especially women) more easily become subject of gender policing in sports (Erikainen, 2020). Despite the fact that “female” and “male” are socially constructed categories that change over time, mean different things in different contexts, and attach to different bodies in different ways, and despite the fact that the existence of non-binary, trans, and intersex people or people with DSD shows that neither sex nor gender are empirically binary, sports is organised into binary female and male categories.

Sex segregation in sports is principally based on the presumption that men are bigger, stronger, and faster than women, who, in turn, are relatively smaller, weaker, and slower, and therefore, separate sports competitions and training programmes are necessary to provide women fair competitions, and prevent injury that may result from women training with men who have superior physical prowess. These presumptions are not only foregrounded by enduring conceptualisations of (implicitly white) women as the “weaker sex,” but they are also, of course, not *categorically* true: some women are bigger, stronger, faster, and perform better in sport than some men, and women competing at top levels of sports perform better than most men. Yet, categorical thinking is embedded throughout sports organisation and governance, foregrounding many of the gender relations, norms, and presumptions that characterise sporting spaces, communities, and competitions. Existing research documents, for example, how gym spaces tend to be organised into feminised and masculinised areas based on presumptions about the kinds of exercise that women and men (are supposed to) do: while weightlifting areas tend to be gendered masculine, cardiovascular and resistance machine areas are generally gendered feminine, because men are expected to engage in muscle building and women in weight management and muscle “toning” (Dworkin, 2003; Johansson, 1996; Johnston, 1998; Salvatore & Marecek, 2010). This, in turn, is foregrounded by culturally delineated body norms that expect men to be strong, muscular and large, and

women to be small or frail, and neither (too) fat nor (too) muscled, but these expectations attach to different bodies in different ways: for example, not only are muscles culturally coded “masculine” or “male” but when attached to (especially) black female bodies, they represent unruly racial as well as gendered “overflow” across the presumed physiological limits of appropriate femininity (Tate, 2015).

Sports is also a social sphere through which gender identities are negotiated and materialised via clothing, training practices, fitness imaginary such as depictions of the ideal fit female and male bodies, and gendered fitness cultures and social encounters taking place in sporting spaces (Johansson, 1996). A notable body of research documents how boys and men learn hegemonic or orthodox forms of masculinity through sports (e.g. Adams, Andreson, & McCormack, 2010; Anderson, 2005, 2008; Bridges, 2009; Connell, 1995; Messner, 1992). This includes so-called “toxic” (practices of) masculinity (Connell & Messerschmidt, 2005) such as aggression and derogation of women and effeminacy, but also cultural presumptions about the physical aptitudes of different men and women: for example, the enduring myth of the “natural black athlete” frames black bodies’ athletic successes as a “natural” by-product of racial difference rather than as a marker of skill and technique. Especially when attached to black women, this myth is easily intertwined with racialised conceptualisations of black women as the unfeminine contrast to white women’s presumed “frailty.” This can make black women’s bodies and sporting achievements seem culturally suspect in both gendered and racialised terms (Vertinsky & Captain, 1998).

Relatedly, women’s sports communities and spaces are spheres where white heteronormativity is policed and maintained, including via gender policing practices especially in women-only spaces like changing facilities: women often evaluate and police both themselves and each other against feminine appearance norms (Clark, 2018), partially because of protectionist discourses around women’s spaces that position these spaces and women themselves as vulnerable. Because (white) women are discursively positioned as the weaker sex in relation to men, they are often also considered to be in danger of male (sexual) violence, which is why women-only spaces are frequently positioned as safe spaces that grant protection from gender-based harm (Slater & Jones, 2020; Ramster, Greed, & Bichard., 2018). However, the safety of these spaces is also often perceived as precarious, which is why women’s spaces are policed especially against a perceived threat of sexual violence in ways that associate gender-transgressive bodies with dangerous male sexuality (Westbrook & Schilt, 2013). The effect is that gender-diverse bodies, including “butch” or masculine-presenting women as well as trans women and non-binary people, easily become subject of gender policing via being positioned as a “threat” to the safety of women-only spaces. As Patel (2017) has shown, this policing is especially intensified for gender-transgressive people of

colour, when masculine gender presentation is interpreted in conjunction with racialised pre-conceptions of especially black female bodies as “male-like.”

In this context, non-binary, trans, and intersex athletes in general and racialised athletes in particular often face scrutiny, discrimination and exclusion from sport because they challenge the binary gender system. Exemplary is the public controversy that has surrounded South African middle-distance runner Caster Semenya since 2009, when she was subjected to “sex testing” due to suspicions raised about her gender, and especially about her testosterone levels, which sport regulators considered too high for a female athlete. Much publicity has centred on Semenya’s perceived masculine bodily appearance and gender presentation, made culturally doubly salient by the racialised discourses that continue to position black women’s bodies as sex(ually) deviant in relation to white body norms: here, “we see opening before us the old question of Black women’s heterosexual womanhood from which they are removed” (Tate, 2015, p. 100), exemplifying how race, gender, sex, and sport intersect to (pre-)mark some bodies as gender-transgressive (Munro, 2010).

The 2009 “sex test” controversy around Semenya sparked a decade of public and policy debate around the extent to which women with high testosterone levels should or should not be eligible to compete with other women. These debates are ongoing (Karkazis & Carpenter, 2018). Concurrently, in Scotland, the Government consultation about legally recognising non-binary gender incited a backlash against non-binary and trans people’s rights, especially relating to women-only spaces but also women’s sports: some vocal opponents voiced concerns over “the safety of women and girls” in single-sex facilities, and others around “non-binary men having an unfair advantage if able to compete against biological [sic] women” (Scottish Government, 2018).

However, while sport has been a central site for the promotion and maintenance of the (racially mediated) gender divisions, it can also be a site where gendered power relations and norms are contested. Sports enable individuals to manipulate their bodies in ways that can both alter and maintain how they experience the relationship between their body and gender identity (Johansson, 1996), which can be especially empowering for trans and non-binary people. Resistive sporting subcultures have emerged that actively construct and embrace alternative definitions of femininity and masculinity through various strategies of “gender manoeuvring” where gender roles and expressions are re-written (Beaver, 2012; Finley, 2010; Shilling & Bunsell, 2009). It has been argued that sport currently operates within “a contested gender order” and “no longer plays a purely reactionary and regressive role in the fortification of binary gender relations” (Segrave, 2016, p. 1302). Rather, the association between sporting prowess and maleness, and conceptualisation of (white) women as frail and (athletically) inferior have been challenged by decades of feminist, decolonial, queer, trans, intersex and, more recently, non-binary activism, and by alternative organisational configurations and

communities of sports. These social and political developments have created space for diverse ways of imagining and constructing sporting identities, communities, and spaces that subvert both the binary gender system and institutionalised models of sport (Coakley, 2009; Segrave, 2016).

Methodology

Our study² applied the world café workshop method (Brown, 2002;), which is both a group dialogue method and a metaphor for everyday ways of meaning-making and knowledge generation (Brown, 2002). The principal intent is to transform individual knowledge into collective understandings via group conversations where information and experiences are shared (Brown, 2002). While the world café can be used for various purposes from process evaluation to strategy development, it also lends itself to participatory qualitative research due to its ability to quickly foster collective knowledge-creation (see e.g. Fouché & Light, 2010; Macfarlane et al., 2017).

We applied the world café method because it facilitates community members' active participation in identifying challenges and generating solutions, while enabling knowledge synthesis and generation of a great deal of data in a relatively short amount of time, which is ideal for scoping studies. Our study included 16 participants, who were primarily representatives and members of major activist and sports organisations in Scotland engaged in non-binary and trans inclusion. All shared a non-binary and trans emancipatory agenda. They were thus a selective group of individuals with specific expertise and experience on the research themes either as athletes, activists, or sports organisers, with some having more than one of these roles.

The one-day workshop was divided into three parts dedicated to, firstly, challenges around non-binary sports; secondly, ways to overcome these challenges and facilitate inclusion; and thirdly, future directions. The workshop space was arranged around three tables, each equipped with spreadsheets, notepads, and markers. During the first two parts, participants were divided into three groups around the tables, and engaged in small group discussions focused either on sports spaces, communities, or competitions. After 20 minutes, the groups changed tables until a full rotation around the room was completed. All participants then came together for general discussions where overarching themes across the small groups were identified. Participants were prompted to make further comments, changes or additions. The third part of the day was a general discussion among all participants to identify future directions and further research questions.

The discussions were facilitated by the authors, all of whom identify as non-binary and also participated in discussions. In addition to contributing, facilitators worked with participants to identify emerging themes and recorded discussions on spreadsheets and notepads. This

generated 15 spreadsheets and 22 sheets of notes, which were then subjected to thematic analysis. Much of the analysis took place during the workshop itself, as participants collectively identified emerging themes. Afterwards, the first author conducted several rounds of re-analysis to refine the themes and identify further sub-themes. The findings were then circulated to all participants for confirmation.

While we aimed to follow the principles of world café organisation (see Brown, 2002), including creating a hospitable space and encouraging everyone's contribution, issues pertaining to the building where the workshop was held limited the extent to which this was realised. Due to space availability issues, the workshop was held in a room requiring key card access, which made moving in and out unnecessarily laborious, even though cards were available to use when needed. Moreover, the building was a university sports facility without gender-neutral toilets. A genuinely hospitable space would have required a welcoming and safe environment, but the workshop took place in an entirely inappropriate facility. This likely impacted the quality of discussions, potentially limiting some participants' willingness to openly share their experiences. The importance of ensuring that an appropriate space is available for a workshop of this kind was a key lesson learned.

It is also important to underline that the exploratory nature of this study means that the findings can only provide a starting point rather than a conclusion for understanding experiences and challenges around non-binary people's sports participation. The findings can most appropriately be seen as direction for future research and initiatives in this area. Relatedly, the selective nature of the participant group constrains the findings' wider applicability. Despite the centrality of racialisation in the constitution of sex and gender difference, while information about participants' socio-demographic backgrounds was not collected, all participants were (or would pass socially as) white, none were visibly disabled, and it was apparent from discussions that they were disproportionately highly educated. The participants' ethnicity reflects the Scottish context (only 4% reported ethnicity as other than white in the most recent population census, see Scotland's Census, 2011), but the absence of intersectionally marginalised groups is a limitation of the study and related to the fact that individuals' ability to be "out" as non-binary let alone occupy visible positions in activism and sports organisation is delimited by other axes of privilege (Bergman & Barker, 2017). Indeed, intersectionality is often a major challenge in non-binary and trans scholarship and activism more generally, constraining the extent to which this scholarship and activism can be presumed to represent non-binary and trans needs in any generalisable terms (Bergman & Barker, 2017). Relatedly, while the findings presented below are based on experiences of participants with expertise on the research topic through their roles as athletes, activists, and sports organisers, it is important to acknowledge the locatedness of this experience and, thus,

the limited extent to which it can serving as evidence to ground what is known about the barriers and opportunities non-binary people face in sports (see Scott, 1991).

Spaces: barriers

Sports spaces are usually rigorously organised along gendered lines due to the broader gender binarisation that characterises sports, which gives rise to specific constraints for non-binary people but intersect with barriers faced by other marginalised groups. Importantly, the notion of space denotes not just the material organisation of buildings. Rather, this organisation is also a medium and outcome of social power relations, including those of gender, (dis)ability, race and religion, for example, which become materialised into spatial arrangements, and are maintained spatially through the production and control of space (van Ingen, 2003). The long history gender segregated, and racially segregated spaces is exemplary: spatial segregation enacts wider politics of division and inequality. The social production of space is also connected with the construction of gendered (and racialised, disabled, etc.) bodies and identities, as they are both produced and maintained in and through (social and material) spaces (van Ingen, 2003).

Sports spaces are generally designed from the presumption of a binary gender system, most clearly manifested in gender-segregated changing rooms and toilets. Changing facilities in the building where the workshop was organised are illustrative: accessing toilets and showers requires facility users to first enter either a female- or male-designated open changing room, and thus go through several gendered doors to access even toilets. They are also expected to change clothing and shower with others, as the showering space has no doors that can be closed for privacy. Participants consistently identified this kind of spatial organisation as a major barrier for non-binary people, not only because the changing room space is inaccessible, but also because the gendered organisation of changing rooms consequently makes the actual sporting facilitates inaccessible as well.

In the absence of gender-neutral facilitates, non-binary people must enter gender-segregated spaces if they want to engage in sports activities, and many participants discussed fears and examples of gender policing especially in women-only facilities, which may be doubly harmful for people whose bodies are scrutinised also along racial and other intersecting lines. Some of those who had used women-only facilities described practices of gendered self-editing to avoid harassment, including adjusting one's gendered self-presentation via clothing and behaviour to "look like they belong." This mirrors findings from toilet research showing that many trans women and non-binary people who use women-only facilitates feel compelled to engage in feminising self-editing to mitigate the risk of exposure due to gender policing (e.g. Jones & Slater, 2020). This can be understood as a violent manifestation of the evaluation and scrutiny all women and other feminine subjects face in relation to compulsory (sporting)

heterofemininity: many women in general engage in feminising practices and police both themselves and each other in relation to feminine appearance norms (Clark, 2018), which can reinforce the exclusionary effects of these norms for those who do not conform. However, the ability to “successfully” perform normative femininity is delimited by other axes of privilege and difference: “passing” as appropriately feminine may be especially difficult for people who are pre-conceived as inadequately feminine based on racialised features, and some bodies may be more easily coded as a “threat” due to public discourses that associate some bodies and clothing items, including hijabs or niqabs, with violence and the prospect of terror. The combined effects of these different surveillance modes apply not only trans women and non-binary people but also to other gender-transgressive people, including masculine-presenting and “butch” women.

Most participants expressed a preference for gender-neutral facilities, favouring spaces where these facilities exist. Some noted, however, that gender-neutral facilities are often conflated with disabled spaces, with the effect that gender-neutrality and disability are associatively linked around questions of accessibility. Indeed, (especially physically) disabled people are often discursively positioned as “genderless” including in relation to disabled toilets, which are more often gender-neutral and (unlike those in the workshop building) physically separated from women’s and men’s toilets (Slater & Liddiard, 2018) The consequence can be that lack of gendering itself becomes a(n additional) social marker of difference for disabled bodies (Slater, Jones, & Procter, 2018). Some participants also noted that when gender-neutral facilities do exist, they can be poorly indicated, requiring one to ask about their location, which can mean “outing” oneself as non-binary unnecessarily.

Beyond explicitly gender-segregated spaces, many participants discussed gender norms characterising the kinds of sporting activities that women and men are expected to do, which are often implicitly materialised in sports facilities’ spatial organisation. Gyms were most frequently mentioned. Participants discussed how gym spaces are designed around gendered presumptions about who uses what equipment: while training for muscle size and strength and, consequently, free weights spaces are associated with men, cardio and muscle “toning” is associated with women in ways that are *spatialised*, for example by arranging smaller weights alongside cardio equipment. This is consistent with existing research which, as discussed above, documents the organisation of fitness spaces along gendered lines reflecting cultural body norms.

Many gyms additionally have explicitly segregated women-only sections. While these spaces often aim to facilitate women’s access to gym spaces, some participants noted that this women’s inclusion strategy not only excludes those who do not identify as women, but is also a limited strategy for those who do, including cis women: instead of facilitating access to gyms generally by combatting the masculine norms that are experienced as a barrier by

women and others who are not cis men, this strategy relies on segregating women out from general gyms which can actually reinforce gender divisions (see also Coen, Rosenberg, & Davidson, 2018; Craig & Liberti, 2007).

Participants also discussed how exercise equipment are often designed around a male body norm. Some described being unable to reach or use equipment properly due to having a shorter stature, especially strength training equipment like the leg press and chin-up bar: the leg press may not allow shorter people to adjust the height low enough to achieve appropriate range of motion, while reaching chin-up bars may require shorter individuals to use additional tools like chairs. Some additionally highlighted gender inequalities in the scheduling and availability of sports facilities: several participants engaged in team sports and organised club activities noted that men's teams tend to get priority, including better facilities and training schedules, while women are allocated lunchtime and late-evening shifts.

Finally, several participants discussed challenges associated with body visibility, especially in water sports. Swimming halls tend to be large open spaces that require body exposure and may have restrictions banning loose clothing, which some participants found difficult to navigate. Body visibility and bans on loose clothing may also pose challenges for people who cover their bodies for cultural or religious reasons, such as women who wear hijabs, and echoes existing research on trans people's swimming experiences: trans people often discontinued swimming especially during transition because swimming halls expose the body to scrutiny and heighten awareness of the body in ways that can amplify gender dysphoria (Jones et al., 2017). Similar points were raised by our participants not only about swimming but also gym spaces that include large wall mirrors amplifying body visibility to both others and the self, which some experienced as increasing body dysphoria. Like swimming halls, gyms are usually open spaces where mirrors add a further layer of visibility, as one must both look at oneself and watch oneself being looked at (Clark, 2018).

Spaces: facilitating access

Key challenge to creating non-binary inclusive sports spaces is that most facilities are designed from the presumption of a binary gender system. Two overarching strategies to overcome this were proposed: inclusively redesigning existing spaces; and creating new spaces designed from the presumption of inclusivity, embedding this presumption throughout the facilities' design. Participants saw the latter as preferable, but also more expensive and time consuming.

Participants consistently identified privacy as central to non-binary inclusion in changing facilities, achievable most successfully through gender-neutral single-occupancy cubicles, with locks, that have showers, toilets and changing facilities incorporated. Such facilities could simultaneously be made accessible to disabled people, removing the need for

separated disabled facilities. Participants also noted that moving from gendered to gender-neutral toilets would likely help to provide women with equal toilet access: even when facilities have equal numbers of male and female toilets, women's toilets tend to have longer queues (Greed, 2019; Ramster, Greed, & Bichard, 2018). This results from complex causes including inadequate toilet facilities for women but also women spending longer in toilets for various biological, sartorial, spatial, and social reasons (Greed, 2019). One participant noted that equal toilet access should not mean equal number but equal chance of having access to toilets when needed. Notably, while the discussions around privacy focused on (re)organising material spaces, "privacy" should be taken to extend beyond spatiality, including the right to conceal one's body. This is important in facilitating not only non-binary people's access to spaces like swimming halls and gyms, but also in facilitating accessibility for other minority groups including women who wear hijabs or niqabs.

Participants also highlighted the importance of removing gendered presumptions and body norms from the organisation of sport facilities and equipment. For example, they suggested that the gym floor be arranged into smaller clusters, each including various types of equipment, rather than into weights and cardio areas, which might also mitigate the social barriers women face in accessing gyms and especially weights. Exercise equipment designers should account for diverse body types including height but also body size differences and different kinds of ability. Instead of fixed wall mirrors, one participant suggested using movable mirrors or curtains, making mirrors voluntary, while several participants asked for unnecessary gendered and other dress codes to be removed, including in swimwear.

Implementing many of the above solutions can be challenging because they require, among other things, structural renovation of existing sports spaces to create single-occupancy cubicles with incorporated showers and toilets, which can entail significant financial investments. Some older Scottish sports facilities are also protected for historical reasons, making substantial renovation impossible. These challenges do not mean, however, that improvements cannot be made. Participants suggested many intermediary solutions to facilitate better access even when comprehensive spatial reorganisation is unpractical: converting gender-segregated facilities into gender-neutral ones or adding new gender-neutral facilities while providing clear signage to them and removing as many gendered doors as possible from each space. Many participants also emphasised the importance of combatting gendered policing and other modes of body surveillance, avoiding unnecessary gendered language (e.g. "feminine hygiene products" for sanitary items), and making body diversity visible in promotional materials and resources to challenge dominant body norms and ideals. Ultimately, it was highlighted that no single solution exists for making existing spaces more inclusive when renovation possibilities are limited. Rather, each space should be evaluated individually to create contextually appropriate solutions.

Communities: barriers

While communities are often associated with commonality including shared interests, purpose, or beliefs, they are also sites of exclusion where community borders are policed against “otherness” (Carter & Baliko, 2017). In mainstream sporting communities, policing practices around gender category borders, bodies and behaviours emerged as key barriers to non-binary people’s inclusion. Participants also discussed, however, the empowering potential of alternative, queer and non-binary sporting communities as sites where emancipatory forms of community belonging take place.

Most significant barriers to accessing mainstream sports communities were connected with gendered sporting cultures, body policing, behaviour and appearance norms. Firstly, men’s communities were associated with “lad culture” and other forms of masculinity that were explicitly named as “toxic” and perceived as prevalent. Discussions around toxic masculinity were intertwined with discussion of the gendered body and training norms that also structure the spatial organisation of sports: participants identified gendered presumptions about the different ways in which men and women train as directly connected with toxic masculinity, and highlighted how these presumptions manifests in gendered language (including “locker-room talk”) that intersects with sexism. Participants gave examples of slurs like “you throw like a girl” and “boys don’t cry,” and discussed presumptions like “men are big and strong” and “women are small and weak,” built on old notions of (implicitly white middle-class) women as the “weaker sex”. Indeed, perceptions of the connection between men’s sports, lad culture and toxic masculinity corresponds with existing research showing that sport has long been a central social sphere where toxic masculinity is reproduced, as discussed above. It is noteworthy that this can have exclusionary effects also for women and some men: gender stereotypes, especially undermining women’s athleticism, negatively impacts women’s performance levels and belief in their own athleticism (Hively & El-Alayli, 2014). Some men, especially those who do not embody the muscular body norm, also experience exclusion from hypermasculine sports cultures (Coen, Rosenberg, & Davidson, 2018).

Secondly, discussions around women’s sports communities focused on fears and experiences of gender policing, in ways intertwined with wider gender politics in women’s sports. Participants discussed the backlash against trans and non-binary people’s rights, and especially against trans women’s right to enter women’s spaces, including women’s sports, and trans exclusionary politics around the proposal to legally recognise non-binary gender in Scotland. Many described how their fear of accessing women’s sporting communities had been amplified by this backlash, and by reading negative views especially online, while some noted that their fear of gender policing had been particularly heightened by negative commentary around Caster Semenya. This decreased their willingness to enter women’s

sports due to concerns about negative community reception, including fear of violence against gender-diverse people. Risk of harm was especially identified with people assigned male at birth because of the cultural discourses that position trans women as threatening to cis women. This highlights how wider gender politics trickle down to community level, shaping what gender-diverse people expect to face in sporting communities.

The spectre of Caster Semenya looming over many of these discussions is significant also because of the vastly different positionalities of the (white) participants speaking in the Scottish context, and Semenya, a black woman from the Global South, whose body has been scrutinised in particularly racialised ways: as many have emphasised, wider racial systems of meaning and body norms have been central in rendering Semenya's body gender "suspicious" (e.g. Magubane, 2014; Munro, 2010). While some participants acknowledged that Semenya's geopolitical and racialised social position embeds how and why she became an object of public gender controversy, it is important to acknowledge the power relations at play: the scrutiny directed at Semenya heightened the participants' sense of their own vulnerability, but racial privilege awards relief from some this scrutiny for white people from the Global North.

Additionally, participants highlighted that registering for community membership usually requires one to choose a gender category limited to binary female or male options, implying that becoming a member is, in the first place, either impossible for non-binary people, or requires registering one's gender inaccurately.

Communities: facilitating access

An intersectional approach to community building, including representatives of diverse groups in organisational roles, better support for non-binary and other gender-diverse people was identified as key to facilitating access to sporting communities. Participants highlighted that the onus should be on communities, including sports clubs, societies and organisations, to proactively facilitate inclusion. Instead of waiting for non-binary people to show up before accounting for their needs, communities should actively create an inclusive environment, so non-binary people feel welcome enough to come along in the first place. Participants also provided examples of alternative sporting communities featuring non-binary, gender-neutral or mixed-gender participation, which could be used as models for inclusive community building.

Creating more gender-neutral or mixed teams in team sports was frequently proposed as a way to overcome community access barriers, because this might help mitigate some of the gender norms and behaviours that were experienced as a barrier. It is noteworthy that there has been some movement towards including mixed-gender possibilities in some sports: mixed relays in 4x400m running, 4x100m swimming, and the triathlon were included into the 2020 Tokyo Olympics programme, for example, which may positively facilitate gender mixing

in higher levels of sports, although the extent to which this will be realised remains to be seen. Community and grassroots-level team sports were especially perceived by the participants as fruitful contexts for experimenting with team composition beyond the binary male and female format. They also highlighted that steps can be taken to better integrate non-binary people even when only gender-segregated teams exist, including by offering at least some mixed activities and coaching strategies that do not rely on presumptions about the kinds of training women and men do. The importance of inclusive language was highlighted, e.g. using individuals' preferred pronouns and offering non-binary gender options for membership registration even when individuals must choose either the female or male team. One participant also suggested that community guidelines or an accreditation system for sports organisations, clubs, and facilities like gyms could be developed that would include training staff and community members. This could be similar to the LGBT sports charter (LGBT Youth Scotland, 2019) but include ongoing training and compliance monitoring systems.

Beyond gender segregation, some participants shared experiences of alternative queer and non-binary (inclusive) communities, which were generally perceived as more accepting and empowering compared to mainstream sports. Indeed, sports groups have been an important means of community building for many gender- and sexual minorities because they can offer an escape not just from mainstream sports but also the wider cissexist and heteronormative society (Carter & Baliko, 2017). While queer sports communities can also enact their own exclusions – e.g. lesbian communities organising under the women (single-sex) category (Carter & Baliko, 2017), and racism, ableism etc. enacted by community members – participants gave examples of empowering communities and sub-cultures that enable members to experiment with different ways of organising sports, while facilitating community construction around shared interests in sport.

Firstly, participants discussed queer and non-binary (inclusive) communities in mainstream sports but organised in alternative ways. For example, the Jedburgh Ultramarathon race has pioneered the inclusion of a non-binary category on equal footing with the women's and men's races, fostering a community of non-binary long-distance runners. The race is organised by community members who make their own rules and norms in ways moving beyond higher-level regulation. Similarly, the trans and non-binary weightlifting group TransForMotion provides training explicitly with an awareness of diverse training goals without presuming gendered body goals, and is run by a non-binary personal trainer specialising in working with non-binary and trans people.

Secondly, participants discussed how alternative sports and the sub-cultures they harness can be especially empowering because they exist outside the gendered regulatory structures of mainstream sports. The most widely mentioned was muggle quidditch, which is a creative real-world variation of the fictional sport of quidditch depicted in the Harry Potter

fantasy books. Muggle quidditch builds on the fictional portrayal of quidditch as gender-neutral but extends this to embrace gender inclusiveness in ways challenging dominant mainstream sport organisation, especially at the community-level (Cohen & Peachey, 2015; Segrave, 2016). Muggle quidditch has its own organisational structure, including the four-maximum rule that states: “there may be no more than four players of the same gender on pitch at the same time, ensuring that the sport is inclusive to all genders and that gender diversity is always maintained on the field of play” (IQA, 2018). This rule proactively resists the binary gender system at least in principle, attempting to address issues surrounding gender identity and participation in mainstream sports (Segrave, 2016). It remains to be seen to what extent these efforts and the rule that embodies them facilitate inclusivity in practice including at higher level competitions, if and when quidditch becomes more popular and competitive. Indeed, there is some evidence that while participation in muggle quidditch can foster gender stereotype reduction among those who participate in the sport and increase their desire for gender equality and inclusivity, underlying prejudices about women athletes are nonetheless expressed by men who take part in quidditch (Cohen, Melton, & Welty Peachey, 2014).

Participants also agreed that both mainstream and alternative sports communities should increase diversity of representation in organisational roles, resources and promotional materials, and provide inclusivity training especially for coaches and staff but also community members. To challenge broader derogatory perceptions of gender-diverse people in sport that circulate especially online (which should be taken to include racialised etc. perceptions), it was suggested that sports community organisations could publish open responses challenging these perceptions, thus showing their support of gender diversity. Participants agreed, however, that how communities are, can be, and should be organised depends on context, but whatever the contextual factors, communities must sincerely and proactively engage with questions around inclusion.

Competitions: barriers

Barriers to non-binary people’s participation in sports competitions were focused around, firstly, the fact that most competitions are restricted to binary female and male categories, and secondly, policies restricting athletes’ eligibility to compete in women’s sports. These barriers manifest differently between different sports and levels of competition and have different implications for differently gendered, racialised and geopolitically located individuals. Yet, international sport regulations, like the World Anti-Doping Agency (WADA) and international sports federations including World Athletics (previously called International Association of Athletics Federations, i.e. IAAF) regulations, also trickle down to shape lower level competition participation.

High-level, especially national and international competitions usually only offer female and male categories. To compete, non-binary people must choose one. Many non-binary and trans people also have fluctuating gender identities and bodies that undergo changes due to gender-affirming hormone treatment (Vincent, 2018) but competition categories are fixed, and possibilities to change from one to another extremely limited. This is the case even for the SA (2019) non-binary category, which demands that “athletes who opt to compete in a non-binary category will be limited to that category for all scottishathletics [sic] championships events within that competition year.” While mixed competitions exist in some sports including the new events added into the 2020 Olympics, these are still rare at high-level sports.

A central barrier to non-binary, trans, and intersex people or people with DSD competing at national and international levels pertains to eligibility regulations in women’s sports and especially testosterone regulations, which take multifaceted forms that, combined, make competitions inaccessible for many gender-diverse people. Notably, testosterone has been biologically and socially understood as a male hormone, and often culturally positioned as the chemical source of manhood (Jordan-Young & Karkazis, 2019). Testosterone is prescribed as part of gender-affirming care for many trans and non-binary people assigned female at birth, but different people may receive different doses. While testosterone treatment can be a means to externalise an internal male identity (especially) for trans people who identify exclusively as men, it can also be a way to “un-make” gender, including by moving away from cis femaleness or being read socially as female without settling on maleness in embodied (or social) terms (Bolton, 2019). It is often assumed that those taking testosterone do so to achieve a binary-oriented transition from female to male, but this assumption makes it difficult for non-binary and trans people who use testosterone but do not identify (exclusively) as male, or use it in lower doses to achieve some changes but not others, to fit within the regulatory landscape governing testosterone in sports.

International eligibility regulations for trans athletes generally presume that all trans individuals undergo a binary transition from female to male or vice versa, and impose a testosterone threshold for trans women. In athletics, this currently sits at 5 nmol/L (IAAF, 2019a). Some sport governing bodies, most notably World Athletics, also impose thresholds for internally produced testosterone for some intersex women or women with DSD, which is also currently 5 nmol/L (IAAF, 2019b). No such restrictions apply for the male category, irrespective of sex characteristics or gender assigned at birth. WADA additionally prohibits externally administering testosterone as doping, except when testosterone is administered for “therapeutic reasons” by athletes competing in the male category (WADA, 2017): men who have low testosterone levels compared to their competitors can get therapeutic exemptions to the anti-doping testosterone ban, including trans men (WADA, 2017).

The practical effects of this regulatory framework are complicated and restrictive. Under the current regulations, non-binary and trans athletes assigned female at birth receiving testosterone therapy could be eligible to compete in men's sports but very unlikely to be eligible for women's sports. Non-binary and trans athletes assigned male at birth will be ineligible for women's sports, unless they undergo hormone therapy to lower testosterone levels. Moreover, irrespective of the gender category an individual would prefer to compete in, testosterone regulations could classify the same athlete differently at different states of hormone therapy: for example, some athletes assigned male at birth who initially were only eligible for men's competitions could become eligible for women's competitions, while athletes assigned female at birth who initially were eligible for women's competitions could later only be eligible for men's competitions.

These issues also trickle down to lower competition levels. Participants expressed not only that who is and is not allowed to take testosterone or have what testosterone levels is confusing, but also that the anticipation of scrutiny around testosterone at higher levels limits non-binary athletes' motivation to strive to compete at all. One participant shared how they had stopped competing in sport due to fears over testosterone testing and worries about when this testing will start. The same participant also noted that testosterone regulations force people on hormone therapy to disclose their non-binary (and/or trans) status to sports authorities, raising questions about when, how, and to whom this status should be disclosed. Participants' worries over testosterone testing were amplified by the public scrutiny surrounding Caster Semenya, whose testosterone levels, in particular, have been the focus international attention. Several participants explicitly talked about media debates around Semenya when discussing fears over testosterone regulations.

Notably, however, the history of "sex testing" in international sports in general (Erikainen, 2020) but especially the current testosterone regulations are foregrounded by covert operations of race and regional bias, and "engage racialized judgments about sex atypicality that emerged in the context of Western colonialism" (Karkazis & Jordan-Young, 2018, p.1). While "sex testing" and testosterone regulations impact all athletes competing at international level in the female category, they disproportionately target women of colour from the Global South, as Karkazis and Jordan-Young (2018) have shown: firstly, the implicit whiteness of hegemonic feminine body norms brings racialised bodies under intensified scrutiny, including due to enduring (implicitly white) notions of "clean" sex dimorphism being the "natural" state of human biology. Secondly, intersex(ualised) bodies, including many women with high testosterone levels, may not be viewed as a medical "problem" in some contexts, but Western medical models have long prescribed these bodies with medical "treatment" from infancy. This medical model, and testosterone regulations in sports that medicalise high testosterone levels in female-categorised bodies as something that requires

lowering via treatment, is foregrounded by the role that race and context play in determining which bodies are marked as a “problem,” where, and what is done about it (Magubane, 2014). Thus, while testosterone testing shapes the sports participation of gender and sex-diverse athletes in general, it particularly impacts racialised athletes from the Global South.

Some participants also discussed their perceptions of the disparate ways in which the high-performance emphasis of competitive sports enables and constrains the success potential of differentially gendered subjects with different kinds of bodies. One participant noted that “doing well while trans,” especially for individuals assigned female at birth who are on testosterone therapy, is very difficult. These individuals are nearly always ineligible to compete in women’s sports, which generally means they must compete against men if at all. Some participants felt that individuals assigned female at birth who use testosterone are unlikely to be successful if competing against cis men, due to physical differences between cis men and individuals assigned female at birth that were seen to matter in ways that mean the former group will generally outcompete the latter, especially at high-level competitions. Generally, accessing high-level competition (and especially being successful) was seen by some as nearly impossible within the confines of current regulations, although it was not entirely clear exactly which physical differences were the relevant ones.

Beyond binary gender categories, participants discussed the relative merits and disadvantages of a non-binary competition category. This was contextualised both by the SA non-binary policy and the fact that some individual Scottish running races (especially the Jedburgh ultramarathon) included a non-binary category before the policy was introduced. Participants’ views on the sustainability of this inclusion strategy were divided, however. Firstly, many argued that including a non-binary category can be empowering, since it enables non-binary athletes to compete in the gender category they identify with rather choosing between the usual binary options. For many, who would choose to not compete at all in the confines of the binary system, a non-binary category makes competing possible in the first place. Secondly, and in contrast, others argued that merely adding a non-binary category within the existing binary system – the add non-binary and stir approach – can actually reify the gender binary even further. This is because it can create the impression that the female and male categories are themselves internally free from gender non-conformity in more straightforward ways than they actually are (see Enke, 2012). This can give rise to a different binary – the non-binary/binary binary – that can intensify the binarisation of the existing female and male categories. Some also noted that the effect of including a non-binary category may be that trans and intersex women or women with DSD are unjustly derailed into the non-binary category instead of allowed to compete with other women. This echoes similar arguments made by sports ethicists, who have also highlighted that the effects of such derailing most

intensely attach to athletes who face intersecting forms of marginalisation especially along racialised and geopolitical lines (Karkazis & Carpenter, 2018).

One participant involved in non-binary inclusive sport organising also noted that introducing non-binary competition categories becomes increasingly challenging at higher competition levels because control over competitions is monopolised by national and international sport governing bodies. Introducing a non-binary category especially at international level would require major sport governing bodies to make this change – a fact perceived as a major barrier. Others added that in the current context where limited numbers of non-binary athletes perform at competitive levels, attaining sufficient numbers to run separate non-binary categories is challenging.

Some participants additionally highlighted that the non-binary category does not discriminate between (gendered) physical differences that may impact sports performance. They worried that especially at high levels, the implication might be that athletes assigned female at birth will not be competitive. Related discussions circled around questions of physical difference and advantage: athletes have different bodies, but it was unclear which differences matter, for what activities, how, and why. Indeed, one participant noted that the science around testosterone and sports performance is incomplete and contested despite the testosterone regulations in sport: “we don’t even know what testosterone does for performance,” yet regulations are focused on policing testosterone-induced performance advantage (Karkazis & Carpenter, 2018).

Competitions: facilitating access

Two overarching strategies were proposed for creating non-binary inclusive competitions: some argued that non-binary competition categories should become more widespread across sports, while others argued that the key questions around inclusion go beyond this and pertain, rather, to the organisational configurations of competitive sports.

Those proposing the implementation of non-binary categories across sports were principally motivated by simply allowing non-binary entries, as the main issue for non-binary people is that they cannot compete authentically within the existing system. The non-binary category facilitates integration and validates non-binary identities (if valued equally with the female and male categories). One participant suggested that sports organisers should at least experiment with non-binary categories and see what happens, as one cannot know the full implications without trialling it. Some additionally noted that even if a non-binary category is not the final solution, it may be a good starting point, not only because it does facilitate non-binary athletes’ inclusion but also because it will likely increase visibility around non-binary identities, bodies, and related issues in sport.

In response to these proposals, one participant argued, however, that the question of whether or not non-binary categories should be introduced raises a more foundational question: “what are categories for?” In other words, the question of how people should be categorised is secondary to the question of why people are categorised. Some participants noted that athletes are explicitly classified not only along gendered lines but also by age and weight categories, largely because of the ethically loaded notion that sports competitions should start from a level playing field to be fair. This is intertwined with the (equally ethically loaded) notion of unfair advantage, seen to arise if children compete against adults or women against men, for example, because the latter groups are positioned as unfairly advantaged over the former due to physiological reasons. Relatedly, much discussion around facilitating competition access circled around the notions of “advantage,” “fairness,” “level playing field,” and other normative concepts including “competition” itself that structure sports governance. Some participants highlighted that competitive sport starts from a focus on physical bodies: regulations governing sports are targeted at policing physical bodies, and emphasis is placed on pitting the bodies of individuals and teams against each other to determine the best, which usually mean the highest performing, athletes. This model of competitive sports and the normative concepts through which it is regulated were identified as an underlying problem.

During one small group discussion, the participants considered that the emphasis on physicality in sports more generally (including how high performance is defined as running fastest, throwing furthest, etc.) means that “fairness,” “advantage,” and “level playing field” are also conceptualised in physical terms; unfair advantage generally denotes physical advantage. Thinking about how a level playing field could be achieved, participants noted that this concept has multiple meanings beyond the physical, including socio-economic and geopolitical, that are relevant in sport: broader (cross-)societal inequalities translate into competitive sports, making the playing field un-level to begin with as some have better access to training facilities, professional coaching, and even nutrition. Simultaneously, while fairness can be understood as physical similarity, it can also be understood as acceptance and inclusion of physical difference.

Another small group discussion culminated into a nuanced analysis of how gendered social systems structure which physical differences are seen to count as unfair and which are not. Many participants across different groups noted that regulating testosterone seems arbitrary, because other physical differences that arguably provide an advantage (e.g. height and altitude training to increase haemoglobin) are not similarly regulated. Yet, this particular group suggested that this is not arbitrary at all, in the sense that the reasons that motivate the focus on testosterone are driven by wider social ideas about embodied difference: gender and sex are socially relevant classifications, and testosterone is gendered as “male hormone,” but height and haemoglobin are not. As one participant noted, “we are not high altitudist,” but we

(or our cultures) are sexist and transphobic (and, it should be added, racist, ableist, etc.). Height let alone haemoglobin do not carry the same cultural significance as gender and sex. This is related to the question of which physical differences are regulated as unfair advantage and which are seen as acceptable “human” variation: social structures and norms, including gendered and racialised ones, shape the answers that are given to these questions.

Participants also suggested alternative models for organising sports, moving beyond physicality and dominant conceptualisations of concepts like advantage and fairness. It was argued that there is a need to re-think what sports is for and about in the first place. Some suggested that one could build on the parasports model to reform competition categories to move away from gender categorisation,³ while others argued that the best albeit somewhat utopian solution is to “tear down sports institutions and start again.” This included moving beyond emphasising competition and winning altogether to focus, instead, on participation or inclusion. While adding a non-binary category into the existing gender categorisation model may be limiting as it does not necessarily address the underlying binary gender division, some suggested that non-binary sports more widely can offer an avenue for experimenting with alternative possibilities and ways of organising sports. Exclusively non-binary (or gender-mixed) competitions could challenge how fairness and level playing field but also competition itself are conceptualised: if cis men have a physical advantage over other people, for example, maybe fairness does not mean gender-segregated competitions but focusing on something other than physical performance in determining winners. Perhaps levelling the playing field should not be about ensuring that those competing with each other have similar performance potential, but about celebrating attributes and skills other than performance levels (alone) in providing different people, with different bodies and social positionalities, a level chance to be recognised. As one participant noted, starting from the presumption of non-binary inclusion, or non-binary sports, can turn on its head what people mean when they say, “sport is a competition,” which can facilitate inclusion and celebration of not just non-binary people but diverse individuals and groups, as long as implemented intersectionally.

Conclusions and future directions

This paper analysed the findings of a participatory scoping study aiming to identify barriers to non-binary people’s sports participation and strategies to facilitate inclusion, focusing on sports spaces, communities, and competitions in the Scottish context. In so doing, we aimed to provide new insight into the specific detriment that non-binary people experience in sports, and a starting point for further research in this area.

In conclusion, we argue that genuine non-binary inclusion entails a radical re-thinking of how gender and sex operate in sport, and of the meaning and value of sport itself: it entails moving beyond the dominant ways in which sport is conceptualised and regulated, including

the focus on physicality and competition, and spatial and community divisions that reflect broader societal and cultural hierarchies. As one participant highlighted repeatedly, starting from the presumption of non-binary inclusion instead of gender binarisation can facilitate inclusion not just for non-binary people but diverse subjects with different kinds of bodies and needs. Many of the barriers and solutions that were identified intersect with sexism, racism, ableism, and other axes of difference, entailing that strategies for non-binary inclusion are also necessarily intersectional. Alternative sports practices and configurations, including non-binary embracing sports and communities, offer real-world examples of how dominant forms of institutionalised sports can be and are being reformed. This includes not only resistance to the gender and sex binaries, but it is also about providing alternative ways to participate and experience sports.

At the end of the research workshop, participants identified future directions to build a research agenda for non-binary sports. They emphasised the importance of developing better, more multidimensional understandings of the normative concepts that govern sports and highlighted a need to better understand how diverse groups beyond sports authorities, organisers, and athletes understand the meaning and implications of concepts like fairness, advantage, and level playing field. This understanding could then be used to synergise and better integrate the views and beliefs of different groups into sports governance. It was agreed that future research should inquire what social norms and structures shape the “advantages” that are regulated, and the kinds of attributes that are conceptualised as advantages. Future research should also ask empirical, conceptual, and ethical questions about the meaning and value of sports itself, including the foundational question: what is and what should sports be for?

Footnotes

1. Australia legally recognised non-binary gender in 2014, and New Zealand has offered an “x” gender option in passports since 2012, but varying levels of recognition are awarded for third genders in countries including India, Pakistan, Bangladesh and Nepal for different historical and cultural reasons (Herpolsheimer, 2017).
2. The study was reviewed and approved by the University of Leeds AREA Research Ethics Committee (reference: AREA-18-124).
3. It is noteworthy, however, that parasports enact their own hierarchical categorisation processes that can and have been problematised as a form of (ableist) division through which “experts” group athletes into “classes” based on assessment of their “approximation to normal functional capacity,” where “normal” is defined in relation to ableist body norms (Peers, 2012: 178).

References

- Adams, A., Anderson, E., & McCormack, M. (2010). Establishing and Challenging Masculinity: The Influence of Gendered Discourse in Organized Sport. *Journal of Language and Social Psychology, 29*(3): 278-300
- Anderson, E. (2005). *In the Game: Gay Athletes and the Cult of Masculinity*. Albany: State University of New York Press
- Anderson, E. (2008). 'I Used to Think Women Were Weak': Orthodox Masculinity, Gender Segregation, and Sport. *Sociological Form, 23*: 257-280
- Barker, M-J. & Richards, C. (2015). Further Genders. In: M-J. Barker & C. Richards (eds). *The Palgrave Handbook of the Psychology of Sexuality and Gender*. Basingstoke: Palgrave
- Beaver, T. (2012). 'By the Skaters, For the Skaters.' The DIY Ethos of the Roller Derby Revival. *Journal of Sport and Social Issues, 36*(1): 25-49
- Bergman, B. & Barker, M-J. (2017). Non-Binary Activism. In: C. Richards, Bounman, W., & Barker, M-J. *Gender Queer and Non-Binary Genders*. London: Palgrave
- Bolton, R. (2019). Reworking Testosterone as a Man's Hormone: Non-Binary People Using Testosterone Within a Binary Gender System. *Somatechnics 9*(1): 13-31
- Bornstein, K. (1994). *Gender Outlaw: On Men, Women, and the Rest of Us*. New York: Routledge
- Bridges, T. (2009). Gender Capital and Male Bodybuilders. *Body & Society, 15*(1): 83-107
- Brown, J. (2002). *The World Café: A Resource Guide for Hosting Conversations That Matter*. Williston: Pegasus
- Carrera, M. V., DePalma, R., & Lameiras, M. (2012). Sex/gender identity: moving beyond fixed and 'natural' categories. *Sexualities, 15*(8), 995-1016.
- Carter, C. & Baliko, K. (2017). 'These Are not my People': Queer Sport Spaces and the Complexities of Community. *Leisure Studies, 36*(5): 696-707
- Clark, A. (2018). Exploring Women's Embodied Experiences of 'the Gaze' in a Mix-Gender Gym. *Societies 8*(2): 1-19
- Coakley, J. (2015). *Sports in Society: Issues and Controversies*. (10th ed). New York: McGraw Hill
- Cohen, A., Melton, E. N., & Welty Peachey, J. (2014). Investigating a Coed Sport's Ability to Encourage Inclusion and Equality. *Journal of Sports Management 28*(2): 220-235
- Connell, R. (1995). *Masculinities*. Cambridge: Polity
- Connell, R. & Messerschmidt, J. (2005). Hegemonic Masculinity: Rethinking the Concept. *Gender & Society 19*: 829-859
- Craig, M. & Liberti, R. (2007). "Cause That's What Girls Do.' The Making of a Feminized Gym. *Gender & Society, 21*(5): 676-699

- Dreger, A., Chase, C., Sousa, A., Gruppuso, P., & Frader, J. (2005). Changing the Nomenclature/Taxonomy for Intersex: A Scientific and Clinical Rationale. *Journal of Pediatric Endocrinology & Metabolism*, 18: 729-733.
- Dworkin, S. (2003). A Woman's Place is in the... Cardiovascular Room? Gender Relations, the Body, and the Gym. In: A. Bolin & J. Granskog (eds). *Athletic Intruders: Ethnographic Research on Women, Culture, and Exercise*. New York: State University of New York Press
- Eckert, L. (2009). 'Diagnosticism': Three Cases of Medical Anthropological Research into Intersexuality. In M. Holmes (Ed.), *Critical intersex*. Farnham: Ashgate.
- Enke, A. F. (2012). The Education of the Little Cis: Cisgender and the Discipline of Opposing Bodies. In: A. F. Enke (ed). *Transfeminist Perspectives in and Beyond Transgender Studies*. Philadelphia: Temple University Press
- Erikainen, S. (2020). *Gender Verification and the Making of the Female Body in Sport: A History of the Present*. London: Routledge
- Fausto-Sterling, A. (2000) *Sexing the Body: Gender Politics and the Construction of Sexuality*. New York: Basic Books
- Feinberg, L. (1992). *Transgender Liberation: A Movement Whose Time Has Come*. New York: World View Forum
- Finley, N. (2010). Skating Femininity: Gender Manoeuvring in Women's Roller Derby. *Journal of Contemporary Ethnography*, 39(4): 359-387
- Fouché, C. & Light, G. (2010). An Invitation to Dialogue: 'The World Café' in Social Work Research. *Qualitative Social Work*. DOI: 10.1177/1473325010376016
- Greed, C. (2019). Join the Queue: Including Women's Toilet Needs in Public Space. *The Sociological Review*, 67(4): 908–926.
- Herd, G. (1993). *Third Sex, Third Gender*. New York: Zone
- Herpolsheimer, A. (2017). A Third Option: Identity Documents, Gender Non-Conformity, and the Law. *Women's Rights Law Report* 1(39): 46-83
- Hively, K. & El-Alayli, A. (2014). 'You Throw Like a Girl': The Effect of Stereotype Threat on Women's Athletic Performance and Gender Stereotypes. *Psychology of Sport and Exercise* 15: 48-55
- IAAF. (2019a) World Athletics Eligibility Regulations for Transgender Athletes. Retrieved from: www.iaaf.org/download/download?filename=a857c45d-7f6d-4bc4-85c1-b3056750f705.pdf&urlslug=Eligibility%20Regulations%20for%20Transgender%20Athletes%20in%20force%20from%201%20October%202019 (accessed 27/10/2019)
- IAAF. (2019b) Eligibility Regulations for the Female Classification (Athletes with Differences of Sex Development). Version 2.0. Retrieved from: <https://www.iaaf.org/news/press-release/eligibility-regulations-for-female-classifica> (accessed 03/06/2019)

- IQA. (2018). *IQA Rulebook 2018-20*. Retrieved from:
<http://iqasport.org/wp-content/uploads/2019/02/IQA-Rulebook-2018-20.pdf> (accessed 25/09/2019)
- Johansson, T. (1996). Gendered Spaces: The Gym Culture and the Construction of Gender. *Young* 4(3): 32-47
- Johnston, L. (1998). Reading the Sexed Bodies and Spaces of Gyms. In: H. J. Nast & S. Pile (eds). *Places Through the Body*. London & New York: Routledge.
- Jones, B., Arcelus, J., Bouman, W., Haycraft, E. (2017). Barriers and Facilitators of Physical Activity and Sport Participation Among Young Transgender Adults Who Are Medically Transitioning. *International Journal of Transgenderism* 18(2): 227-238
- Jones, C. & Slater, J. (2020). The Toilet Debate: Stalling Trans Possibilities and Defending 'Women's Protected Spaces.' In: B. Vincent, S. Erikainen, & R. Pierce (eds.) *TERF Wars: A Social Analysis of Trans Exclusionary Politics*. Sociological Review monographs (forthcoming)
- Jordan-Young, R. & Karkazis, K. (2019). *Testosterone: An Un-Authorized Biography*. Harvard: Harvard University Press
- Karkazis, K. & Carpenter, M. (2018). Impossible 'Choices': The Inherent Harms of Regulating Women's Testosterone in Sport. *Bioethical Inquiry*, 15: 579-587
- Karkazis, K. & Jordan-Young, R. (2018). The Powers of Testosterone: Obscuring Race and Regional Bias in the Regulation of Women Athletes. *Feminist Formations*, 30(2): 1-39
- LGBT Youth Scotland. (2019). LGBT Charter. Retrieved from:
<https://www.lgbtyouth.org.uk/lgbt-charter/lgbt-charter/> (accessed 30/09/2019)
- Lugones, M. (2007). Heterosexualism and the Colonial/Modern Gender System. *Hypatia*, 22(1): 186-219
- Macfarlane, M., Galvin, R., O'Sullivan, M., et al. (2017). Participatory Methods for Research Prioritization in Primary Care: An Analysis of the World Café Approach in Ireland and the USA. *Family Practice*, 34(3): 278-284
- Magubane, Z. (2014). Spectacles and Scholarship: Caster Semenya, Intersex Studies, and the Problem of Race in Feminist Theory. *Signs: Journal of Women in Culture and Society*, 39(3), 761-785.
- McClintock, A. (1995). *Imperial Leather: Race, Gender and Sexuality in the Colonial Contest*. New York: Routledge
- Messner, M. (1992). *Power at Play: Sports and the Problem of Masculinity*. Boston: Beacon
- Ministry of Justice. (2015, September 11). Allow Transgender People to Self-Define

- Their Legal Gender. Government Responded. Retrieved from:
<https://petition.parliament.uk/archived/petitions/104639> (accessed 17/09/2019)
- Munro, B. (2010). Caster Semenya: Gods and Monsters. *Safundi*, 11(4), 383-396
- Munro, S. (2007). Transmuting Gender Binaries: The Theoretical Challenge. *Sociological Research Online*, 12(1): 1-15
- Nicolazzo, Z. (2016) 'It's a Hard Line to Walk': Black Non-binary Trans* Collegians' Perspectives on Passing, Realness, and Trans*-normativity. *International Journal of Qualitative Studies in Education*, 29(9): 1173-1188.
- Patel, N. (2017). Violent Cistems: Trans Experience of Bathroom Space. *Agenda: Empowering Women for Gender Equity*, 31(1): 51-63
- Peers, D. (2016). Interrogating Disability: The (De)composition of a Recovering Paralympian. *Qualitative Research in Sport, Exercise and Health*, 4(2): 175-188
- Ramster, G., Greed, C., & Bichard, J. (2018). How Inclusion can Exclude: The Care of Public Toilet Provision for Women. *Built Environment*, 44(1): 52-76.
- Rankin, S., & Beemyn, G. (2012). Beyond a Binary: The Lives of Gender-Nonconforming Youth. *About Campus*, 17: 2-10
- Richards, C., Bouman, W. P., & Barker, M-J (eds) (2017). *Genderqueer and Non-Binary Genders*. London: Palgrave
- Richards, C., Bouman, W., Seal, L., Barker, M-J., Nieder, T., & T'Sjoen, G. (2016). Non-Binary or Gender Queer Genders. *International Review of Psychiatry*, 28(1): 95-102
- SA. (2019). Scottish Athletics Policy on Non-Binary Athletes Competing Within Scottish National Championships. Retrieved from: <https://www.scottishathletics.org.uk/wp-content/uploads/2015/11/Scottish-Athletics-Policy-on-non-binary-athletes-competing-within-Scottish-National-Championships.pdf> (accessed 02/02/2019)
- Salvatore, J. & Marecek, J. (2010). Gender in the Gym: Evaluation Concerns as Barriers to Women's Weightlifting. *Sex Roles*, 63: 556-567
- Scotland's Census (2011). Ethnicity, Identity, Languages and Religion. Retrieved from: <https://www.scotlandscensus.gov.uk/ethnicity-identity-language-and-religion> (accessed 02/02/2020)
- Scott, J. (1991). The Evidence of Experience. *Critical Inquiry*, 17(4): 773-797
- Scottish Government. (2018, November 23). Review of the Gender Recognition Act 2004: Consultation Analysis. Retrieved from: <https://www.gov.scot/publications/review-gender-recognition-act-2004-analysis-responses-public-consultation-exercise-report/pages/7/> (accessed 21/02/2019)
- Segrave, J. (2016). Challenging the Gender Binary: The Fictive and Real World of Quidditch. *Sport in Society*, 19(8-9): 1299-1315
- Shilling, C. & Bunsell, T. (2009). The Female Bodybuilder as a Gender Outlaw. *Qualitative*

- Research in Sports and Exercise*, 1(2): 141-159
- Slater, J., Jones, C., & Procter, L. (2018). School Toilets: Queer, Disabled Bodies, and Gendered Lessons of Embodiment. *Gender and Education*, 30(8): 951-965
- Slater, J. & Liddiard, K. (2018). 'Like Pissing Yourself is Not a Particularly Attractive Quality, Let's Be Honest': Learning to Contain Through Youth, Adulthood, Disability, and Sexuality. *Sexualities*, 21(3): 319-333
- Tate, S. (2015). *Black Women's Bodies and the Nation: Race, Gender and Culture*. Hampshire: Palgrave MacMillan
- Valentine, V. (2016). Non-Binary People's Experiences in the UK. Scottish Trans Equality Network. Retrieved from: <https://www.scottishtrans.org/wp-content/uploads/2016/11/Non-binary-report.pdf> (accessed 15/09/2019)
- van Ingen, C. (2003). Geographies of Gender, Sexuality and Race: Reframing the Focus on Space in Sport Sociology. *International Review for the Sociology of Sport*, 38(2): 201-216
- Vertinsky, P. & Captain, G. (1998). More Myth than History: American Culture and Representations of the Black Female's Athletic Ability. *Journal of Sport History*, 25(3), 532-561.
- Vincent, B. & Manzano, A. (2017). History and Cultural Diversity. In: C. Richards, W. Bounman, & Barker, M-J. *Gender Queer and Non-Binary Genders*. London: Palgrave
- Vincent, B. (2020) *Non-Binary Genders: Navigating Communities, Identities, and Healthcare*. Bristol: Policy Press
- Vincent, B. (2019). Breaking Down Barriers and Binaries in Trans Healthcare: The Validation of Non-Binary People. *International Journal of Transgenderism*: 1-7
- WADA. (2017). TUE Physician Guidelines: Medical Information to Support the Decision of TUE Committees. Transgender Athletes. Retrieved via: https://www.wadaama.org/sites/default/files/resources/files/wada_transgender_athletes_v1.0_en.pdf (accessed 24/11/2017)
- Westbrook, L., & Schilt, K. (2013). Doing Gender, Determining Gender: Transgender People, Gender Panics, and the Maintenance of the Sex/Gender/Sexuality System. *Gender & Society*, 28(1), 32-57.
- Yeadon-Lee, T. (2016). What's the Story? Exploring Online Narratives of Non-binary Gender Identities. *The International Journal of Interdisciplinary Social and Community Studies*, 11: 19-34.