

## **Gender Inclusive Sport: A Paradigm Shift for Research, Policy, and Practice**

Sheree Bekker, University of Bath

Ryan Storr, Swinburne University

Seema Patel, Nottingham Trent University

Payoshni Mitra, Global Observatory for Gender Equality & Sport

### **Abstract**

This commentary develops the concept of gender inclusive sport: sport that is inclusive and affirming of—and safe for—all women and sex and gender minoritized people, regardless of whether their bodies, gender expression, and/or identity align neatly with normative notions of the female/male binary. Debates about the sports participation of transgen-der (trans) athletes and athletes with natural sex variations often assume a choice between inclusion on one side and fairness on the other, particu-larly in the context of women’s sport. In this commentary, we instead demonstrate the value of approaching equity and inclusion as allied causes. We offer four principles of Gender Inclusive Sport as an alternative policy and research paradigm: lead with inclusion; de-centre regulatory science; increase access to community and youth sport; and double down on gender equity. Whereas sports studies scholars have often focused on the important work of critiquing the existing regulatory and epistemic practices of sports governing bodies, we call on scholars to also engage in research that expands the knowledge base needed to build change. From the grassroots to the elite level, increasingly, there are opportunities to learn about the best practices and interventions that can support the realisation of Gender Inclusive Sport in practice.

## **Gender Inclusive Sport: A Paradigm Shift for Research, Policy, and Practice**

Over recent years, the sports participation of sex and gender minoritized people (e.g., trans,<sup>1</sup> gender diverse, and people with natural sex variations) has increasingly been represented as a defining issue for women's sport.<sup>2</sup> One narrative in such debates has been that women's sport will be forever compromised should it become more inclusive of those women who are not cisgender and/or normatively bodied.<sup>3</sup> According to one organization formed with the explicit goal of excluding trans women from sport: "We are talking about erasing the definition of woman" (Save Women's Sport 2021). According to *The New York Times*, sport finds itself at an impasse, caught between "two almost irreconcilable positions" (Brassil and Longman 2020). Sports administrators must, according to this framing, choose between advancing the rights and interests of cisgender women *or* those of trans and gender diverse people, but can't do both. A new eligibility policy released by the International Swimming Federation (FINA) in June 2022, which bans all trans women and women with natural sex variations from elite women's competition, affirms this zero-sum logic: "We have to protect the rights of our athletes to compete, but we also have to protect competitive fairness at our events, especially the women's category" (FINA 2022).<sup>4</sup>

In this paper, we challenge a vision of women's sport that pits cisgender women against sex and gender minoritized groups. We introduce our concept of *gender inclusive sport*: sport that is inclusive and affirming of—and safe for—all women and sex and gender minoritized people, regardless of whether their bodies, gender expression, and/or identity align neatly with normative notions of the female/male binary. Rather than pitting equity against inclusion, we demonstrate the value of approaching these as allied causes. In building on the insights of critical feminist sports scholarship (Kane 1995; Travers 2008; Lenskyj 2018), our approach is significant in arguing for a vision of inclusion that centrally incorporates gender equity, and vice versa. With the International Olympic Committee (IOC) releasing the Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity and Sex Variations in November 2021 (IOC

2021), which sends the clear message that trans athletes and athletes with sex variations belong in the Olympic Movement, sports organizations urgently need new ways of framing inclusion and its relationship to gender equity.

As part of our proposed paradigm shift, our intervention also emphasizes the need for more sports governing bodies to take proactive policy actions beyond regulation in order to foster inclusion and social cohesion across their sport, from grassroots to elite levels.<sup>5</sup> That is, we aim to move current policy agendas couched in regulatory science—a paradigm that utilizes particular scientific and medical approaches to regulate exclusion—towards a more holistic vision of sport as a dynamic space of social cohesion and innovation, in which the harms of exclusion and vast potentials of inclusion are given full consideration. In parallel, we call for sports studies scholarship to prioritize not only critical analyses of exclusion, but also the creative pursuit of knowledge on the “how” and “why” of building gender inclusive sport.

We begin with a brief overview of policy debates surrounding the participation of trans women and women with sex variations, particularly in elite women’s sport. We then suggest four principles of Gender Inclusive Sport as an alternative policy and research paradigm: *lead with inclusion; de-center regulatory science; increase access to community and youth sport; and double down on gender equity*. Given the aforementioned IOC Framework (IOC 2021), which asks sports organizations to prioritize inclusion and nondiscrimination while also ensuring equitable and safe playing conditions for all athletes, we offer these principles as a practical support for sports governing bodies looking to broaden their policy responses to this topic.<sup>6</sup>

### **A Regulatory Quagmire**

The regulatory terrain with which we engage in this commentary primarily concerns the participation of two groups of athletes—trans women and women with natural sex variations—though we also recognize the access and inclusion challenged faced by gender diverse (e.g., nonbinary) people. While there are important differences between trans women and women with

sex variations, contemporary policy responses to (and anxieties towards) both groups of women fit within a longer history of efforts to define the boundaries of the legitimate female athlete. There are excellent reviews of this history, which we will not replicate here (see e.g., Erikainen 2019; Henne 2014; Pieper 2016). However, the following insights are key: first, sports governing bodies have long privileged a certain kind of science as the solution to the complexity of sex/gender, while never succeeding in defining the boundaries of “the” female athlete once and for all; second, such efforts are underpinned by unfounded fears about male “imposters” in sport and fail to fully recognize trans women and women with sex variations as women; third, regulations obscure the heterogeneity of women, including the diverse transition journeys of trans women and the diversity of women with sex variations, while obscuring the many factors that matter to sports performance; and fourth, ideologies of “protection” are more concerned with shoring up the normative boundaries of (white, Global North) cisgender femininity than they are with genuinely advancing gender equity in sport. Science-driven regulations have brought real and enduring harm to bear on the women affected, which in the case of athletes with sex variations have in recent years been disproportionately women of color from Global South nations (HRW 2020; Karkazis and Jordan-Young 2018).<sup>7</sup>

A key assumption underpinning policies regulating the exclusion of athletes who do not meet normative definitions of the female body is that they will be universally athletically superior (and physically larger) than their competitors. This obscures women’s considerable heterogeneity, including variation across those women who are not subject to regulation. In the case of the trans population, transition is not a linear event in which there is a clear before-and after; rather, it is a highly varied, nonlinear process that is unique to each individual (Barras *et al.* 2021). So, too, are people with natural sex variations highly diverse (Davis 2015). Sports governing bodies have tended to look to testosterone levels as a presumed straightforward means of regulating trans athletes and athletes with sex variations. However, establishing a clear causal relationship between

natural testosterone levels and athletic performance is highly complex and often inconclusive (Jordan-Young and Karkazis 2019).

The laborious focus on (inconclusive) science also neglects the legal and human rights aspects of this debate (Patel 2021). Even if the scientific evidence was settled, the exclusion of athletes on the basis of their gender identity or sex variations status is potentially incompatible with legal and human rights frameworks at national and international levels. For example, the requirement to undergo medical surgery or hormone treatment as a condition of sports participation contravenes numerous fundamental human rights (Patel 2022). Bans on trans women as a class, as in the case of World Rugby's (2020) elite women's rugby policy, may also be considered discriminatory and unimplementable in certain national jurisdictions. So, too, does FINA's (2022) policy raise questions regarding rights violations, given it mandates the sex testing of all women athletes—an approach not seen since compulsory sex testing was acknowledged as grossly unscientific and abandoned by the IOC in the mid-1990s (Erikainen 2019).

In the spirit of building new pathways forward, in the remainder of this paper we outline four principles for creating safe, gender inclusive, and gender equitable sporting environments for all athletes.

## **Four Principles for Gender Inclusive Sport**

### *Leading with Inclusion*

A guiding principle for governing bodies at all levels of sport is to lead with inclusion. This means engaging in a values-driven approach to policymaking that takes the concept of inclusion as its starting point (Buzuvis 2011). Many sport organizations espouse a 'sport for all' ethos and a commitment to harnessing sport as a social leveler (Spaij Oxford and Jeanes 2016). However, there is often a mismatch between these stated values and policy responses to trans, gender diverse, and athletes with sex variations, which typically lead with a message of exclusion in prioritizing the development of eligibility criteria aimed at limiting participation. Moreover, they

often do not engage the already marginalized athletes who are directly affected in the policy creation process (Stewart *et al.* 2021). Often, too, the priority has been to regulate exclusion at the elite level of sport. Yet this may also impact practices and values at the community and youth level, where the vast majority of sports participation takes place.

There are considerable benefits for trans and gender diverse people from engagement and participation in sports, particularly from the point of view of mental health and social support (Buzuvis 2021; Storr et al., 2021). For example, when trans and gender diverse people participate in gender inclusive local swimming events, they can experience feelings of liberation, increased self-confidence, relaxation, and motivation to do more exercise (Caudwell 2020). In the case of tennis, LGBTIQ+ inclusive spaces and clubs can increase social capital and feelings of social connection for trans people (Storr and Richards 2022). These benefits of inclusion are significant, given high rates of discrimination, depression, and suicide in trans and gender diverse populations (Miller and Grollman 2015).

Major sports organizations are now recognizing the importance of inclusion. The IOC Framework (2021) states that sporting environments should be “welcoming to people of all gender identities,” and all people “should be able to participate in sport safely and without prejudice” (p.2) Similarly, a coalition of national sports governing bodies in Australia has signed onto a framework promoting the inclusion of trans and gender diverse athletes, particularly in club sport (see Pride in Sport 2020).

In practical terms, inclusion-led policymaking could mean: rolling out education initiatives aimed at providing stakeholders with the language, data, and practices needed to welcome trans, gender diverse, and people with sex variations; having a sport-wide policy on diversity and inclusion that encompasses trans, gender diverse, and athletes with sex variations; incorporating protections into safeguarding and antidiscrimination policy; establishing a diversity and inclusion committee and responsible staff person/club representative; ensuring inclusive language in

organizational documents; and participating in Pride days or International Transgender Day of Visibility activities (Pride in Sport 2020).

### *Decentering Regulatory Science*

To date, the primary response of feminist scholars to the regulation of eligibility in women's sport has been to critically analyze the scientific bases of such policies (e.g., Henne 2014; Jordan-Young and Karkazis 2019; Pielke and Pape 2019; Tannenbaum and Bekker 2019). Such work unpacks the many assumptions embedded within appeals to science by sports governing bodies, showing how this science falls short of delineating a clean boundary around the female athlete category. This work has been instrumental in challenging the scientific bases of exclusion-oriented policies, thereby revealing their ideological origins. This research is also demonstrating how appeals to science by sports governing bodies obscure the entanglement of eligibility regulation with histories of racialization and imperialism (Bohuon 2015; Henne and Pape 2018; Karkazis and Jordan-Young 2018). Such work has brought other critiques into the frame, including in relation to double standards in safeguarding protections, abuses of bodily integrity, and other human rights failures (Bekker and Posbergh 2021).

This scholarship will continue to be important, given the influence of sports scientists in these policy debates (Pigozzi *et al.* 2022).<sup>8</sup> However, we argue that the knowledge that can support the proactive pursuit of gender inclusive sport is also urgently needed. The sport for development literature has already demonstrated how sport can be used in socially meaningful ways in some contexts, specifically the global south, including for the advancement of gender equity goals (see e.g., Spaaij Oxford and Jeanes, 2016; Sherry and Rowe 2020). What are the positive impacts of sports participation for trans, gender diverse, and athletes with sex variations? And what are the positive impacts for all sports stakeholders (including cisgender, normatively bodied women) when sport becomes a site of gender inclusion?

Other innovative research agendas could investigate the impacts on club sport of trans and gender diverse inclusion: how do practices and attitudes change, and with what broader benefits for the club and all sports stakeholders? Additionally, what factors and interventions aid in developing broad-based support for gender inclusive sport? For example, door-to-door canvassing in the US has been shown to durably reduce transphobic attitudes (Broockman and Kalla 2016). How might the consultation of trans and gender diverse athletes lead to different policy outcomes in sport? The 2021 IOC Framework, which departs considerably from previous policy stances, stemmed from two years of stakeholder consultation that included engagement of such athletes (IOC 2021). With trans and gender diverse people increasingly participating in sport, there are growing opportunities to undertake research on both the benefits of inclusion and the interventions that can support gender inclusive policymaking.

#### *Investment in Community and Youth Sport*

There has been significant discussion within policy and scholarly circles related to the oft cited yet heavily questioned “trickle-down effect,” whereby elite sport success and mega sporting events are alleged to inspire a generation of young people to be physically active and pursue elite performance (Mahtani *et al.* 2012). Short-term empirical evidence appears to attest to the ability of certain forms of elite success to inspire the masses (Grix and Carmichael 2012). If we extend this logic to the participation of trans, gender diverse, and athletes with sex variations, what might we expect to be the wider impacts of policies aimed at limiting or even banning certain groups of athletes, require them to medically alter their bodies, or normalize scrutiny and the subjective application of invasive and intrusive testing?

Recent evidence shows that narratives and discourses around trans athletes in sport have a negative impact on both young trans and gender diverse people’s mental health and on their desire to engage in sport (Storr *et al.* 2021). Evidence also indicates that young trans and gender diverse people want to participate and engage in sport but, due to hostile environments and a lack of



provision around bathrooms and changing rooms, remove themselves from such spaces (Kulick *et al.* 2018; Storr *et al.* 2021).

Yet there is enormous potential at the community and youth sport level to foster inclusion, particularly given the lesser emphasis on and perceived need for regulations stipulating science-driven criteria for inclusion/exclusion. Moreover, much can be learned from community and youth-level clubs, teams, and sporting leagues that are utilizing inclusion-driven policy approaches. We thus recommend that sports governing bodies at all levels—including elite—look to the community and youth sport as a space of opportunity where new, proactive interventions can be tried and lessons learned, with the potential for “trickle up” impacts and sport-wide cultural change around the inclusion of trans, gender diverse, and athletes with sex variations. Sports organizations could, for example: consult local-level athletes to understand their needs and how they benefit from sports participation; learn from and co-develop “best practices” inclusion guidance with member organizations; identify and hold up the “champions” of their sport who work to advance gender inclusive sport at community and youth levels. Gender inclusive sport is community building work.

### *Double Down on Gender Equity*

The notion of “fairness” has very frequently been raised in debates about the participation of trans, gender diverse and athletes with sex variations in elite women’s sport. Indeed, “fairness” is one of the guiding principles in the IOC’s (2021) Framework. Fairness, however, is (like the notion of a “level playing field”) a vague term in the world of sport; one that, though lauded as a shared value, is hard to define in practice. This ambiguous concept has recently been put to work to advance various political agendas within and outside of sport (see e.g., Chandler 2022; Pavitt 2022). An alternative framing to fairness, that more accurately captures what is impeding the advancement of women’s sport, is that of gender equity.

In the US in 2019, twenty-three women's rights and gender justice organizations, including the Women's Sport Foundation, jointly stated in support of trans athletes: "we will continue to spend our energy combating the actual problems [facing women's sport]: stereotypes about women and girls' interest and ability to compete, lack of equal resources for girls' sports, pay inequality and other types of discrimination against women coaches and professional women athletes, and sexual harassment that pushes women and girls out of sports" (AAUW *et al.* 2019, p.2). Trans women and women with sex variations have not contributed to any of these legitimate threats to the secure and equal place of women in sport. Indeed, the regulation of their participation has been elevated as a priority in ways that obscure the inaction of many sports organizations on gender inequality.

An alternative to a zero-sum game framing pitting "fairness" against "inclusion" is to double down on addressing the pervasive ways that gender inequality and discrimination continues to undermine sport. Importantly, there are opportunities to identify common ground between the causes of gender equity and gender inclusion. Ideologies of binary sex difference are a key factor hampering the pursuit of gender equity across sport settings, from the playing field to the ranks of leadership (see e.g., Athlete Ally 2021; Kane 1995; Lenskyj 2018; Travers 2008). The medicalization of women's bodies has harmed all women athletes, from policing the boundaries of the legitimate female athlete to the exclusion of women on alleged medical grounds (Travers 2011). The disproportionate impacts on women of color from Global South nations in recent years further undermines the notion that eligibility regulation benefits women's sport (Human Rights Watch 2020). The proactive pursuit of gender inclusive sport is thus a critical opportunity to transform sport in ways that can create benefits and wins for all women.

### **Towards Gender Inclusive Sport?**

Sport finds itself at an apparent crossroads: how will sports organizations and stakeholders respond to the call from trans, gender diverse, and intersex communities to support their right to

participate in safe and welcoming sporting environments? How, too, will the continued pursuit of gender equity be meaningfully advanced? Rather than starting with the assumption that inclusion represents a loss for cisgender, normatively bodied women, we invite sports organizations and sports researchers to ask different questions. As feminist science studies scholars have frequently noted, the research agendas we choose to pursue matter to the realities that become possible (Harding 1986). What might we learn if we choose to engage the question of inclusion in sport constructively, by investigating where and under what conditions it has been achieved, and with what consequences, in order to generate practical insights for all sports stakeholders? What does conceptualising women’s sport as a “radically inclusive space” make possible (Doyle 2016)?

Sports organizations have enormous potential to play an important broader role in the larger project of creating inclusive and tolerant societies. Several countries are experiencing a considerable backlash against the advancement of trans and gender diverse rights and inclusion. In the US, women’s sport has been taken up as a defining issue by various conservative organizations who oppose the free expression of sexuality and women’s reproductive rights. Sport has always been political (Lenskyj 2018), but on the question of trans, gender diverse, and athletes with sex variations, sport must rise above politics: we have an unprecedented opportunity to leverage the potential of sport to counter the vulnerability that such populations face, advancing instead their acceptance, safety, nondiscrimination, and the possibility of living well, while also realizing benefits for all women. We invite interested scholars and administrators working in this space to embrace the challenge of gender inclusive (and equitable) sport as a vision to guide research, policy, practice, and sporting cultures in new directions.

---

## Notes

<sup>1</sup> We use “trans” to refer to people whose gender identity does not align with the sex category they were assigned at birth, as opposed to “cisgender” (people whose gender identity aligns with the sex category they were assigned at birth). We use “sex variations” when referring to people whose

---

naturally occurring sex-linked traits (e.g., chromosomes) do not align with strictly binary definitions of female/male. We do not use “intersex” in this commentary, given not all athletes with sex variations identify as intersex.

<sup>2</sup> This is particularly the case for trans women. See for example Chandler (2022) in Australia and U.S. House of Representatives (2020).

<sup>3</sup> We use “normatively bodied” to refer to those women who do not have or are not *suspected* of having natural sex variations.

<sup>4</sup> Regarding women with natural sex variations, the FINA (2022) ban applies specifically to women with a 46 XY chromosomal configuration.

<sup>5</sup> Here, we build on what grassroots sports settings and some non-Olympic sports are often already recognizing and doing (see e.g., Pride in Sport 2020).

<sup>6</sup> We use “safe playing conditions” to refer to the imperative of safeguarding all athletes, including protecting trans, gender diverse, and athletes with sex variations, from the harms associated with gender eligibility regulation (Bekker and Posbergh 2022).

<sup>7</sup> This is part of a longer history of constructing ideal femininity vis-à-vis the cultural/racial other, with sex testing practices in the 1970s and 1980s targeting women from Eastern Europe (Bohuon 2015).

<sup>8</sup> The IOC Framework (2021) emphasizes the importance of incorporating scientific expertise, albeit without reducing the policymaking process to scientific considerations alone.

### **Acknowledgement**

The authors would like to thank Dr Madeleine Pape for her insight in the development of this manuscript.

### **Disclosure Statement**

No potential conflict of interest was reported by the author(s).

## References

American Association of University Women (AAUW) *et al.*, 2019. *Statement of Women's Rights and Gender Justice Organizations in Support of Full and Equal Access to Participation in Athletics for Transgender People*, April 1<sup>st</sup>. Available at:

<https://www.aclu.org/letter/statement-womens-rights-and-gender-justice-organizations-support-full-and-equal-access>

Athlete Ally, 2021. The Future of Women's Sports Includes Transgender Women and Girls Statement. November. Available at: [http://www.athleteally.org/wp-](http://www.athleteally.org/wp-content/uploads/2021/11/The-Future-of-Womens-Sport-includes-Transgender-Women-and-Girls-Statement_11.15.21.pdf)

[content/uploads/2021/11/The-Future-of-Womens-Sport-includes-Transgender-Women-and-Girls-Statement\\_11.15.21.pdf](http://www.athleteally.org/wp-content/uploads/2021/11/The-Future-of-Womens-Sport-includes-Transgender-Women-and-Girls-Statement_11.15.21.pdf)

Barras, A., *et al.*, 2021. Timelines and transitions: Understanding transgender and non-binary people's participation in everyday sport and physical exercise through a temporal lens. *In: B.C. Clift et al. (Eds.) Temporality in Qualitative Inquiry*. Abingdon, UK: Routledge, 51-71.

Bekker, S. and Posbergh, A., 2021. Safeguarding in sports settings: unpacking a conflicting identity. *Qualitative Research in Sport, Exercise and Health*, 14 (2), 181-198.

Brassil, G.R., and Longman, J., 2020. Who should compete in women's sports? There are 'two almost irreconcilable positions.' *The New York Times*, August 18. Available at: <https://www.nytimes.com/2020/08/18/sports/transgender-athletes-womens-sports-idaho.html>

Bohuon, A. 2015. Gender verifications in sport: From an east/west to a north/south antagonism. *The International Journal of the History of Sport*, 32 (7), 965-979.

Broockman, D., and Kalla, J., 2016. Durably reducing transphobia: A field experiment on door-to-door canvassing. *Science*, 352 (6282), 220-224.

- Buzuvis, E., 2011. Transgender student-athletes and sex-segregated sport: Developing policies of inclusion for intercollegiate and interscholastic athletics. *Seton Hall J. Sports & Ent. L.*, 21, 1.
- Buzuvis, E., 2021. Law, policy, and the participation of transgender athletes in the United States. *Sport Management Review*, 24 (3), 439-451.
- Caudwell, J., 2020. Transgender and Non-binary swimming in the UK: Indoor public pool spaces and Un/safety. *Frontiers in Sociology*, 64.
- Chandler, C. 2022. Save women's sport: Take action today. Available at: [https://www.senatorchandler.com.au/pledge\\_2112\\_savewomenssports](https://www.senatorchandler.com.au/pledge_2112_savewomenssports)
- Davis, G., 2015. *Contesting intersex: The dubious diagnosis*. New York: NYU Press.
- Denison, E., Bevan, N. and Jeanes, R., 2021. Reviewing evidence of LGBTQ+ discrimination and exclusion in sport. *Sport Management Review*, 24 (3), 389-409.
- Doyle, J., 2016. Capturing Semenya. *The Sport Spectacle*, August 16. Available at: <https://thesportspectacle.com/2016/08/16/capturing-semenya/>
- Erikainen, S., 2019. *Gender verification and the making of the female body: A history of the present*. Abingdon, UK: Routledge.
- Fédération Internationale de Natation (FINA), 2022. Press Release: FINA Announces New Policy on Gender Inclusion. Available at: <https://www.fina.org/news/2649715/press-release-fina-announces-new-policy-on-gender-inclusion>
- Grix, J., and Carmichael, F., 2012. Why do governments invest in elite sport? A polemic. *International journal of sport policy and politics*, 4 (1), 73-90.
- Harding, S. (1986). *The Science Question in Feminism*. Ithaca, NY: Cornell University Press.
- Hargie, O.D., Mitchell, D.H., and Somerville, I.J., 2017. 'People have a knack of making you feel excluded if they catch on to your difference': Transgender experiences of exclusion in sport. *International Review for the Sociology of Sport*, 52 (2), 223-239.

- Henne, K., 2014. The 'science' of fair play in sport: Gender and the politics of testing. *Signs*, 39 (3), 787-812.
- Henne, K., and Pape, M., 2018. Dilemmas of gender and global sports governance: An invitation to southern theory. *Sociology of Sport Journal*, 35 (3), 1-35.
- Human Rights Watch, 2020. "They're Chasing Us Away from Sport" Human Rights Violations in Sex Testing of Elite Women Athletes. December. Available at: [https://www.hrw.org/sites/default/files/media\\_2020/12/lgbt\\_athletes1120\\_web.pdf](https://www.hrw.org/sites/default/files/media_2020/12/lgbt_athletes1120_web.pdf)
- International Olympic Committee (IOC), 2021. IOC Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity and Sex Variations. Available at: <https://stillmed.olympics.com/media/Documents/News/2021/11/IOC-Framework-Fairness-Inclusion-Non-discrimination-2021.pdf>
- Jordan-Young, R., and Karkazis, K., 2019. *Testosterone: An Unauthorized Biography*. Cambridge, MA: Harvard University Press.
- Kane, M.J., 1995. Resistance/transformation of the oppositional binary: Exposing sport as a continuum. *Journal of Sport and Social Issues*, 19 (2), 191-218.
- Karkazis, K., and 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.
- Kulick, A., Wernick, L. J., Espinoza, M. A. V., Newman, T. J., & Dessel, A. B. (2018). Three strikes and you're out: culture, facilities, and participation among LGBTQ youth in sports. *Sport, Education and Society*.
- Lenskyj, H., 2018. *Gender, Athletes' Rights, and the Court of Arbitration for Sport*. Bingley: Emerald Publishing.
- Mahtani, K.R., et al., 2013. Can the London 2012 Olympics 'inspire a generation' to do more physical or sporting activities? An overview of systematic reviews. *BMJ Open*, 3 (1), e002058.

- Miller, L.R., and Grollman, E.A., 2015. The social costs of gender nonconformity for transgender adults: Implications for discrimination and health. *Sociological Forum*, 30 (3), 809-831.
- Patel, S., 2021. Gaps in the Protection of Athletes Gender Rights in Sport- A Regulatory Riddle. *International Sports Law Journal*, 21, 257-275.
- Patel, S., 2022. Law and regulatory barriers to increasing inclusivity for trans athletes. In Witcomb and Peel (Eds.), *Gender Diversity and Sport: Interdisciplinary Perspectives*. London: Routledge.
- Pavitt, M., 2022. UK Prime Minister claims transgender athletes should not compete in women's sport. Inside the Games, April 6. Available at: <https://www.insidethegames.biz/articles/1121552/boris-johnson-transgender-athletes-sport>
- Pielke, R., and Pape, M., 2019. Science, sport, and sex. *Issues in Science and Technology*, 36 (2), 56-63.
- Pieper, L., 2016. *Sex Testing: Gender Policing in Women's Sports*. Urbana Champaign: University of Illinois Press.
- Pigozzi, F., et al., 2022. Joint position statement of the International Federation of Sports Medicine (FIMS) and European Federation of Sports Medicine Associations (EFSMA) on the IOC framework on fairness, inclusion and nondiscrimination based on gender identity and sex variations. *BMJ Open Sport & Exercise Medicine*, 8, e001273.
- Pride in Sport, 2020. Transgender and Gender Diverse Governance in Sport. Available at: <https://www.prideinsport.com.au/trans/>
- Roberts, T.A., et al., 2021. Effect of gender affirming hormones on athletic performance in transwomen and transmen: implications for sporting organisations and legislators. *British Journal of Sports Medicine*, 55, 577-583.



- Save Women's Sport, 2021. "We are talking about erasing the definition of woman. When we replace sex with "gender identity" there are no boundaries to that." Available at: <https://www.facebook.com/watch/?v=200893891661637>
- Sherry, E., and Rowe, K., 2020. *Developing Sport for Women and Girls*. Abingdon, UK: Routledge.
- Spaaij, R., Oxford, S., and Jeanes, R., 2016. Transforming communities through sport? Critical pedagogy and sport for development. *Sport, Education and Society*, 21 (4), 570-587.
- Stewart, L., O'Halloran, P., Oates, J., Sherry, E., and Storr, R., 2021. Developing trans-athlete policy in Australian National Sport Organizations. *International Journal of Sport Policy and Politics*, 13 (4), 565-585.
- Storr, R., Nicholas, L., Robinson, K., and Davis, C., 2021. 'Game to play?': barriers and facilitators to sexuality and gender diverse young people's participation in sport and physical activity. *Sport, Education and Society*, 1-14.
- Storr, R., and Richards, J., 2022. "The tennis club is my safe space:" Assessing the impact of playing tennis on LGBT+ people in Australia. *Sport Education and Society*, 1-14.
- Tannenbaum, C., and Bekker, S., 2019. Sex, gender, and sports. *BMJ*, 364, 11120.
- Travers, A., 2008. The sport nexus and gender injustice. *Studies in Social Justice*, 2 (1), 79–101.
- Travers, A. 2011. Women's Ski Jumping, the 2010 Olympic Games, and the Deafening Silence of Sex Segregation, Whiteness, and Wealth. *Journal of Sport and Social Issues*, 35 (2), 126-145.
- World Rugby. 2020. Transgender Guidelines. Available at: <https://www.world.rugby/the-game/player-welfare/guidelines/transgender>
- United States (US) House of Representatives (2020). Protection of Women and Girls in Sports Act of 2020, H.R. 5603, 116<sup>th</sup> Congress.