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A DIFFERENT ANGLE ON THE TRANSGENDER ISSUE IN SPORTS: WHY HAS NO VIEW BEEN EXPRESSED FROM THE PERSPECTIVE OF CISGENDER FEMALE ATHLETES?

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The eligibility of *male-to-female* transgender athletes to participate in female sports competitions has sparked significant controversy. The sports society should also consider why no view has been expressed from the perspective of cisgender female athletes? It has long been recognised that men possess inherent physical advantages, including greater muscle mass, higher levels of haemoglobin, differences in skeletal structure, and enhanced cardiorespiratory capacity. In the case of *male-to-female* transgender athletes, it can be considered that they retain such male-based physical capacities, which may give them an unfair advantage when competing against other female athletes under the same sporting conditions. This may create an inequitable situation for the other female competitors. Therefore, the question that arises is how this sensitive and complex issue should be addressed, while ensuring the “fairness” of female sports competitions. Against this background, the purpose of this article is to provide the sports society with a different angle on the transgender issue, viewed from the standpoint of cisgender female athlete. Through this consideration, this article is of significance to consider and visualise a view of the cisgender female athletes who have no male-based physical advantages in the female category of the sports competitions.

1 INTRODUCTION

The eligibility of *male-to-female* transgender athletes to participate in female sports competitions has sparked significant controversy (Diaconu, 2024). For instance, Lia Thomas is a transgender female swimmer at the University of Pennsylvania and dominates American swimming tournaments. In response, the World Aquatics has adopted a new eligibility policy for *male-to-female* transgender athletes. According to this policy, they can participate in female sports competitions only if “they have not experienced any part of male puberty beyond Tanner Stage 2 or before age 12, whichever is later” under Article F(4)(b) of the World Aquatics Policy on Eligibility for the Men’s and Women’s Competition

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Categories (Version in force as 24 March 2023) (Ingle, 2023a; World Aquatics, 2023a).

Against this decision, Thomas filed a complaint against the World Aquatics before the Court of Arbitration for Sport (CAS) in January 2024 (CAS, 2024; See also Close & Tucker, 2024) and the CAS rendered an arbitral award on 10 June 2024 (CAS 2023/O/10000 *Lia Thomas v. World Aquatics*, arbitral award of 10 June 2024). Furthermore, the World Aquatics decided to launch the open category for transgender athletes at the World Cup in Berlin in accordance with the Policy on Eligibility for the Men's and Women's Competition Categories but no entries for this competition received (Ingle, 2023b; World Aquatics, 2023b; World Aquatics, 2023c). Therefore, the eligibility of *male-to-female* transgender athletes for female sports competitions has been a complex and contentious issue (See Shinohara 2025). This also complies with the "IOC Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity and Sex Variations" adopted by the International Olympic Committee (IOC) on 17 November 2021. This Framework was to establish a common criterion for inclusion and non-discrimination in sports. It notes that the "IOC is ... not in a position to issue regulations that define eligibility criteria for every sport, discipline or event across the very different national jurisdictions and sports systems" (IOC, 2021).

In contrast to this, the sports society should also consider why no view has been expressed from the perspective of cisgender female athletes? (See Lopiano, 2024). It has long been recognised that men possess inherent physical advantages, including greater muscle mass, higher levels of haemoglobin, differences in skeletal structure, and enhanced cardiorespiratory capacity. In the case of *male-to-female* transgender athletes, it can be considered that they retain such male-based physical capacities, which may give them an unfair advantage when competing against other female athletes under the same sporting conditions (World Rugby, n.d.). This may create an inequitable situation for the other female competitors. Therefore, the question that arises is how this sensitive and complex issue should be addressed, while ensuring the "fairness" of female sports competitions (Shinohara 2024, pp. 81–82).

Against this background, the purpose of this article is to provide the sports society with a different angle on the transgender issue, viewed from the standpoint of cisgender female athlete. The crux of this contentious and complex issue lies not in "gender identity", but rather in the "biological sex" of *male-to-female* transgender athletes. This understanding is based on the recognition that original and inherent biological sex may result in male-based physical advantages when compared with cisgender female athletes (UNGA, 2024, paras. 32–33). Furthermore, the absence of female-specific physiological phenomena, such as the menstrual cycle and menstruation, can confer a significant advantage in

performance management (Carmichael et al., 2021; Findlay et al., 2020, pp. 2–4; Santos et al., 2025; Zinner et al., 2025).

Furthermore, it is important to note that different sports may reach different conclusions. For example, contact sports, such as boxing and rugby, must carefully balance the concepts of “safety” and “fairness” with those of “inclusion” and “equality”. In women’s boxing, the participation of Algerian athlete Imane Khelif and Taiwanese athlete Lin Yu-Ting at the Paris 2024 Olympic Games sparked significant controversy because of their male-based physical capacity which is clearly different from cisgender female athletes (see BBC, 2024b). Therefore, this article is of significance to consider and visualise a view of the cisgender female athletes who have no male-based physical advantages in the female category of the sports competitions (See also Dawkins, 2024).

In light of the foregoing, this article will be divided into the following sections: After this introduction, this article will provide a brief overview of *Lia Thomas* case, which revolves around the eligibility of *male-to-female* transgender athletes. Second, it will consider the interests of *male-to-female* transgender athletes and those of other female athletes competing in the female sports category. Finally, the concluding section will answer the main question of how the sports society should strike a balance between both interests.

2 ELIGIBILITY OF TRANSGENDER WOMEN IN FEMALE SPORTS COMPETITIONS: *LIA THOMAS V. WORLD AQUATICS*

This section will provide a brief overview of *Lia Thomas* case. It is important to note that Lia Thomas lodged a complaint against the World Aquatics with the CAS. On 10 June 2024, the CAS rendered an arbitral award holding that the Thomas’ request was dismissed because Thomas lacked “standing to challenge the Policy and the Operational Requirements in the framework of the present proceedings” (CAS 2023/O/10000 *Lia Thomas v. World Aquatics*, para. 105).

Lia Thomas, a transgender female swimmer at the University of Pennsylvania, garnered attention for her remarkable performance in American swimming tournaments. Notably, she competed in the male category of swimming competitions during the 2018-2019 season, but she did not secure victories in these competitions. However, she demonstrated exceptional dominance, consistently outperforming cisgender female swimmers in many races when competing in female swimming competitions (See Weisman, 2022).

Under this circumstance, the USA Swimming released a policy on transgender athletes for US swimming competitions, which is called the “Athlete Inclusion, Competitive Equity, and Eligibility Policy” (USA Swimming, 2022; USA Swimming, 2023). This policy outlines the eligibility criteria for *male-to-female*

transgender athletes, potentially barring them from swimming competitions if they do not sustain a testosterone level below 5 nmol/L for at least 36 consecutive months preceding the competitions. While Lia Thomas was unable to compete in the swimming competition organised by the National Collegiate Athletic Association (NCAA) due to this regulation, the USA Swimming opted not to enforce this rule in her case.

The World Aquatics implemented a new regulation prohibiting the eligibility of *male-to-female* transgender athletes from competing in the female category of swimming competitions (World Aquatics, 2023a). At the same time, it made the decision to introduce an open category of non-binary competition, aiming to provide an avenue for transgender athletes to participate in swimming matches (CAS, 2024). If the open category were to become a standard across the sporting world, Gleaves & Lehrbach (2016) argue that “it has no reason to exclude transgender and intersex athletes” (p. 315) (See also Smith, 2025). However, no registrations were received for this particular competition. Against the implementation of the new regulation for transgender athletes, Thomas decided to bring a complaint against the World Aquatics before the CAS.

In this case, the CAS media release announced that the CAS officially registered her request for ordinary arbitration against the World Aquatics. She argued that, even though “fair competition is a legitimate sporting objective” and:

“some regulation of transgender women in swimming is appropriate”, the World Aquatics’ Policy on the Eligibility for the Men’s and Women’s Competition Categories and its associated Operational Requirements are invalid and unlawful. This is because “they discriminate against her contrary to the Olympic Charter, World Aquatics Constitution, and Swiss law including the European Convention on Human Rights and the Convention on Elimination of All Forms of Discrimination against Women” (CAS, 2024).

Furthermore, she claimed that “such discrimination cannot be justified as necessary, reasonable, or proportionate to achieve a legitimate sporting objective” (CAS, 2024).

Finally, the CAS Panel made an arbitral award holding that her request was dismissed because she had no standing to challenge the World Aquatics’ regulations. The ground for the lack of her standing in this case was that her eligibility for the World Aquatics competitions does not caused by the World Aquatics’ regulations but by USA Swimming Policy (CAS 2023/O/10000 *Lia Thomas v. World Aquatics*, para. 96). Therefore, the CAS Panel did not consider how to strike a balance between the interests of transgender female athletes and those of female sports in this case.

3 PARTICIPATION OF *MALE-TO-FEMALE* TRANSGENDER ATHLETES IN THE FEMALE SPORTS COMPETITIONS?

This section considers how *male-to-female* transgender athletes may argue for their eligibility to compete in female sports categories. They contend that, following hormonal treatment, their testosterone levels negate any alleged physical advantages over cisgender female athletes.

In this regard, *male-to-female* transgender athletes contend that they do not possess any physical advantage over fellow female athletes following hormonal treatment aimed at reducing testosterone levels (Kornei, 2018). When *male-to-female* transgender athletes undergo testosterone suppression therapy, their physical capabilities no longer resemble those of males (Kornei, 2018). Specifically, the reduction in testosterone levels leads to decreases in haemoglobin levels and muscle mass, resulting in diminished strength and speed during sports competitions (Harper, 2015, p. 6). Therefore, *male-to-female* transgender athletes may also compete against other female athletes in the female sports competitions because of the lack of scientific evidence showing that they possess better physical capacity than cisgender female athletes (Gleaves & Lehrbach, 2016, pp. 312–315; Harper, 2015, pp. 7–8; Harper, Jung & Klöppel, 2021, pp. 865–872; Safer, 2022, p. 2). In this sense, transgender women's bodies are deemed compatible for participation in female sports competitions (See Shaw, 2024). Furthermore, Yuracko has noted that transgender female athletes experience significant harm when they are excluded from participation in female sports (Yuracko, 2022, pp. 731–744). This means that *male-to-female* transgender athletes have suffered psychological harm when their eligibility is refused on the basis of their gender identity.

In summary, *male-to-female* transgender athletes assert their eligibility to compete in the female category of sports competitions alongside cisgender female athletes on the basis of the absence of inherent male-based physical advantage over their cisgender female athletes. However, the subsequent section will explore potential counter-arguments that cisgender female athletes might present to protect their interests.

4 CISGENDER FEMALE ATHLETES' VIEW AGAINST THE PARTICIPATION OF *MALE-TO-FEMALE* TRANSGENDER ATHLETES IN THE FEMALE SPORTS COMPETITIONS?

Although there is an argument for the inclusion of *male-to-female* transgender athletes in female sports competitions, their participation may result in compromising the opportunities of the majority of cisgender female athletes to compete in fair and safe competitions (Fair Play For Women, 2024; See also UNGA, 2024, para. 12). According to a 2024 BBC Sport study, more than 100

elite British sportswomen expressed discomfort with *male-to-female* transgender athletes competing in female categories, citing concerns about physical performance advantages (BBC, 2024a). Furthermore, it is important to note that this approach is essential in contemporary society because, if cisgender female athletes express the view that *male-to-female* transgender athletes should not compete in the female category, they may face public criticism and risk being perceived as discriminatory. This situation can be understood as a restriction on freedom of expression, as cisgender female athletes may feel unable to express their opinions publicly in defence of their own interests. Therefore, this section will clarify a view of cisgender female athletes from a neutral standpoint, in order to offer a different perspective on the issue of the participation of *male-to-female* transgender athletes.

Given this perspective, cisgender female athletes present two primary arguments to oppose to the participation of *male-to-female* transgender athletes in the female category of sports competitions: (1) the risk of serious injuries among cisgender female athletes in contact sports; and (2) inherent physical differences between men and women, including skeletal structure as well as cardiovascular and respiratory capacities.

Cisgender female athletes have experienced serious injuries in contact sports when competing alongside *male-to-female* transgender athletes (See Perry, 2024). In this regard, World Rugby has made an official decision prohibiting *male-to-female* transgender athletes from competing in women's rugby to ensure the safety and fairness of other female athletes (Ingle, 2020; World Rugby, n.d). Conversely, *male-to-female* transgender athletes who transitioned before puberty, thus not undergoing the biological effects of testosterone during puberty and adolescence, are permitted to participate in women's rugby and mixed-gender non-contact rugby. Consequently, some sports governing bodies advocate for restrictions on the participation of *male-to-female* transgender athletes in physical contact sports to ensure the safety and fairness of cisgender female athletes, as there have been instances of serious injuries occurring (Bowman, 2024). However, it is important to note that if *male-to-female* transgender athletes compete in non-physical contact sports, the fairness of their participation against cisgender female athletes may still be questioned. This is because *male-to-female* transgender athletes may retain inherent male-based physical advantages over cisgender female athletes.

In addition to the risks associated with injuries in contact sports, there is the undeniable reality of inherent physical disparities between *male-to-female* transgender athletes and cisgender female athletes. *Male-to-female* transgender athletes maintain unalterable male skeletal structures that have been influenced by early-life exposure to testosterone (Heather, 2022, p. 4). Moreover, men typically possess superior cardiovascular and respiratory capacities compared to women due to the effects of early-life testosterone exposure, resulting in sex differences in the cardiorespiratory system (Heather, 2022, pp. 4–5). These

physiological differences can significantly impact the performance of *male-to-female* transgender athletes in sports, enabling them to generate greater strength and speed of movement. As a result, *male-to-female* transgender athletes may possess inherent male-based physical advantages over cisgender female athletes, raising questions about the fairness of competition. In this regard, Heather indicates that:

Permanent sex differences that affect athletic performance involve the (i) brain, (ii) skeletal structure, and (iii) cardiorespiratory system. Modifiable sex differences include testosterone effects on (i) muscle mass and strength and (ii) aerobic capacity (Heather, 2022, p. 2).

This means that brain, skeletal structure and cardiorespiratory system cannot be changed permanently. In this connection, Heather has also highlighted that adult-life exposure to testosterone impacts muscle mass and haemoglobin levels. These additional factors further underscore the significance of biological differences between *male-to-female* transgender athletes and cisgender female athletes, potentially affecting their competitiveness in sports (Heather, 2022, pp. 5–7). However, these two elements can be modified in accordance with the aforementioned Heather’s opinion.

Based on this understanding, even if *male-to-female* transgender athletes take medication to lower their testosterone levels before competing in female sports competitions, they may still retain a physical advantage over other biological female athletes due to their unmodifiable skeletal structure and cardiorespiratory system (Heather, 2022, pp. 5–7). In this sense, it is logical to argue that *male-to-female* transgender athletes have a competitive advantage if they compete in female sports categories, as they cannot negate the inherent physical advantages associated with being biologically male, despite any changes in their gender identity.

In support of the argument that *male-to-female* transgender athletes should not participate in the female category of sports competitions, on the basis of safety and fairness, 23 States in the United States of America have already enacted laws that limit the access of *male-to-female* transgender athletes to participate in school sports in order to protect cisgender female athletes and female sports category (Barnes, 2024). Similarly, the *Equality Act 2010* (UK) permits sports organisations to impose restrictions on the participation of transsexual individuals in sports competitions if such limitations are deemed necessary to maintain “fair competition” or “the safety of competitors” (Section 195 (2)). Furthermore, both World Athletics and UK Athletics have implemented regulations that prohibit transgender athletes from competing in female competitions under specific conditions (UK Athletics, 2023). These actions reflect a broader effort to address concerns regarding fairness and safety in sports competitions, particularly in relation to transgender participation.

In short *male-to-female* transgender athletes possess a significant inherent male-based physical advantage over cisgender female athletes due to inherent, unchangeable physical differences between males and females. Consequently, there is a pressing need to strike a balance between the interests of both *male-to-female* transgender athletes and cisgender female athletes who wish to compete in female sports categories.

5 CONCLUSION

As of now, assessing female athletes' testosterone levels is considered a credible scientific method for determining whether they may have an unfair advantage over other female athletes. Historically speaking, the sports society relied on visual inspections of genitalia and XY chromosome tests to determine the eligibility of female athletes for female sports competitions. However, these methods were prone to errors and often resulted in the humiliation and mistreatment of female athletes. In response to these shortcomings, the sports society has shifted towards using testosterone level testing as a more reliable means of assessing eligibility for female sports categories. This method aims to provide a fair and objective way to ensure competitive equality among female athletes without subjecting them to undue scrutiny or discrimination.

While some may question the reliability of using testosterone levels as a criterion, there has been no other scientifically validated method available to assess the eligibility of *male-to-female* transgender athletes for the participation in female sports competitions. Given this reality, the sports society must remain open to future scientific developments that could offer alternative means of ensuring the fairness of female competitions without unduly sacrificing the participation of *male-to-female* transgender athletes. Achieving a balance between the interests of *male-to-female* transgender athletes and those of other female athletes hinges on the advancement of scientific understanding and the development of reliable methods to accurately assess whether *male-to-female* transgender athletes possess an unfair physical advantage over their cisgender female athletes. As such, ongoing scientific research and innovation are crucial for navigating this complex issue in a manner that upholds the principles of fairness and inclusion, and respect for individual fundamental human rights.

In this context, it is not a straightforward matter to argue that the sports society should simply prioritise the protection of *male-to-female* transgender athletes without also considering the cisgender female athletes' view, particularly given that the number of cisgender female athletes is far greater than the number of *male-to-female* transgender athletes seeking to compete in female sports categories. Therefore, the sports society must engage in deeper reflection to develop a more equitable solution that balances the inclusion of *male-to-female* transgender athletes with the safeguarding of cisgender female athletes. For instance, some sports governing bodies have attempted to create non-binary

categories to accommodate *male-to-female* transgender athletes; however, these categories have seen minimal engagement, with no registrations recorded. This suggests that *male-to-female* transgender athletes are not solely seeking participation, but aspire to compete—and succeed—against other female athletes. Accordingly, the sporting society must carefully consider how to integrate *male-to-female* transgender athletes into female sports categories in light of this reality. If no reasonable or balanced solution can be identified, the sporting society may ultimately be required to make the difficult decision that *male-to-female* transgender athletes cannot participate in female categories in order to safeguard the interests of cisgender female athletes which are composed of the majority of the female sports category.

In conclusion, in the *Lia Thomas* case, the CAS avoided addressing the complex and contentious issues surrounding the eligibility of *male-to-female* transgender athletes in female sports categories. This is because it is necessary to identify clearly the interests that must be protected—namely, “inclusion” or “equality”—even if doing so may require compromising the interests of the majority of cisgender female athletes. At the same time, the interests of the majority of cisgender female athletes—namely, “fairness”—must be safeguarded in order to preserve their opportunities to succeed in women’s sports. At present, there is insufficient scientific evidence to determine which of the competing interests should be prioritised, or to allow a careful and balanced assessment of them. More objective and robust scientific research is essential; until such evidence becomes available, the interests of the majority of cisgender female athletes should remain prioritised because the interests lost by cisgender female athletes are overwhelmingly greater than the interests protected by accepting *male-to-female* transgender athletes.

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