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Maria C. Dugas*

Gender According to World Athletics:
The Regulation of Racialized Athletes
from the Global South

In March 2023, World Athletics, the regulating body for the sport of Athletics introduced The Eligibility Regulations for the Female Classification (Athletes with Differences of Sex Development). These Regulations limit participation in female Athletics events at international competition and to set world records. They require certain athletes to maintain a testosterone threshold below 2.5nmol/L, despite their naturally occurring testosterone levels. On one level, this paper is about gender regulation in sport, particularly regulating testosterone in elite, female athletes. On another level it is about power and privilege at the intersection of race, nationality, and gender. It argues that through its gender regulations, World Athletics is racializing non-western bodies and asserting white, Global North civilization as the appropriate authority on, and representation of, gender in sport.

En mars 2023, World Athletics, l'organisme de réglementation du sport de l'athlétisme, a introduit les règlements d'admissibilité pour la classification féminine (athlètes ayant une différence de développement sexuel). Ces règlements limitent la participation des femmes aux épreuves d'athlétisme lors des compétitions internationales et à l'établissement de records du monde. Elles imposent à certaines athlètes de maintenir un seuil de testostérone inférieur à 2,5nmol/L, en dépit de leur taux de testostérone naturel. D'une part, le présent article traite de la régulation du genre dans le sport, en particulier de la régulation de la testostérone chez les athlètes féminines d'élite. D'autre part, il traite du pouvoir et des privilèges à l'intersection de la race, de la nationalité et du sexe. Il soutient qu'à travers ses réglementations en matière de genre, World Athletics racialise les corps non occidentaux et affirme que la civilisation blanche du Nord est l'autorité appropriée en matière de genre dans le sport et de représentation de ce dernier.

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Introduction

In March 2023, World Athletics, the regulating body for the sport of Athletics¹ which was formerly known as the International Amateur Athletic Federation (“IAAF”), introduced two regulations that limit participation in female Athletic events at international competitions and to set world records. The Eligibility Regulations for Transgender Athletes effectively ban transgender women from participating in female Athletics.² The Eligibility Regulations for the Female Classification (Athletes with

1. World Athletics, “Our Sport,” online: <worldathletics.org/our-sport> [perma.cc/L5J2-CCPV].

2. There is a very limited exception where the athlete has “not experienced any part of male puberty” and has maintained testosterone levels below 2.5nmol/L since puberty.” See World Athletics, *Book of Rules: C3.5—Eligibility Regulations for Transgender Athletes*, (Monaco: 2023), ss 3.2.2-3.2.3, online (pdf): <worldathletics.org/about-iaaf/documents/book-of-rules> [perma.cc/XZ8T-L2DZ].

Differences of Sex Development) (“2023 Regulations”) set a testosterone threshold of 2.5 nmol/L for athletes with certain sex variations.³ This threshold requires some athletes whose bodies produce testosterone above this threshold to medically reduce their levels, often using oral testosterone suppressants, to be eligible to compete at the elite level. This paper focuses on the 2023 Regulations.⁴

World Athletics did not begin to regulate gender in women’s sport in March 2023. It has regulated women’s bodies since the inception of elite female Athletics.⁵ All of its policies, from requiring female athletes to parade nude before a panel of doctors through chromatin testing to testosterone regulation, have been heavily criticized, some of which is detailed below. The new regulations will not be the exception. Rather than remedy the flaws inherent in its logic and approach to previous regulations, including explicit critique of its focus on testosterone as the gatekeeper of fairness in women’s Athletics, World Athletics has doubled down on both the need to regulate gender in elite Athletics, and its desire to regulate it through testosterone.

On one level, this paper is about gender regulation in sport, particularly regulating testosterone in elite, female athletes. On another level, it is about power and privilege at the intersection of race, nationality, and gender. It is about the political economy and global hierarchies in the north-south divide that dictate which ideas become regulations, who gets to set the standards and how and when they are enforced. This paper argues that through its gender regulations, World Athletics is racializing non-western

3. World Athletics, *Book of Rules: C3.6—Eligibility Regulations for the Female Classification (Athletes with Differences of Sex Development)*, (Monaco: World Athletics, 2023) s 3.2, online (pdf): <worldathletics.org/about-iaaf/documents/book-of-rules> [perma.cc/9SYM-T8CW] [World Athletics, “2023 Regulations”].

4. The transgender women’s ban is equally deserving of scrutiny. In reality, the issues with both regulations are intertwined and overlapping such that parsing them in this manner may be fraught with difficulties. However, this paper focuses on the *Eligibility Regulations for the Female Classification* because they embed an evident racial bias. This is not to suggest that laws and regulations about transgender people are race neutral. We cannot separate law from its social context. The reality is that Black and Brown transgender people are murdered and dying at alarming rates. The harm that society inflicts at the intersection of race, gender, and sex will likely be perpetuated against transgender athletes through the transgender women’s ban.

5. For a detailed account, see e.g. Lindsay Parks Pieper, *Sex Testing: Gender Policing in Women’s Sports* (Urbana, IL: University of Illinois Press, 2016) [Pieper, *Sex Testing*]; Colleen English, “‘Beyond Women’s Powers of Endurance’: The 1928 800-Meter and Women’s Olympic Track and Field in the Context of the United States” (2019) 50:2 *Sports History Rev* 187, DOI: <10.1123/shr.2018-0040>; L Dawn Bavington, “Sex Control in Women’s Sport: A History of the Present Regulations of Hyperandrogenism in Female Athletes” in V Krane, ed, *Sex, Gender, and Sexuality in Sport: Queer Inquiries* (New York: Routledge: 2019) 181; Human Rights Watch, “‘They’re Chasing Us Away from Sport’” Human Rights Violations in Sex Testing of Elite Women Athletes” (4 December 2020), online: <hrw.org> [perma.cc/5VAB-69TG].

bodies and asserting white, Global North civilization as the appropriate authority on, and representation of, gender in sport.

This paper is rooted in Critical Race Theory, Intersectionality, Black Feminism, Misogynoir, and (bio, medical, legal) ethics. It also draws from Third World Approaches to International Law (“TWAIL”).⁶ These lenses help to unpack how prima facie race-neutral regulations perpetuate racialized harm. This paper proceeds in four parts. Part I introduces the Sports Industrial Complex and the hierarchies that exist within sport where sport’s governing bodies are at the top, and individual, often racialized athletes, are at the bottom. Part II problematizes the Court of Arbitration for Sport (“CAS”), which is the designated arbitrator for issues arising in Athletics. Reference will be made here to Dutee Chand’s successful challenge of the 2011 IAAF regulations (“2011 Regulations”)⁷ before the CAS, and to Caster Semenya’s unsuccessful challenge to the 2018 World Athletics regulations (“2018 Regulations”).⁸ Part III discusses the 2023 Regulations in detail, and critiques World Athletics’ choice to double down on testosterone (and gender) regulation despite assertions that a “testosterone advantage” is unfounded and that regulating testosterone is inhumane, unethical, medically unnecessary, violates basic human rights, and arguably racially motivated. Part IV draws on athletes’ stories to highlight the harms caused by gender regulation in sport, in the context of Athletics. This paper concludes by calling on readers to critically assess the Sports Industrial Complex; to unpack the implication of legal regulations on real bodies in order to understand the ways in which superficially neutral rules have brutal and discriminatory consequences.

I. *The Sports Industrial Complex*

This part outlines the hierarchical relationship structure between the key decision-makers involved in regulating gender in Athletics, and who the regulations effect. The key decision-makers include World Athletics, who sets the rules and regulations, and their employees and doctors who provide the “evidence” to support their rules and regulations, assess whether individual athletes meet the eligibility requirements, and make

6. Particularly as it seeks to “understand, deconstruct, and unpack the uses of... law as a medium for the perpetuation of a racialized hierarchy...” (see Makau Mutua & Antony Anghie, “What is TWAIL” in *Proceedings of the Annual Meeting (American Society of International Law)* (Cambridge University Press, 2000) 31 at 31, online: <jstor.org> [perma.cc/C6X3-EYJG]).

7. International Association of Athletics Federations, *IAAF Regulations Governing Eligibility of Females with Hyperandrogenism to Compete in Women’s Competition* (2011), online (pdf): <sportsintegrityinitiative.com> [perma.cc/NS4G-UYGM] [IAAF, “2011 Regulations”].

8. World Athletics, *Eligibility Regulations for the Female Classification (Athletes with Differences of Sex Development)* (2018), online (pdf): <worldathletics.org> [perma.cc/RJJ2-88DB] [World Athletics, “2018 Regulations”].

recommendations for athletes to maintain eligibility. The organizations and people affected by the regulations include the national athletics federations (e.g. Athletics South Africa (“ASA”)) who are responsible for ensuring their athletes comply with the regulations, and athletes themselves (consider Caster Semenya and Anet Negesa) who are subjected to the regulations. This structure is hierarchical. World Athletics is at the top and individual athletes are at the bottom. Even among the tier of individual athletes, there is a hierarchical structure based on gender, sexuality, race, nationality, class, and social status. As explained below, race and global location are relevant at every level of the hierarchy.

1. *The hierarchy*

World Athletics is at the top of the hierarchy for regulating Athletics. This has been the case since July 1912, when it was founded as the sport’s independent governing body.⁹ Its governing structure comprises of a Congress, Council, Executive Board, President, Vice-Presidents, Chief Executive Officer and Commissions.¹⁰ It is responsible for setting rules and regulations for Athletics and adjudicates any issues that arise. Athletes and athletics organizations must comply with these rules and regulations to participate in the sport.

The International Olympic Committee (“IOC”) also plays a role here. The IOC is “the guardian of the Olympic Games and the leader of the Olympic Movement.”¹¹ World Athletics, as an international federation, is a member of the Olympic Movement and therefore must comply with the Olympic Charter.¹² In 2021, the IOC released the “Framework on Fairness, Inclusion and Non-discrimination on the Basis of Gender Identity and Sex Variations” (the “Framework”).¹³ While the Framework is not binding on international federations like World Athletics, it does establish ten principles that the IOC says “should be taken into consideration” when those federations establish and implement eligibility rules.¹⁴ Therefore,

9. World Athletics, “About World Athletics,” online: <worldathletics.org/about-iaaf> [perma.cc/X8LM-DJ6P].

10. World Athletics, “Our Organization: Structure: Intro,” online: <worldathletics.org/about-iaaf/structure> [perma.cc/J87V-AXEH].

11. International Olympics Committee, “International Olympic Committee,” online: <olympics.com/ioc/overview> [perma.cc/PBN7-794U].

12. International Olympics Committee, “Olympic Movement,” online: <olympics.com/ioc/olympic-movement> [perma.cc/X7AN-8W4N]; International Olympics Committee, “International Sports Federations,” online: <olympics.com/ioc/international-federations> [perma.cc/AY5C-YPD5].

13. International Olympic Committee, *Framework on Fairness, Inclusion and Non-discrimination on the Basis of Gender Identity and Sex Variations* (2021), online (pdf): <olympics.com/ioc/news> [perma.cc/9JEL-EMJQ]. [International Olympic Committee, *Framework*].

14. *Ibid* at 2.

while the 2023 Regulations should be considered in light of the Framework, World Athletics is still allowed to independently govern Athletics.¹⁵

Each country has a national governing body for Athletics that is affiliated with World Athletics. For example, ASA is the governing body in South Africa. The membership terms are set out in World Athletics' Constitution.¹⁶ National federations must abide by World Athletics' rules and regulations to be affiliated.¹⁷ Among other things, World Athletics has the power to exclude individual athletes from international competition if their federation fails to comply with its rules and regulations.¹⁸

Each national federation is made up of athletes, coaches, trainers, etc. They must comply with the rules and regulations established by their federation, which must be in accordance with the rules and regulations established by World Athletics (as an international federation). For example, ASA must comply with the 2023 Regulations and ensure that their athletes are tested, where required, and meet the eligibility criteria set out therein.

Individual athletes have limited autonomy in how their sport is governed. There is an inherent power imbalance between athletes, their national federation, and World Athletics. Athletes are required to comply or give up their livelihood, as funding, sponsorship, and coaching opportunities will likely dry up if the athlete is barred from elite competition. Athletes have no ability to negotiate with World Athletics. Absent challenging regulations to the CAS, which is inherently problematic as explained in Part III, athletes much accept and abide by World Athletics' rules and regulations if they want to compete at the elite level. Many elite athletes achieve peak-performance in the mid-late teenage years, which intensifies the power imbalances at play.

That said, a hierarchy exists among athletes. For example, male athletes are not required to meet a testosterone threshold. Gender testing was initiated to catch men masquerading as women.¹⁹ Female athletes are being subjected to gender regulation for fear of male behaviour. Even among female athletes, some, typically white, athletes from the Global North, have relatively more power to shape policy-making than others,

15. The 2023 Regulations are inconsistent with the Framework. See the text accompanying note 22.

16. World Athletics, *Book of Rules: A1—The Constitution*, (Monaco: World Athletics, 2023), online (pdf): <worldathletics.org/about-iaaf/documents/book-of-rules> [perma.cc/D7L4-782A] [World Athletics, *Constitution*].

17. *Ibid*, s 9.1(b). World Athletics, "Our Organization: Structure: Member Federations," online: <worldathletics.org/about-iaaf/structure> [perma.cc/DX3N-G76H].

18. World Athletics, *Constitution*, *supra* note 16, s 13.5I.

19. See e.g. Pieper, *Sex Testing*, *supra* note 5 at 184; Julianna Photopoulos, "The Future of Sex in Elite Sport" (2021) 592:7852 *Nature* S12 at S12, DOI: <10.1038/d41586-021-00819-0>.

typically racialized athletes from the Global South.²⁰ Similarly, some cisgender women have called for and supported banning transgender women from the female classification.²¹ In both of these instances, whether lobbying for gender testing or to exclude transgender women, these voices are aligned with World Athletics. This could suggest that women's relative power is only recognized insofar as it supports World Athletics' direction.

To recap, the IOC has established principles it hopes will help achieve fairness in establishing eligibility criteria. These principles are not binding on World Athletics because it has independent governing authority for the sport. World Athletics sets the rules and regulations that national federations must comply with. The national federations must ensure that their individual athletes and coaches comply with World Athletics' regulations. With respect to gender regulation in sport, the 2023 Regulations are directly in conflict with the IOC's Framework, despite being drafted after the Framework was set.²² The 2023 Regulations stand because World Athletics is allowed to independently govern. The onus is on national federations and individual athletes to ensure that they comply with the regulations, despite how harmful they are.

2. *The Global North bias in sports and medicine*

With this hierarchy in mind, how does World Athletics choose what gets regulated? Why focus on testosterone and not other things like stride length, access to state-of-the-art training facilities, or funding? It comes down to questions about who is in power, what they value, and where they choose to set parameters. World Athletics has not explicitly stated that it is biased in favour of the Global North, but a closer examination of its practices, public statements, and regulations indicates its worldview and

20. For times where white athletes from the Global North have directly tried (sometimes successfully) to encourage regulating bodies to adopt gender testing see Bavington, *supra* note 5.

21. See e.g. Jamie Strashin, "Far from resolved: Debate rages following World Athletics' ban on trans athletes in female sport," *CBC News* (25 March 2023), online: <cbc.ca/sports/world-athletics-trans-ban-debate-1.6790454> [perma.cc/6ABJ-8R23].

22. Briefly, the 2023 Regulations do not prioritize athletes' physical, psychological, and mental well-being as stated in principle 2 of the Framework. They do "systematically exclude" athletes based on based on their gender identity, physical appearance, or sex variations, and they do target athletes for testing because of, or to determine, their gender, contrary to principle 3. The Regulations exclude athletes based on "unverified" evidence, as explained above, contrary to principle 5. The studies BG17 and BKHE18 (both discussed in Part III below) are not "robust and peer reviewed research" that demonstrate a "consistent, unfair, disproportionate competitive advantage" that "exists for the specific sport" being regulated, contrary to principle 6. They do require athletes to undergo unnecessary treatment procedures, including gynaecological and other physical examinations, to meet eligibility criteria, contrary to principle 7. The Regulations also state that blood samples obtained for anti-doping purposes can be a reliable source to trigger a complaint about the athlete's gender, contrary to principle 9. See World Athletics, "2023 Regulations," *supra* note 3; International Olympic Committee, "Framework," *supra* note 13.

white, western bias. A similar bias is evident in modern medicine, which will also be explored here to help explain that in the 2023 Regulations, gender and sex are indivisible from race and nationality.

In “Sensing Race as a Ghost Variable in Science, Technology, and Medicine,” Karkazis and Jordan-Young explore how ideas of race and racial histories are often submerged and disavowed, but yield power in science, technology, and medicine.²³ They call this ‘racial haunting’. They briefly apply this concept to testosterone regulation in sport, which they note is “especially powerful for explaining how sports regulations that limit naturally occurring testosterone levels in women athletes disproportionately harm women of color in the Global South.”²⁴ While World Athletics and its supporters have argued the federation’s regulations are only about science and have nothing to do with race, Karkazis and Jordan-Young’s work sought to excavate race and address the racial and gendered politics of the regulations.²⁵ In the vein of Critical Race Theory, Karkazis and Jordan-Young dug deeper to unpack the social and cultural reality in which the regulations were created to focus on the people being harmed and to assess the impact of the regulations, not simply the statements of the drafters. Borrowing from Subramaniam, they note that history, race, and racism are not just matters of social science. They are biological,²⁶ and as others have argued, biology is political.²⁷

We cannot understand the racial underpinnings of the regulations without first understanding the colonial and racist underpinnings of the gender binary. Academic literature on the construction of intersex variations is helpful here, even if the women targeted by the 2023 Regulations are not themselves intersex.²⁸ In “Pelvic Politics: Sexual Dimorphism and Racial Difference,” Sally Markowitz traces how the category of sex/gender difference “has been saturated with racial meanings for centuries and not

23. Katrina Karkazis & Rebecca Jordan-Young, “Sensing Race as a Ghost Variable in Science, Technology, and Medicine” (2020) 45:5 *Science Tech & Human Values* 763, DOI: <10.1177/0162243920939306>.

24. *Ibid* at 766.

25. *Ibid*, citing Katrina Karkazis & Rebecca Jordan-Young, “The Powers of Testosterone: Obscuring Race and Regional Bias in the Regulation of Women Athletes” (2018) 30:2 *Feminist Formations* 1 at 9, DOI: <10.1353/ff.2018.0017> [Karkazis & Jordan-Young, “Powers of Testosterone”].

26. *Ibid* at 775.

27. Zine Magubane, “Spectacles and Scholarship: Caster Semenya, Intersex Studies, and the Problem of Race in Feminist Theory” (2014) 39:3 *Signs* 761 at 763, DOI: <10.1086/674301>, citing Anne Fausto-Sterling, “Gender, Race, and Nation: The Comparative Anatomy of ‘Hottentot’ Women in Europe, 1918–1817” in Jennifer Terry & Jacqueline Urla, eds, *Deviant Bodies: Critical Perspectives on Difference in Science and Popular Culture* (Bloomington: Indiana University Press, 1995) 19.

28. It has been suggested that the regulations “are designed to find and punish intersex athletes” (see Andrew, “New IAAF Testosterone Regulations are Bigoted and Targeted,” *The Victory Press* (2 May 2018), online: <victorypress.org> [perma.cc/6828-B5VG]).

always in ways that are easy to discern.”²⁹ They caution against accepting at face value that conceptions of physiological sex are race neutral.³⁰ In western ideology, clear sex/gender difference is seen as a human ideal. These differences are said to increase as a race “advances.”³¹ White Europeans are seen as the epitome of this difference, and the standard against which all other races are measured and found wanting.³² In other words, a clear gender binary is associated with whiteness and white supremacy. This culminates in the manly European man and the feminine European woman being the ideal gender representatives. Anyone who does not meet these standards is seen as “other” and inferior. Race and gender are linked to serve white supremacy.

This western bias is also on display at World Athletics and in its regulations. First, all the women who have been publicly subjected to, or prevented from competing based on, the regulations are racialized women.³³ Dutee Chand, who successfully challenged the 2011 Regulations regarding testosterone to CAS is from India. Santhi Soundarajan is also from India. Annet Negesa is from Uganda. Caster Semenya, who challenged the 2018 Regulations is from South Africa. Margaret Wambui is from Kenya, and Francine Niyonsaba is from Burundi. They were both excluded from participating in the 2020 Olympics. Christine Mboma and Beatrice Masilingi are teenagers from Namibia. They were barred from competing in the 400m event at the 2020 Olympics, just four weeks before they were set to compete, after “testing” determined they had elevated naturally occurring testosterone.³⁴ The four athletes described in a controversial report by Dr. Bermon were all “from rural or mountainous regions of developing countries.”³⁵ Human Rights Watch interviewed 13

29. Sally Markowitz, “Pelvic Politics: Sexual Dimorphism and Racial Difference” 26:2 *Signs* 389 at 389, online: <jstor.org> [perma.cc/7PVM-H6ZL].

30. *Ibid* at 394.

31. *Ibid* at 391.

32. *Ibid* at 390.

33. Karkazis and Jordan-Young state, based on their review of talks given by World Athletics officials and policy makers, that all the women investigated for having naturally high testosterone are “exclusively from the Global South” (see Karkazis & Jordan-Young, “Powers of Testosterone,” *supra* note 25 at 5).

34. Gerald Inray, “Namibia teenagers out of Olympic 400m over high natural testosterone levels,” *CBC News* (2 July 2021), online: <cbc.ca/sports/olympics/summer/trackandfield> [perma.cc/4CDJ-62CH]. Both women competed in the 200m even because the testosterone regulations do not apply to races shorter than 400m.

35. Patrick Fénelin et al., “Molecular Diagnosis of 5 α -Reductase Deficiency in 4 Elite Young Female Athletes Through Hormonal Screening for Hyperandrogenism” (2013) 98:6 *J Clinical Endocrinology & Metabolism* E1055 at E1056, DOI: <10.1210/jc.2012-3893>. According to this report, four young women aged 18-21 were sent to France for testing. Although Dr. Bermon acknowledges in the report that their medical status carried “no health risks,” he states that he still informed each woman, “that

racialized athletes from the Global South who had experienced gender testing and regulation.³⁶ Soundarajan, Negesa, Chand, and Semenya's stories are explored in Part IV.

Second, all of World Athletics' approved assessment facilities are in the Global North.³⁷ World Athletics can approve assessment centres outside of these locations, but this list signifies that it does not believe the Global South is competent to perform these assessments. Language used by World Athletics in the 2023 Regulations and used by people associated with World Athletics in other publications support this conclusion. For example, World Athletics associates often describe the regulations and their interventions as "saving" or "protecting" women from "poor care" in their home countries.³⁸ This saviour narrative is in direct contrast to the "biomedical control" they have exerted over women's bodies, and the "biomedical violence" they have inflicted.³⁹

Third, World Athletics appears to rely on physical appearance in its assessment process. The 2023 Regulations permit World Athletics to access an athlete's samples taken for other purposes to determine whether they are a Relevant Athlete (defined in Part III). However, where neither the athlete nor their federation tells World Athletics that they believe they are a Relevant Athlete, what prompts it to assess their samples? It is clear from Caster Semenya, Dutee Chand, Annet Negesa and Santhi Soundarajan's stories that none of them presented themselves to World Athletics as potentially being Relevant Athletes. World Athletics can act based on a complaint from a reliable source, but again, what is likely to trigger that complaint? Based on the western bias in the gender binary, the fact that all of the public cases are racialized athletes from the Global South and considering public comments made by World Athletics and fellow competitors, it is likely that an athlete's physical appearance (typically a muscular appearance) and ill fit with western femininity is what triggers

gonadectomy would most likely decrease their performance level but allow them to continue elite sport in the female category" and recommended the procedure (*ibid* at E1057). On his account, all athletes "agreed after informed consent" to have surgery and "[s]ports authorities then allowed them to continue competing in the female category 1 year after gonadectomy" (*ibid* at E1057). See Part IV below for the circumstances that impugn this informed consent. Annet Nagesa, one of the women depicted in the report, contradicts that there was informed consent, and that she was able to return to competition.

36. Human Rights Watch, *supra* note 5.

37. World Athletics, "2023 Regulations," *supra* note 3 at 22.

38. Fénichel et al, *supra* note 35 at E1056, E1058; World Athletics, *Eligibility Regulations for the Female Classification (Athletes With Differences Of Sex Development): Explanatory Notes/Q&A*, (Monaco: World Athletics: 2018) at 4, online (pdf): <worldathletics.org> [perma.cc/3BS5-QXPW].

39. Bavington, *supra* note 5 at 183.

an investigation.⁴⁰ Further, World Athletics' regulations themselves have targeted virilization and physical appearance. For example, the preamble to the 2011 Regulations state that people with "hyperandrogenism... often display masculine traits and have an uncommon athletic capacity in relation to their fellow competitors."⁴¹

Despite denying that the regulations are about race, World Athletics (and its associates) have made public statements that undermine this stance. For example, Dr. Stéphane Bermon is Director of the IAAF's Health and Science Department. Between 2006 and 2014 he was a Member of the IAAF's Anti-Doping Commission. In introducing an earlier version of testosterone regulations at the International Convention on Science, Education and Medicine in Sport⁴² in 2012, Bermon suggested that a muscular physique either indicates that someone is a man, that they are doping, or that they have elevated testosterone that confers an unfair advantage over non-muscular women. Bermon reinforced the anti-Black undertones of the regulations by using the fictional image of Goya's *La Maja Desnuda* to represent female athletes and a picture of Kenneth "Flex" Wheeler to represent male athletes. *La Maja* is depicted as white, delicate, and without muscle tone. Flex Wheeler is a Black bodybuilder known to have taken steroids for decades and has a gene mutation that allows for "nearly unlimited muscle growth."⁴³ The use of these images could "hardly have been an accident."⁴⁴ Portraying womanhood as white and delicate while portraying masculinity as Black and muscular visually reinforces Bermon's premise that testosterone is associated with masculinity, and that higher levels of testosterone can be identified by physical features.

Focusing on physical appearance serves a distinctive purpose. Karkakis and Jordan-Young argue that assessment factors like physical appearance are "entangled with deeply subjective and stereotypical Western definitions of femininity."⁴⁵ Bavington explains that "[given] the legacy of racist thinking that constructs black and brown women as both physically and sexually masculinized" they are more likely to be targeted

40. See Part IV.

41. IAAF, "2011 Regulations," *supra* note 7 at 1.

42. This is "the official scientific conference that accompanies the Olympic Games" (see Karkakis & Jordan-Young, "Powers of Testosterone," *supra* note 25 at 10).

43. *Ibid* at 13. See also Andrew, *supra* note 28.

44. Karkakis & Jordan-Young, "Powers of Testosterone," *supra* note 25 at 14.

45. Katrina Karkakis et al, "Out of Bounds? A Critique of the New Policies on Hyperandrogenism in Elite Female Athletes" (2012) 12:7 *American J Bioethics* 3 at 13, DOI: <10.1080/15265161.2012.680533> [Karkakis et al, "Out of Bounds"]. See also Karkakis & Jordan-Young, "The Powers of Testosterone," *supra* note 25 at 6.

as a deviation from western femininity.⁴⁶ Researchers have concluded that “Blackness is associated with masculinity, and Whiteness more so with femininity.”⁴⁷ Further, these associations lead to errors when categorizing a woman’s gender.⁴⁸ Black women are also under-differentiated from Black men and excluded from “women.”⁴⁹ It follows that Black women are more likely to be subjected to a process that scrutinizes based on perceived fit with femininity and athletic ability that is considered unwomanly.⁵⁰

Bavington suggests that World Athletics’ policymakers seem to be uncomfortable with muscular women.⁵¹ This is apt. One of the earliest fears about allowing women to compete in sport is that they would become too masculine.⁵² Overtime this narrative shifted from all female athletes being too masculine to only racialized athletes being perceived as too masculine. It is paradoxical to target female athletes who present as more masculine because “the characteristics identified with masculinity—notably, skeletal and muscular development—are also characteristics strongly correlated with athleticism.”⁵³

Fourth, there is reason to be concerned that World Athletics is conducting an unethical medical experiment on the effect of testosterone suppressants on testosterone levels in elite athletes.⁵⁴ Once an athlete is required to reduce their testosterone level, they also need to prove compliance.⁵⁵ There is a logical connection between monitoring athletes for compliance and ensuring they comply. That said, there is concern that

46. Bavington, *supra* note 5 at 196. See also Lindsay Parks Pieper, “Sex Testing and the Maintenance of Western Femininity in International Sport” (2015) 31:13 *Intl J History in Sport* 1557, DOI: <10.1080/09523367.2014.927184> [Pieper, “Sex Testing 2”].

47. Stewart M Coles & Josh Pasek, “Intersectional Invisibility Revisited: How Group Prototypes Lead to the Erasure and Exclusion of Black Women” (2020) 6:4 *Translational Issues in Psychological Science* 314 at 320, DOI: <10.1037/tps0000256>.

48. *Ibid.*

49. *Ibid* at 315.

50. See e.g. Karkazis & Jordan-Young, “Powers of Testosterone,” *supra* note 25 at 5 (“Sports authorities...have consistently indicated that the women investigated for high levels of naturally occurring [testosterone] are exclusively from the Global South, and all indications are that they are black and brown women”); Bavington, *supra* note 5 at 182, 195-196.

51. Bavington, *supra* note 5 at 196.

52. See e.g. English, *supra* note 5; Susan Cahn, “Cinderellas of Sport: Black Women in Track and Field” in Patrick Miller & David Wiggins, eds, *Sport and the Color Line: Black Athletes and Race Relations in Twentieth Century America* (New York: Taylor and Francis, 2004) at 247-248, 250.

53. Karkaskis et al, “Out of Bounds,” *supra* note 45 at 13.

54. Semenya raised this at CAS. See *Mokgadi Caster Semenya v International Association of Athletics Federations & Athletics South Africa v International Association of Athletics Federations* (2019), at para 83 (Court of Arbitration in Sport) (Arbitrators: Hon. Dr. Annabelle Bennett, Hon. Judge Hugh L Fraser, Dr. Hans Nater), online (pdf): <tas-cas.org/fileadmin/user_upload/CAS_Award_-_redacted_-_Semenya_ASA_IAAF.pdf> [perma.cc/CN2A-ZFYT] [“Semenya”].

55. World Athletics, “2023 Regulations,” *supra* note 3, s 5.

World Athletics is using athletes as “lab rats” to conduct “experiments.”⁵⁶ This needs to be understood not only in the context of medical and research ethics, but also in global medical power dynamics and the history of experimentation on racialized people.⁵⁷

Sporting governance is not neutral. Rather, this part has established that a hierarchical structure exists that favours white, Global North interests, and is biased against racialized athletes from the Global South. These concerns are also reflected in the CAS, an integral part of the Sports Industrial Complex, which is discussed next.

II. *Problematizing the Court of Arbitration for Sport*

This part explores how the CAS is a quasi-legal system that is structured in a way that favours sports governing bodies and disadvantages athletes. This is evident from the origin and structure of CAS, how adjudicators are appointed, the (often) exclusive jurisdiction given to the CAS, and the nature of its decision making.⁵⁸ This part also briefly addresses two CAS decisions on testosterone regulations from World Athletics.

1. *CAS: Structure, adjudicators, jurisdiction, and decision making*

The CAS is an arbitral institution.⁵⁹ It was established by the IOC in 1984⁶⁰ at the direction of then president, H. E. Juan Antonio Samaranch. He called it the “supreme court for world sport.”⁶¹ The CAS was deemed necessary to have a specialized authority that could flexibly, quickly, and inexpensively settle sports-related disputes,⁶² and to achieve international harmony on sports-related issues. The CAS is headquartered in Lausanne, Switzerland.⁶³ There are two “decentralized” offices in Australia, and the

56. *Semenya*, *supra* note 54 at para 83.

57. For example, the Tuskegee Syphilis Study in the United States, Pfizer testing Trovan in Nigeria, HIV/AIDS testing in Africa, etc. See e.g. Kristen Farrell, “Human Experimentation in Developing Countries: Improving International Practice by Identifying Vulnerable Populations and Allocating Fair Benefits” (2006) 9:1 *J Health Care L & Pol’y* 136; Lara Gautier et al, “Deconstruction the notion of “global health research partnerships” across Northern and African contexts” (2018) 19:1 *Ethics & Global Health*, DOI: <10.1186/s12910-018-0280-7>.

58. For a detailed critique of the CAS, see Grit Hartmann, *Tipping the Scales of Justice—the Sport and Its Supreme Court* (Play the Game, 2021), online (pdf): <playthegame.org/publications/tipping-the-scales-of-justice-the-sport-and-its-supreme-court/> [perma.cc/9GYU-8DBQ] [Hartmann, “Tipping the Scales”].

59. Court of Arbitration for Sport, *Code of Sports-related Arbitration*, (Lausanne, Switzerland: CAS, 1 July 2020), online (pdf): <digitalhub.fifa.com> [perma.cc/2RVU-JB85] [“Code”].

60. Court of Arbitration for Sport, “Frequently Asked Questions,” online: <tas-cas.org> [perma.cc/A69X-Q4XW] [CAS, “Frequently Asked Questions”].

61. Hartmann, “Tipping the Scales,” *supra* note 58 at 5.

62. *Code*, *supra* note 59, s S2.

63. *Ibid*, s S1; Grit Hartmann, “The secret life of the Court of Arbitration for Sport” (8 February 2022), online: <sportsintegrityinitiative.com> [perma.cc/Y59X-5NAL] [Hartmann, “Secret Life”].

USA.⁶⁴ The CAS was meant to be an optional dispute resolution mechanism for parties. It was not meant to be imposed on athletes or federations.⁶⁵

From the beginning, the CAS has been intricately linked to the IOC. While some changes were made to its structure in 1994, as described below, a connection between the CAS, IOC, and international federations remains. The original structure of the CAS included 60 members, 15 of which were appointed each by the IOC, the international federations, the National Olympic Committees, and the IOC President.⁶⁶ The CAS was also fully funded by the IOC, and the CAS Statute could only be modified by the IOC at the proposal of its Executive Board.⁶⁷

In 1994, changes were made to the CAS structure after the Swiss Federal Tribunal commented in an appeal of a CAS decision that the closeness of the two bodies could lead the court to question the independence of the CAS.⁶⁸ The Code of Sports-Related Arbitration was created to govern the CAS, include its organization and arbitration procedures.⁶⁹ The Statute and Regulations of the CAS were revised to make the CAS “definitively independent of the IOC.”⁷⁰ This led to the creation of the Internal Council of Arbitration for Sport (“ICAS”), which took over for the IOC to govern the CAS.⁷¹

The ICAS’ responsibilities include amending the Code of Sports-Related Arbitration, electing the CAS president, appointing and removing CAS arbitrators and mediators, and financing the CAS.⁷² The ICAS has 20 members, appointed for a renewable four-year term. They must be “experienced jurists” and agree to act with “total objectivity and independence.”⁷³ Members are appointed in stages. First, the international federations appoint four members, the Association of the National Olympic Committees appoint four members, and the IOC appoint four members.⁷⁴ Then these twelve members appoint four members “with a

64. CAS, “Frequently Asked Questions” *supra* note 60.

65. Court of Arbitration for Sport, “History of the CAS,” online: <tas-cas.org> [perma.cc/PK6J-AWDY].

66. *Ibid.*

67. *Ibid.*

68. *Ibid.* The IOC was not a party to the case.

69. *Ibid.*

70. *Ibid.*

71. Code, *supra* note 59; CAS, “Frequently Asked Questions,” *supra* note 60. Other changes included the creation of two arbitration divisions (Ordinary Arbitration Divisions and Appeals Arbitration Division); and the creation of the Code of Sports-related Arbitration.

72. Code, *supra* note 59, s S6; James Carter & Alexander Chaize, “UK: Caster Semenya Ruling And The Pros And Cons Of The Court Of Arbitration For Sport” (10 September 2019), online: <mondaq.com> [perma.cc/HNA4-Z4H4].

73. Code, *supra* note 59, ss S4-S5.

74. *Ibid.*, ss S4a-S4c.

view to safeguarding the interests of athletes.”⁷⁵ Currently, all four of these members are from the Global North.⁷⁶ These 16 members appoint four final members who are “independent of the bodies designating the other members.”⁷⁷ The current president of the ICAS is John Coats, who has been Vice President of the IOC for 10 years.⁷⁸

The ICAS appoints arbitrators to the CAS. To be an arbitrator, a person must have legal training and knowledge of sports. Their name is brought to the attention of ICAS by the IOC, international federations, National Olympic Committees, or athlete’s commissions.⁷⁹ CAS currently has 418 arbitrators. Of this, only 13 per cent (56 arbitrators) are women; half are from Europe; one in ten are from the US. One half of the arbitrators are from the Global North: US (44), UK (29), Switzerland (28), Australia (22), France (21), Canada, Spain, Germany and Italy (more than ten each).⁸⁰ This has led some critics to conclude that “the CAS is European/North American dominated, it is Western and it is mainly white.”⁸¹

The independence and impartiality of the CAS (and the ICAS) is a central concern for the integrity of sports arbitration.⁸² Despite the reorganization of the CAS in 1994, it continues to be deeply connected to the IOC and other international organizations. This is evident from how the ICAS is appointed (12 of its 20 members are directly connected to the IOC), and how it in turn appoints the CAS arbitrators. For example, 334 of the 418 arbitrators are connected to sport in some capacity.⁸³ Two-hundred arbitrators hold positions in sports-governing bodies.⁸⁴

The process for appointing arbitrators to cases is also questionable. If the case requires one arbitrator, they can be appointed by mutual agreement

75. *Ibid*, s S4d.

76. The “Athletes Advocates” are Michael B Lenard (US), Tjasa André-Prosenec (Slovenia), Moya Dodd (Australia), and Tricia Smith (Canada).

77. Code, *supra* note 59, s S4e.

78. Grit Hartmann, “A Vote of No Confidence in the Court of Arbitration for Sport” (9 February 2022) online: <sportsintegrityinitiative.com> [perma.cc/R3JT-MJ8M] [Hartmann, “No Confidence”].

79. Code, *supra* note 59, s S14.

80. Hartmann, “Tipping the Scales,” *supra* note 58 at 18. For more on how race and gender affect outcomes at the CAS, see generally Helen Jefferson Lenskyj, *Gender, Athletes’ Rights, and the Court of Arbitration for Sport*, (Bingley: Emerald Publishing Limited, 2018).

81. Hartmann, “Tipping the Scales,” *supra* note 58 at 18. On the lack of diversity and representation among decision makers, see also Johan Lindholm, “A legit supreme court of world spots? The CAS(e) for reform” (2021) 21 ISLJ 1, DOI: <10.1007/s40318-021-00184-0>.

82. See e.g. Hartmann, “Tipping the Scales,” *supra* note 58; Jakob S Weitz, “Home Field Advantage: Is ‘The Supreme Court of Sport’ Independent?” (2022) 45:3 Loyola LA Int’l & Comp L Rev 227.

83. Hartmann, “Tipping the Scales,” *supra* note 58 at 24.

84. Andy Brown, “A scandal is necessary to force CAS reform,” *Play the Game* (30 June 2022), online: <playthegame.org/news/a-scandal-is-necessary-to-force-cas-reform/> [perma.cc/U4T8-2V2T].

or they will be appointed by the President of the Appellate Arbitration Division of CAS.⁸⁵ Where there is a panel of three arbitrators on a case, the sports organizations pick one arbitrator, the athlete appoints one arbitrator from the closed list of arbitrators set by ICAS, and the chairperson of the panel is appointed either by mutual agreement of the arbitrators or by the President of the Appellate Arbitration Division of CAS.⁸⁶ The athlete's choice of arbitrator exists in the context of the ICAS controlling the list of arbitrators, and the ICAS and the CAS arbitrators being deeply connected to the IOC and other sporting organizations. Further, it is not always made public who nominated a specific arbitrator to CAS. An athlete could choose an arbitrator recommended by the party opposing them in the dispute. Because the sporting organizations are most commonly before CAS compared to individual athletes, they are more likely to know who the arbitrators are, and who appointed them. It is not surprising that athletes are not confident about the impartiality and independence of CAS.⁸⁷

Despite these concerns, the European Court of Human Rights has concluded that the list of arbitrators “meets the constitutional requirements of independence and impartiality...and that the CAS, when operating as an appellate body external to international federations, is similar to a judicial authority independent of the parties.”⁸⁸ A dissenting opinion did criticize the lack of structural independence, saying that it is not sufficient for individual arbitrators to be impartial “if the organisation’s general structure has no appearance of independence and impartiality.”⁸⁹

Relatedly, sport law is created by sporting organizations that are self-regulating and adjudicated by CAS. Because CAS is largely connected to the IOC and other sporting governing bodies, there is a concern that sport is “governed by a private club that is both legislator and judge and accountable to no one.”⁹⁰

A second critique of the CAS is that it does not make all of its decisions public. A key component of law is that it should be knowable. The CAS is said to develop its own body of binding case law, called *lex sportiva*.⁹¹ CAS decisions are binding and enforceable in over 125 jurisdictions in accordance with the New York Convention.⁹² This is problematic because

85. Code, *supra* note 59, ss R40.1-R40.2.

86. *Ibid*, s R40.2.

87. Brown, *supra* note 84; Hartmann, “Tipping the Scales,” *supra* note 58.

88. *Mutu and Pechstein v Switzerland*, Nos 40575/10 and 67474/10 (2 October 2018), at para 157 (Eur Ct HR), online: <hudoc.echr.coe.int> [perma.cc/42XA-K6S3] [*Pechstein*].

89. *Ibid*, at para 13 (of joint partly dissenting, partly concurring opinion).

90. Hartmann, “No Confidence,” *supra* note 78.

91. Hartmann, “Tipping the Scales,” *supra* note 58 at 11; Lindholm, *supra* note 81 at 230.

92. Carter & Chaize, *supra* note 72.

the CAS does not make many of its decisions public. The CAS publishes about 30 per cent of its awards, but does not explain why it only publishes this amount: “[t]he institution settles disputes for a multi-billion-dollar industry and prides itself on consolidating transnational sports law, but at the same time it keeps it largely a secret how the law is to be interpreted.”⁹³ CAS does have a database on its website of cases since 1996 that it deems non-confidential.⁹⁴ However, the CAS’s failure to publish most of their decisions has led to the criticism that it is the “most secretive pillar in the global governance of sport.”⁹⁵

A third critique of the CAS is that its jurisdiction is essentially mandatory. Arbitration is often based on consent of parties through the contractual model.⁹⁶ In the case of sports adjudication, binding arbitration before CAS is often forced on athletes.⁹⁷ For example, the 2023 Regulations state that all issues arising with and from the regulations must be brought to CAS.⁹⁸ This means that athletes have no choice in which method of relief is suitable for them.⁹⁹ As some critics have commented, mandatory jurisdiction for CAS de facto deprives athletes’ right to a fair trial, which violates Article 6 of the *European Convention on Human Rights*.¹⁰⁰

Fourth, the CAS may not be suited to handle human rights issues. According to the Centre for Sports and Human Rights, the CAS is reluctant to factor human rights into its decisions.¹⁰¹ Human rights professor John Ruggie stated in a report about FIFA that while “300-plus arbitrators who sit at the peak of the system may be well equipped to resolve a great variety of football-related disputes, they generally lack human rights expertise.”¹⁰² This is concerning in the context of World Athletics, since it says it is not bound by international human rights instruments like the United Nations’ *Universal Declaration on Human Rights* or the *European Convention on*

93. Hartmann, “Secret Life,” *supra* note 63.

94. “Jurisprudence,” *Court of Arbitration for Sport*, online: <jurisprudence.tas-cas.org/Help/Home.aspx> [perma.cc/D6SX-TGM7].

95. Hartmann, “Secret Life,” *supra* note 63.

96. Lindholm, *supra* note 81 at 1.

97. See e.g. Pechstein, *supra* note 88.

98. World Athletics, 2023 Regulations, *supra* note 3, s 7.1.

99. Wenjun Yan, “Court of Arbitration for Sport: Rules and Issues” (2023) 11:1 Open J Soc Sciences 64 at 71, DOI: <[10.4236/jss.2023.111007](https://doi.org/10.4236/jss.2023.111007)>.

100. *Ibid*; Brown, *supra* note 84.

101. Daniela Heerd, “The Court of Arbitration for Sport: Where Do Human Rights Stand?,” *Centre for Sport and Human Rights* (10 May 2019), online: <sporhumanrights.org> [perma.cc/44CM-YP3A].

102. John G Ruggie, “*For the Game. For the World.*” *Fifa and Human Rights* (Cambridge: Harvard Kennedy School, 2016) at 26, online (pdf): <hks.harvard.edu> [perma.cc/BMX9-XUR4].

Human Rights.¹⁰³ World Athletics' regulations have significant human rights issues, as discussed in Part IV.

A final critique for the purposes of this paper is that athletes have minimal recourse to challenge CAS decisions, which are considered final.¹⁰⁴ They can only be appealed to the Swiss Federal Tribunal on limited grounds, including lack of jurisdiction, violation of procedural rules like the right to a fair hearing, or incompatibility with public policy.¹⁰⁵

Critics have concluded that these issues mean that CAS is “seen as part of the machine, the network of sports governing bodies, which is likely to crush an athlete in case of a conflict.”¹⁰⁶ Antoine Duval from the Dutch Center for International and European Law has accused CAS of “whitewashing and laundering decisions.”¹⁰⁷ Athletes are also concerned. Some do not consider CAS to be independent and impartial; they see it as an extension of sports federations.¹⁰⁸

If the governing structure of sport is biased in favour of the Global North, and CAS is a part of, and an extension of, the governing structure, it follows that it too is biased in favour of the Global North. Its structure gives us no reason to think otherwise.

2. *Gender regulation at CAS*

CAS has adjudicated two challenges to World Athletics' testosterone regulations in the last decade. Dutee Chand challenged the 2011 Regulations in 2014, and Caster Semenya challenged the 2018 Regulations. CAS reached a different outcome in each case.

CAS suspended the 2011 Regulations in *Chand*. It agreed with Chand that they were prima facie discriminatory¹⁰⁹ and World Athletics failed to adduce sufficient evidence to conclude that testosterone increased female athletic performance such that participation in female events was unfair.¹¹⁰ However, CAS agreed with World Athletics that there was a scientific basis

103. *Semanya*, supra note 54 at para 293. See also Amanda Shalala, “Intersex runner Annet Negesa fighting for everyone’s right to compete in sport,” *Australian Broadcasting Corporation* (11 March 2023), online: <abc.net.au> [perma.cc/9YJM-TXKU].

104. Code, supra note 59, ss R46, R59.

105. CAS, “Frequently Asked Questions,” supra note 60 (under “Is it possible to appeal against a CAS award”).

106. Hartmann, “Tipping the Scales,” supra note 58 at 6.

107. Brown, supra note 84.

108. Hartmann, “No Confidence,” supra note 78.

109. *Dutee Chand v Athletics Federation of India (AFI) and International Association of Athletics Federations (IAAF) (Interim Arbitral Award)* (2015), at para 450 (Court for Arbitration in Sport) (Arbitrators: Hon Justice Annabelle Claire Bennett, Richard H McLaren, Dr Hands Nater), online (pdf): <web.archive.org/web/20170704221029/http://www.tas-cas.org/fileadmin/user_upload/award_internet.pdf> [perma.cc/2XY4-TDH6] [*Chand*].

110. *Ibid* at para 547.

to use testosterone as a basis for gender regulation in sport.¹¹¹ It left the door open for World Athletics to bring forward more evidence to support their assertion that women with higher levels of testosterone competing in the female classification is unfair. CAS wanted evidence about the “magnitude of the performance advantage that hyperandrogenic female enjoy over other females as a result of their abnormally high androgen levels.”¹¹² Had World Athletics adduced this evidence within two years of the CAS decision (by July 2017), CAS was prepared to schedule a hearing to evaluate the evidence. Without the additional evidence, the Regulations were declared void.¹¹³ The willingness of CAS to consider natural testosterone an unfair advantage¹¹⁴ in female competition foreshadows its decision to reject Semenya’s challenge to the 2018 Regulations, despite their more restrictive testosterone threshold of 5nmol/L.

CAS (by majority) dismissed Semenya’s request that the 2018 Regulations be declared unlawful and be prevented from coming into force on the grounds that although the regulations were discriminatory, they were “a necessary, reasonable and proportionate means of achieving the aim of what is described as the integrity of female athletics and the upholding of the ‘protected class’ of female athletes in certain events.”¹¹⁵ The arbitrators presiding over Semenya’s case were from Australia, Canada, and Switzerland.¹¹⁶ Semenya, alongside Athletics South Africa (“ASA”) who joined her on the case, argued that the regulations were discriminatory, unreasonable, unnecessary, disproportionate, and arbitrary. They argued that World Athletics used flawed evidence from studies that were inadmissible and inconclusive to support the regulations.¹¹⁷ For these proceedings, Semenya produced evidence detailing her personal experience with testosterone regulation, including describing the harm she has endured.¹¹⁸ CAS was not persuaded by these arguments.

Semenya appealed CAS’s decision to the Swiss Federal Tribunal (“SFT”) in 2019.¹¹⁹ The case before the SFT focused on whether the CAS

111. *Ibid* at para 499.

112. *Ibid* at para 548.

113. *Ibid*.

114. See Erin Buzuvis, “Hormone Check: Critique of Olympic Rules on Sex and Gender” (2016) 31:1 *Wis J L Gender & Society* 29 at 43.

115. *Semenya, supra* note 54 at para 626.

116. *Ibid* at para 20. Semenya did not appear to have an issue with these arbitrators, though ASA objected to two of them because they also were on the panel in *Chand*.

117. *Ibid* at paras 130-132.

118. *Ibid* at paras 73-87.

119. “Mokgadi Caster Semenya case—judgment by Federal Supreme Court of Switzerland of 25 August 2020,” *Centre for Human Rights at University of Pretoria*, online (pdf): <chr.up.ac.za> [perma.cc/JZL8-MHXS] translating Federal Tribunal, Lausanne, 25 August 2020, *Décision du Tribunal*

decision violated public policy, namely the prohibition on discrimination; Semenya's personality rights to bodily integrity, identity, private life and economic freedom; and human dignity.¹²⁰ Ultimately, the SFT ruled that Semenya and ASA could not establish that the 2018 Regulations met the high threshold for a violation of the public order. Rather, the regulations were "suitable, necessary and proportionate to the legitimate aims of sporting fairness and the maintenance of the 'protected class.'"¹²¹ This, despite no clear definition of "fairness" in the 2018 Regulations, before CAS, or before SFT.

In February 2021, Semenya appealed the SFT's decision to the European Court of Human Rights ("ECtHR"). She argued that Switzerland, "failed in its positive obligation to protect her against the violation of her rights under the *European Convention on Human Rights* as a result of World Athletics' continuing discriminatory attempts to restrict the ability of certain women to participate in female athletics competitions."¹²² The ECtHR found in favour of Semenya by a 4:3 majority in July 2023.¹²³ This decision related to the 2018 Regulations. World Athletics has said that it will encourage the Swiss government to appeal the ECtHR decision to ECtHR Grand Chamber and that the 2023 Regulations "will remain in place."¹²⁴

This part sought to identify some of the problems with CAS being the adjudicator of sport-related issues. CAS's ability to be a fair, independent, and impartial decision-maker is undermined by its connection to the IOC and other governing bodies of sport, its lack of transparency, and its exclusive jurisdiction. These concerns are not necessarily evident in *Chand*, but they become more apparent in *Semenya*, where CAS concludes that more restrictive regulations are justified based on questionable data (see Part III below). The following part provides a deeper consideration of the gender regulations, before addressing harm to athletes in Part IV.

fédéral suisse 4A_248/2019 and 4A_398/2019, (annotation) (Switzerland), online: <bger.ch> [perma.cc/GRC9-HCLH] [*Semenya SFT*].

120. *Ibid* at para 9. See also Lena Holzer, "The Decision of the Swiss Federal Supreme Court in the Caster Semenya Case: A Human Rights and Gender Analysis," *Opinio Juris* (30 September 2020), online: <opiniojuris.org> [perma.cc/UL3U-ELHD].

121. *Semenya SFT*, supra note 119 at para 10.5.

122. Caster Semenya, "This fight is not just about me..." (25 February 2021), online: <twitter.com/MightyCaster/status/1364881945759522816/photo/1> [perma.cc/EDU6-YFTH] (including attached press release).

123. *Semenya v Switzerland*, No. 10934/21 (11 July 2023) (Eur Ct HR) online: <hudoc.echr.coe.int/eng?i=001-226011>.

124. World Athletics, Press Release, "World Athletics responds to European Court of Human Rights decision" (11 July 2023) online: <worldathletics.org/news/press-releases/response-european-court-human-rights-decision-2023> [perma.cc/Z7UV-WKAR].

III. *Gender regulation in Athletics*

The 2023 Regulations are the most recent in a long history of gender regulation for the female classification. They are the third set of regulations to target testosterone as the gatekeeper of female Athletics. This part first sets out the historical perception that track and field, a subset of Athletics, is a “manly” sport, and some of the historical gender regulating practices. It then reviews the 2023 Regulations in more detail by comparing how key aspects (e.g. who a Relevant Athlete is, what the testosterone threshold is, and which events the regulations apply to) have changed from the 2011, 2018, and 2023 regulations. It also suggests some potential reasons for those changes. Finally, this part addresses the procedural aspects of the regulations, namely how the investigation, assessment, and outcomes processes work.

1. *History of gender regulation in the female classification*

Historically, track and field *as a whole* was considered “too masculine” for women to participate.¹²⁵ The perception was that female athletes would never be able to find a husband and would be ill-suited for motherhood.¹²⁶ Now, for the most part, the “too masculine” label only attaches to certain athletes, which is perpetuated and enforced by the regulations.

Women’s track and field entered international competition at the 1928 Olympics.¹²⁷ That year, the women’s 800m race was featured. It was later removed from competition because it was believed to be “too harsh” a sport for women.¹²⁸ For example, one sportswriter described half of the women as being unable to finish the event, and the other half collapsing at the finish line. In reality, all of the women finished the race, running at world-record pace.¹²⁹ The 800m race was only re-added to the list of female events in 1960, breaking the effective 32-year ban on women competing in any event longer than the 200m.¹³⁰

By the 1950s, track and field had a “reputation as a ‘masculine’ endeavour unsuited to feminine athletes.”¹³¹ The Olympic committees considered removing women’s track and field events for being “not truly

125. International Olympic Committee, “In Amsterdam in 1928, Lina Radke was the first female Olympic 800m champion, but...” (03 November 2019), online: <olympics.com/en/news/> [perma.cc/S4CA-VTNF]. See also Cahn, *supra* note 52 at 247.

126. *Ibid*; Pieper, *Sex Testing*, *supra* note 5.

127. See e.g. English, *supra* note 5 at 187.

128. *Ibid* at 190; Kyoko Raita, “The Movement for the promotion of competitive women’s sport in Japan, 1924-35” (1999) 16:3 Intl J History Sport 120 at 125, DOI: <10.1080/09523369908714088>.

129. International Olympic Committee, *supra* note 125.

130. *Ibid*; Anita L Defrantz, “The changing role of women in the Olympic Games” (1997) 26 Olympic Rev 18 at 20, online (pdf): <users.monash.edu.au> [perma.cc/SFM5-T5SU].

131. Cahn, *supra* note 52 at 247.

feminine”¹³² and dangerous to women’s health.¹³³ One Olympic official suggested creating a special category of competition “for the unfairly advantaged ‘hermaphrodites’ who regularly defeated ‘normal’ women, those less-skilled ‘child-bearing’ types with “largish breasts, wide hips, [and] knocked knees.”¹³⁴

In the US, white women seemed to succumb to the negative stereotypes about track and field events and to a large extent stopped participating in the 1930s. Black women continued to participate and dominate the sport, which further entrenched racist associations of Black women with masculinity.¹³⁵ When white women chose to return to track and field years later, it seems they recast racialized women as too manly, rather than the sport as a whole. Refocussing the negative image of the sport in this way is not only evidence of white privilege, but it also had multiple advantages for white women. It allowed them to participate without being subjected to the negative connotations that being a track and field athlete evoked. It also allowed them to claim that faster racialized athletes were not eligible to compete. This in turn allowed them to reframe what it means to be a “female athlete.”

Gender regulation has continuously been a part of the female classification in elite sport. World Athletics explicitly and repeatedly asserts that their objective in regulating female events is to ensure “fairness” in women’s sport.¹³⁶ The underlying assumption is that men are faster, stronger, and better athletes than women, and that events need to be divided by gender to ensure fairness.

Athletics organizations have used various means of regulating and verifying female athletes’ gender. In the 1940s, the British Women’s Amateur Athletic Association required women to submit a letter from their doctor verifying their gender.¹³⁷ There were concerns about the abuse of this process and it was abandoned in the 1960s. In its place, World Athletics required female athletes to parade naked before a panel of female doctors in order to be eligible to compete in the female

132. *Ibid* at 248.

133. *Ibid* at 250.

134. *Ibid* at 248.

135. *Ibid*. On the point of entrenching racist stereotypes, see e.g. Pieper, “Sex Testing 2,” *supra* note 46 at 1562.

136. See e.g. World Athletics, “2018 Regulations,” *supra* note 8; World Athletics, “2023 Regulations,” *supra* note 3 at 1; World Athletics, Press Release, “World Athletics Council decides on Russia, Belarus and female eligibility” (23 March 2023), online: <worldathletics.org/news/press-releases/council-meeting-march-2023-russia-belarus-female-eligibility> [perma.cc/53TJ-26JL] [World Athletics, “2023 Press Release”].

137. MA Ferguson-Smith & Elizabeth A Ferris, “Gender verification in sport: the need for change?” (1991) 25:1 *British J Sports Medicine* 17 at 17.

classification.¹³⁸ Initially, it subjected *all* female athletes in Athletics to a manual gynaecological and breast examination to compete.¹³⁹ At the 1966 European Athletics Championships in Budapest, the manual examination was eliminated, but doctors visually inspected the genitals of 243 women participants.¹⁴⁰ Athletes complained about these “nude parades” and World Athletics abandoned this process in favour of Barr chromatin testing in 1967.¹⁴¹ Chromatin testing also proved controversial and World Athletics abandoned it in 1991.¹⁴² Although this marked the end of blanket screening for all female athletes, World Athletics reserved the right to screen athletes if an issue arose as to their gender identity.¹⁴³ Beginning with its 2006 Policy on Gender Verification, World Athletics set out a process for handling complaints whereby an athlete could be asked to undergo invasive medical screening by various medical professionals if there was suspicion or a “challenge” to their gender.¹⁴⁴ This selective screening process remains in place in the 2023 Regulations.

2. 2023 Regulations

On 23 March 2023, the World Athletics Council approved the new testosterone regulations. They came into effect on 31 March 2023. They are meant “to facilitate the participation of athletes with [sex variations] in the sport of athletics” in accordance with certain “imperatives.”¹⁴⁵ World Athletics says it wants to encourage all athletes to participate and strive for greatness, but because some women have “conditions” that cause higher testosterone levels, they need to set a limit to ensure fairness.¹⁴⁶ In doing so, it “recognises” that athletes want to compete as themselves, “respects the dignity of all individuals,” and wants Athletics to “be as inclusive as

138. *Ibid*; Pieper, *Sex Testing*, *supra* note 5 at 36, 51-52.

139. Ferguson-Smith & Ferris, *supra* note 137 at 17; Pieper, “Sex Testing,” *supra* 5 at 52.

140. Pieper, *Sex Testing*, *supra* 5 at 52.

141. *Ibid* at 54-55.

142. LJ Elsas et al, “Gender verification of female athletes” (2000) 2:4 *Genetics in Medicine* 249, DOI: <10.1097/00125817-200007000-00008>. For more on chromatin testing, see Pieper, *Sex Testing*, *supra* note 5 at 55; Maria Martínez-Patiño, “Personal Account: A woman tried and tested” (2005) 366 *Lancet* S38, DOI: <10.1016/S0140-6736(05)67841-5>; Katrina & Jordan-Young, “The Powers of Testosterone,” *supra* note 25 at 16. Chromatin testing excluded Spanish hurdler Maria Martínez-Patiño from competition in 1985 for having XY chromosomes, even though she has complete androgen insensitivity and therefore derives no benefit from testosterone.

143. S Mohamed & A Dhali, “Global injustice in sport: The Caster Semenya ordeal—prejudice, discrimination and racial bias” (2019) 109:8 *South African Medical J* 548 at 549, DOI: <10.7196/SAMJ.2019.v109i8.14152>.

144. IAAF Medical and Anti-Doping Commission, *IAAF Policy on Gender Verification* (Monaco: International Association of Athletics Federations, 2006), online (pdf): <bolandathletics.com> [perma.cc/7TYM-VKMJ] [IAAF, “2006 Policy”].

145. World Athletics, “2023 Regulations,” *supra* note 3, s 1.1.

146. *Ibid*, ss 1.1.1, 1.1.3-1.1.4.

possible” and “encourage and provide a clear path to participations in sport for all.”¹⁴⁷ As this paper suggests, the regulations do not achieve fairness, are not inclusive, and are harmful to many athletes.

In many respects the three sets of testosterone regulations (2011, 2018, 2023) are similar to each other. They all limit testosterone levels in some capacity for certain athletes and set out an investigation process that involves invasive testing and observations. They all exclude some women from participating unless they change their bodies. The three regulations differ in how they define Relevant Athletes, where they set the testosterone threshold, and which events they apply to.

a. *Relevant athletes*

The three sets of regulations differ in who they apply to. The 2011 Regulations applied to athletes with “hyperandrogenism,” defined as “the excessive production of androgenic hormones (Testosterone).”¹⁴⁸ The 2018 Regulations define Relevant Athletes as someone who has one of the specified conditions listed,¹⁴⁹ has a testosterone level of 5nmol/L or higher, and is sensitive to testosterone such that it has a “material androgenising effect.”¹⁵⁰ The specified conditions include what World Athletics refers to as a “Difference of Sex Development” or “DSD,” which they defined as “congenital conditions that cause atypical development of [a person’s] chromosomal, gonadal, and/or anatomic sex.”¹⁵¹ They explicitly exclude other conditions that may cause elevated testosterone, like polycystic ovary syndrome (PCOS), even where it causes “the individual to have blood testosterone levels above the normal female range.”¹⁵² The 2018 Regulations define the “normal female range” as below 5nmol/L.¹⁵³ The 2023 Regulations define a Relevant Athlete in the same way, except that they exclude two of the listed conditions and lower the testosterone level to 2.5nmol/L.¹⁵⁴

147. *Ibid.*, s 1.1.4.

148. IAAF, “2011 Regulations,” *supra* note 7 at 1, n 1.

149. The listed conditions are: 5 α -reductase type 2 deficiency; partial androgen insensitivity syndrome (PAIS); 17 β -hydroxysteroid dehydrogenase type 3 (17 β -HSD3) deficiency; congenital adrenal hyperplasia; 3 β -hydroxysteroid dehydrogenase deficiency; ovotesticular DSD; and any other genetic disorder involving disordered gonadal steroidogenesis. See World Athletics, “2018 Regulations,” *supra* note 8, s 2.2(a)(i).

150. *Ibid.*, s 2.2(a)(iii).

151. *Ibid.*, s 1.1(b)(ii).

152. *Ibid.* at A-9, n 4. Endnote 8 suggests that the upper limit of testosterone for women with polycystic ovary syndrome (PCOS) is 3.1-4.8nmol/L.

153. *Ibid.* at A-10, n 8.

154. World Athletics, “2023 Regulations,” *supra* note 3, s 3.1

To participate in female events at international competitions and to set world records, Relevant Athletes must meet certain eligibility conditions. First, the athlete must be legally recognized “either as female or as intersex.”¹⁵⁵ Second, their blood testosterone level must be reduced to below a certain threshold (set out below) for a designated time before resuming competition.¹⁵⁶ Third, athletes must maintain the testosterone threshold “at all times” (defined as in or out of competition) to remain eligible to compete.¹⁵⁷ If their testosterone level rises above the threshold for any reason, they are required to restart the waiting period. Athletes are not permitted to compete in Restricted Events during this waiting period.

b. *Testosterone threshold*

Since 2011, an athlete’s testosterone level has been the determining factor in gender screening. This is because World Athletics assumes men are faster, stronger, and better athletes than women, and it attributes this superiority to testosterone,¹⁵⁸ which it sees as an exclusively male hormone above a certain threshold. For example, at CAS, World Athletics asserted that Semenya was “biologically male” due to her testosterone levels, even though she was assigned female at birth and identifies as a woman.¹⁵⁹

In 2011, World Athletics set the testosterone threshold at 10nmol/L for women with hyperandrogenism.¹⁶⁰ In 2018, it lowered the threshold to 5nmol/L and restricted the threshold to athletes with certain sex variations, participating in middle-distance running events.¹⁶¹ At the time, World Athletics said there was “limited evidence” of a material testosterone dose-response below 5nmol/L, while an increase from 5-10nmol/L “delivers a clear performance advantage.”¹⁶² The 2023 Regulations further lower the threshold to 2.5nmol/L for athletes with sex variations participating in any Athletics event. The 2023 Regulations state that 99.99% of all female athletes (except those with PCOS or sex variations) have testosterone levels below 2.44nmol/L. Notably, other medical professionals argue that

155. *Ibid*, s 3.2.1; World Athletics, “2018 Regulations,” *supra* note 8, s 2.3(a).

156. The 2023 Regulations say 24 months for middle distance events, and potentially 6 months for other events if they meet the requirements in s 12 (see World Athletics, “2023 Regulations,” *supra* note 3, s 3.2.3); the 2018 Regulations say 6 months (see World Athletics, “2018 Regulations,” *supra* note 8, s 2.3(b)).

157. World Athletics, “2023 Regulations,” *supra* note 3, s 3.2.3; World Athletics, 2018 Regulations, *supra* note 8, s 2.3(c).

158. World Athletics, “2023 Regulations,” *supra* note 3, s 1.1.2.

159. *Semenya*, *supra* note 54 at paras 285, 289.

160. IAAF, “2011 Regulations,” *supra* note 7, s 6.5.

161. World Athletics, “2018 Regulations,” *supra* note 8, s 2.3(b).

162. World Athletics, Explanatory Notes/Q&A, “Eligibility Regulations for the Female Classification (Athletes With Differences Of Sex Development)” (2018), online (pdf): <worldathletics.org> [perma.cc/3BSS-QXPW].

there is an overlap between male and female testosterone ranges, and that the correlation between testosterone and performance is unclear.¹⁶³

In a press release for the 2023 Regulations, Sebastian Coe, the President of World Athletics, stated that World Athletics “has more than 10 years of research and evidence of the physical advantages that [athletes with sex variations] bring to the female category.”¹⁶⁴ He further stated that gender regulations will be “guided...by the science around physical performance and male advantage.”¹⁶⁵ These statements are misleading for two reasons. First, CAS concluded in *Chand* in 2015 that World Athletics did not produce sufficient evidence at that time to justify a “testosterone advantage” as the basis for the 2011 Regulations.¹⁶⁶ Second, the “evidence” that World Athletics used to support the 2018 Regulations raises ethical and credibility issues.

The 2018 Regulations rely on work by Stephane Bermon as proof of “broad medical and scientific consensus, supported by peer-reviewed data and evidence from the field, that the high levels of endogenous testosterone circulating in athletes with certain DSDs can significantly enhance their sporting performance.”¹⁶⁷ Included in this is BG17, a study conducted by Bermon and Pierre-Yves Garnier,¹⁶⁸ and funded by World Athletics.¹⁶⁹ BG17 has been criticized, including by the World Medical Association (“WMA”),¹⁷⁰ as being “highly flawed,”¹⁷¹ “weak,”¹⁷² and “clearly unreliable.”¹⁷³ Scientists even asked the *British Journal of Sports*

163. See e.g. Peter Sonksen, “Hyperandrogenism: differences in sexual development and sport” (2020) 133 *Endocrinologist* 17, online (pdf): <endocrinology.org> [perma.cc/AR8Q-QPWF]; Karkaskis et al, “Out of Bounds,” *supra* note 45.

164. World Athletics, “2023 Press Release,” *supra* note 136.

165. *Ibid.*

166. Instead, they issued the 2018 Regulations.

167. World Athletics, “2018 Regulations,” *supra* note 8, s 1.1(d).

168. Dr. Garnier is World Athletics’ medical and scientific manager.

169. Stéphane Bermon & Pierre-Yves Garnier, “Serum androgen levels and their relation to performance in track and field: mass spectrometry results from 2127 observations in male and female elite athletes” (2017) 51 *British J Sports Medicine* 1309, DOI: <10.1136/bjsports-2017-097792> [Bermon & Garnier, “BG17”].

170. See e.g. “IAAF Letter to the World Medical Association,” online: <worldathletics.org/news/press-release/iaaf-letter-wma> [perma.cc/SC2U-P74A]; World Medical Association, “WMA Urges Physicians not to Implement IAAF Rules on Classifying Women Athletes” (25 April 2019), online: <wma.net/news-post/wma-urges-physicians-not-to-implement-iaaf-rules-on-classifying-women-athletes/> [perma.cc/UNW7-HMQH] [World Medical Association, “2019 Press Release”].

171. Mohamed & Dhai, *supra* note 143 at 549; Andy Brown, “UN urges IAAF to withdraw DSD Regulations” (24 September 2018), online: <sportsintegrityinitiative.com> [perma.cc/YG9Z-Z52M].

172. Carl Lewis, “Sports Scientist Ross Tucker Previously Said IAAF Study is Flawed” *Eyewitness News*, online: <ewn.co.za/2019/02/19/sports-scientist-ross-tucker-previously-said-iaaf-study-is-flawed> [perma.cc/5BJC-SKWK]; World Medical Association, “2023 Press Release,” *supra* note 136.

173. Pielke et al, “Scientific integrity and the IAAF testosterone regulations” (2019) *Intl Sports LJ* 18, DOI: <10.1007/s40318-019-00143-w>. Pielke and other experts testified to the unreliability of BG17

Medicine (“*BJSM*”) to retract BG17.¹⁷⁴ The *BJSM* declined the request, which some critics say compromises scientific integrity.¹⁷⁵ Bermon published a second study in 2018 in response to the criticism of BG17.¹⁷⁶ BHKE18 allegedly “corrected some data and capture errors” identified in BG17.¹⁷⁷ The second study, BKHE18, has also been criticized: “[w]hat is unequivocal is that BG17 used unreliable data, and thus, its results are also unreliable. Different data and methods were used in BHKE18, leading to significantly different results, based on the almost certain use of flawed data, leading consequently to unreliable results.”¹⁷⁸ The 2018 Regulations relied on these reports despite the noted flaws in BG17 and BHKE18, despite the fact that the WMA and other scientists are skeptical of the reports, despite the fact that the results of both reports could not be reproduced by non-conflicted scientists, and despite the fact that neither BG17 nor BHKE18 was peer-reviewed because the authors would not release the full dataset.¹⁷⁹

The 2023 Regulations do not cite to BG17 or BKHE18, but they do reference other work co-authored by Dr. Bermon.¹⁸⁰ It is logical to assume that the “10 years of evidence” that President Coe referenced includes BG17 and BKHE18. Regardless, it is a conflict of interest for World Athletics to conduct its own studies and rely on those studies for something as harmful and controversial as testosterone regulation. This is especially true given that scientists and the medical communities have raised concerns with the studies.¹⁸¹

The WMA demanded the immediate withdrawal of the 2018 Regulations on 25 April 2019.¹⁸² WMA said the 2018 Regulations “constitute a flagrant discrimination based on the genetic variation of female athletes and are contrary to international medical ethics and human rights standards.”¹⁸³ It is generally considered unethical for a physician to prescribe treatment for elevated testosterone unless the condition is pathological. WMA therefore advised physicians to “take no part in implementing” the 2018

(*Semenya*, *supra* note 54 at paras 243-250, 263-265, 286-271).

174. Pielke, *supra* note 174 at 25.

175. *Ibid.*

176. Bermon et al, “Serum androgen levels are positively correlated with athletic performance and competition results in elite female athletes” (2018) 52:23 *British J Sports Medicine* 1531, DOI: <10.1136/bjsports-2018-099700> [Bermon et al, “BHKE18”].

177. *Ibid* at 1531.

178. Pielke et al, *supra* note 173 at 23.

179. *Ibid* at 20, 23.

180. See World Athletics “2023 Regulations,” *supra* note 3 at 23, n 1.

181. See Part IV, below, for more on this topic.

182. World Medical Association, “2019 Press Release,” *supra* note 170.

183. *Ibid.*

Regulations.¹⁸⁴ WMA reaffirmed its opposition to the Regulations on 15 May 2019.¹⁸⁵ In a letter sent to World Athletics, the President and Chair of WMA opposed the regulations on ethical grounds:

A medical treatment (with a few legal exceptions, which do not apply here) is only justified when there is a medical need. The mere existence of an intersex condition, without the person indicating suffering and expressing the desire for an adequate treatment, does not constitute a medical indication.

The days when doctors or society would determine which gender a person should have are definitely over. It is the ethical duty of physicians to respect the dignity and integrity of people, regardless of whether they are female, male, intersex or transgender. Medical treatment for the sole purpose of altering the performance in sport is not permissible.¹⁸⁶

Although this opposition is to the 2018 Regulations, it is relevant because the 2023 Regulations are substantially similar procedurally and harsher given that the testosterone threshold has been cut in half.

c. *Restricted events*

In addition to reducing the testosterone threshold, in 2023 World Athletics also expanded the scope of the regulations, which now apply to all Athletic events, not just the middle-distance races. This harkens back to the 2011 Regulations, which did not have a list of restricted events.

Part of the criticism facing the 2018 Regulations was that BG17 concluded that testosterone levels correlated with an advantage in events other than the middle-distance running events. BG17 concluded that women with higher testosterone levels performed better in the following events by the value in parentheses: 400m (2.73 per cent), 400m hurdles (2.78 per cent), 800m (1.78 per cent), hammer throw (4.53 per cent), and pole vault (2.94 per cent).¹⁸⁷ Its results also “seem[ed] to confirm” that pole vaulters and hammer throwers with high androgen levels may “benefit from a competitive advantage through improved visuospatial abilities.”¹⁸⁸ Bermon further concluded that in the elite male category, “no significant difference in performance was noted when comparing the lowest and highest [free Testosterone] terciles.”¹⁸⁹ However, the restricted events

184. *Ibid.*

185. World Medical Association, “Physician leaders reaffirm opposition to IAAF rules” (15 May 2019), online: <wma.net/news-post/physician-leaders-reaffirm-opposition-to-iaaf-rules/> [perma.cc/76KR-YTFY].

186. *Ibid.*

187. Bermon & Garnier, “BG17,” *supra* note 169, at 1.

188. *Ibid.* at 6.

189. *Ibid.* at 3.

under the 2018 Regulations were the middle-distance running events, which BG17 concludes that testosterone confers lower performance advantages or were never tested in BG17 (the 1500m and 1 mile events were not included in BG17, though they are middle-distances events).

World Athletics also faced criticism that the 2018 Regulations were designed to target Caster Semenya specifically, since she is a middle-distance runner, and one of the more well-known people caught up in testosterone regulation. For example, deputy minister of sports and recreation for South Africa Tokozile Xasa stated that the regulations apply to “the categories wherein coincidentally Caster Semenya participates and generally dominates. The logic as to why Regulations were restricted to these categories is still unclear, thus compelling us, as a country, to suspect they are targeted to our very own daughter of the soil, who is the reigning world champion in the 400m and 800m track.”¹⁹⁰ The African National Congress has called the 2018 Regulations blatant racism, and a “concerted effort to please some of the sore racist losers who cannot afford to see a [B]lack female South African athlete dominating the world.”¹⁹¹

It is not clear why the 2023 Regulations eliminated the list of restricted events. World Athletics has not given a reason. It could be that World Athletics was trying to sidestep the criticism that it faced in relation to the 2018 Regulations. Another possible explanation is that World Athletics now believes that testosterone confers an unfair advantage in all events. The 2023 Regulations were released two years after the rescheduled Tokyo Olympics, which were held in 2021. Namibian teenager Christine Mboma placed second in the 200m event while her countrymate Beatrice Masilingi placed sixth, after both teenagers were barred from competing in the 400m event due to their testosterone levels.¹⁹² Of course, this is anecdotal, but the connection between these athletes’ success despite the regulations and a subsequent expansion of the regulations is part of the relevant context.

d. *Investigation, assessment, and outcomes*

All of the testosterone regulations include a detailed investigation and assessment procedure and specified outcomes. In all regulations, World Athletics puts the onus on any athlete (and their federation) who believes

190. See “Minister Tokozile Xasa: International Association of Athletics Federations Hyperandrogenism Regulations” (15 February 2019), online (speech): <gov.za/speeches/minister-tokozile-xasa-international-association-athletics-federations-hyperandrogenism> [perma.cc/9JDP-K69D].

191. Andy Bull, “IAAF accused of ‘blatant racism’ over new testosterone level regulations,” *The Guardian* (27 April 2018), online: <theguardian.com> [perma.cc/NMX2-E78K].

192. “Namibian teenagers out of Olympic 400m over testosterone levels,” *BBC* (2 July 2021), online: <bbc.com/sport/africa/57678741> [perma.cc/CW7G-CTMG].

they are a Relevant Athlete to disclose that belief and any relevant information to the Medical Manager.¹⁹³ The Medical Manager also has the authority to investigate any athlete they believe to be a Relevant Athlete, at any time, regardless of whether the athlete has disclosed their status to World Athletics, provided they are acting in good faith on information obtained from reliable sources.¹⁹⁴ Reliable sources include: the athlete themselves, the team doctor of the athlete's national federation, results from a routine pre-participation health exam, and "information/data (including but not limited to blood testosterone levels) obtained from the collection and analysis of samples for anti-doping purposes."¹⁹⁵ This gives World Athletics access to the athlete's blood samples obtained for anti-doping purposes, which is effectively every athlete.¹⁹⁶ This means that any athlete can be subjected to gender-testing at any time, regardless of whether they have given specific consent to that, in so far as their blood samples help to indicate their gender.¹⁹⁷

Athletes must cooperate fully and in good faith in the investigation and assessment process, including providing blood and urine samples and

193. World Athletics, "2023 Regulations," *supra* note 3, s 4; World Athletics, "2018 Regulations," *supra* note 8, s 3.1.

194. World Athletics, "2023 Regulations," *supra* note 3, s 4.5; World Athletics, "2018 Regulations," *supra* note 8, s 3.3.

195. World Athletics, "2023 Regulations," *supra* note 3, s 4.5; World Athletics, "2018 Regulations," *supra* note 8, s 3.3. The *World Anti-Doping Code* also states that international federations could use data from anti-doping controls to "monitor eligibility relating to transgender and other eligibility rules" (see World Anti-Doping Agency, *World Anti-Doping Code* (Montreal: WADA, 2021) at 78 n 147, online (pdf): <wada-ama.org/sites/default/files/resources/files/2021_code.pdf> [perma.cc/H5ZK-BLFP]). Some organizations are pushing back on this requirement. For example, the Canadian Center for Ethics in Sport will not allow samples collected for anti-doping to be used for any other purpose (see Canadian Center for Ethics, *Canadian Anti-Doping Program*, (Ottawa: CCES, 2021) at 35 (comment to rule 5.1), online (pdf): <cces.ca/sites/default/files/content/docs/2023-12/2021_cces-policy-cadp-2021-final-e.pdf> [perma.cc/BC8B-RF53]).

196. The World Anti-Doping Agency ("WADA") standard allows athletes competing at the national and international level to be tested for banned substances. It allows for flexibility and different levels of testing based on risk assessment including differentiating between sports. It also relies on national federations to establish clear policies regarding testing (World Anti-Doping Agency, *International Standard for Testing and Investigations* (Montreal: World Anti-Doping Agency, 2021) ss 4.2, 4.3-4.3.1, 4.4).

197. We should be concerned that World Athletics is trying to access these blood samples. Consent to blood testing for anti-doping does not mean the athletes consents to WADA giving the sample, or information obtained from it, to World Athletics for any other purpose. BG17 was criticized for this reason. Dr. Bermon used blood samples obtained for anti-doping purposes to conduct his studies, described below. The ASA argued this was unethical (see *Semenya*, *supra* note 54 at paras 225-227, 243, 279). On the issue of informed consent, see e.g. World Medical Association, "Declaration of the Helsinki-Ethical Principles for Medical Research Involving Human Subjects" online: <wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/> [perma.cc/AS7T-86C3]; Seema Patel & Ian Varley, "Exploring the Regulation of Genetic Testing in Sport" (2019) 17:1 Entertainment Sports LJ 5.

submitting to physical examinations.¹⁹⁸ The assessment stage is completed in accordance with the guidelines set out in Appendix 2.¹⁹⁹ There are three assessment levels: (1) initial clinical examination and compilation of data and preliminary endocrine assessment; (2) assessment by an Expert Panel; and (3) assessment by a Specialist Reference Center.

The Level 1 Assessment is an information-gathering process. It has three objectives: (1) confirm the athlete's blood testosterone level is at least 2.5nmol/L; (2) gather information to diagnose the cause of elevated testosterone; and (3) gather information to help determine whether the athlete is androgen sensitive (cannot use the testosterone) and if so, to what degree (partial or complete).²⁰⁰ Where the athlete's blood testosterone level is at least 2.5nmol/L, the Medical Manager will send their file to the Expert Panel to complete the Level 2 Assessment.²⁰¹ The Chair may complete the assessment alone or appoint a panel of three experts from an approved list in Appendix 1.²⁰² All of the approved experts are from the Global North.²⁰³ Where the Expert Panel believes further investigation is warranted to determine whether the athlete is a Relevant Athlete, they will recommend the athlete proceed to Level 3 Assessment for a "full examination and diagnosis."²⁰⁴

The Level 3 Assessment has two objectives: (1) to diagnose the cause of the athlete's testosterone levels; and (2) to "consider further" whether and to what extent the athlete is androgen insensitive.²⁰⁵ This assessment must take place at a designated Specialist Reference Center.²⁰⁶ The approved Reference Centers are in Stockholm, Nice, Pennsylvania, Melbourne, Tokyo, Sao Paulo, and London, though World Athletics could approve a different location.²⁰⁷

198. World Athletics, "2023 Regulations," *supra* note 3, s 2; World Athletics, "2018 Regulations," *supra* note 8, s 3.5.

199. World Athletics, "2023 Regulations," *supra* note 3 at Appendix 2; World Athletics, "2018 Regulations," *supra* note 8, s 3.8, Appendix 3.

200. World Athletics, "2023 Regulations," *supra* note 3 at Appendix 2; World Athletics, "2018 Regulations," *supra* note 8, s 3.8, Appendix 3. Where the athlete's own physician has already gathered this information and provided it to the World Athletics, the process will not be duplicated unless there are concerns with reliability and adequacy. If there are concerns, World Athletics will refer the athlete to a qualified physician as defined in section 4.

201. World Athletics, "2023 Regulations," *supra* note 3 at Appendix 2, para 10; World Athletics, "2018 Regulations," *supra* note 8 at para 11.

202. World Athletics, "2023 Regulations," *supra* note 3 at Appendix 2, para 11; World Athletics, "2018 Regulations," *supra* note 8 at para 11.

203. World Athletics, "2023 Regulations," *supra* note 3 at Appendix 1.

204. *Ibid*, s 14.

205. *Ibid*, s 17.

206. *Ibid* at Appendix 2.

207. *Ibid* at Appendix 3.

To complete the three assessment levels, athletes must undergo a full medical history, clinical examinations, including urine and blood analyses. The Level 3 Assessment specifically requires a “full examination,” which “normally” includes various tests: physical, urine, blood, “appropriate genetic testing for mutation in the genes involved in the conditions at issue,” imaging, and a psychological assessment.²⁰⁸ These invasive assessments of an athlete’s mind and body, often in a foreign location, can be triggered by a complaint by a “reliable source,” which can include someone they beat in a race, or a competing athletic federation.

Where an athlete is determined to be a Relevant Athlete, they must follow compliance procedures.²⁰⁹ In the past, World Athletics’ recommendations for compliance have been controversial. In some cases, World Athletics has recommended that athletes undergo medically unnecessary surgeries to “allow them to continue elite sport in the female category.”²¹⁰ This surgery is medically unnecessary because it is not done for health-related reasons, only to reduce testosterone levels. Other than surgery, World Athletics recommends athletes reduce their testosterone levels through oral testosterone suppressants. Compliance under the 2023 Regulations includes giving the Medical Manager two weeks’ notice of the start of their 24-month testosterone suppression period; advance notice of their whereabouts during that 24-month period so they can be located for sample collection; providing samples on demand; consenting to having those samples analyzed; and agreeing to tell the Medical Manager of any anti-doping sample results completed during the 24-month period.²¹¹ Near the end of the 24-month suppression period, the athlete’s information will be forwarded to the Expert Panel to determine whether the athlete has complied with the Eligibility Criteria.²¹² This decision is final and binding, subject to challenge only to CAS.²¹³

The 2023 Regulations contain sections on “Continuing Compliance” and “Disciplinary Proceedings.” Relevant Athletes are “solely responsible” for complying with the Eligibility Conditions.²¹⁴ Where they fail to do so, they may be able to offer “compelling justification” for the failure, such that the Expert Panel will assess a new waiting period before they are

208. *Ibid.*, s 20.

209. *Ibid.*, s 4.

210. See e.g. Fénichel et al, *supra* note 35 at E1057.

211. World Athletics, “2023 Regulations,” *supra* note 3, s 4.10.

212. *Ibid.*, ss 4.12, 3.2.2.

213. *Ibid.*, s 4.14.

214. *Ibid.*, s 5.1. See *ibid.*, s 5 for “Continuing Compliance section; and *ibid.*, s 6 for “Disciplinary Proceedings” section.

able to return to competition.²¹⁵ If the athlete fails to provide a compelling justification, they will be “ineligible to compete...for the same period as the period of ineligibility that they would have received for intentional use of an anabolic steroid under the World Athletics Anti-Doping Rules.”²¹⁶ In other words, World Athletics is equating failing to chemically suppress natural testosterone levels with doping, where an athlete is penalized for using a banned substance. Further, an athlete can be disciplined for failing to maintain their testosterone levels below the threshold, which amounts to a breach of the Integrity Code of Conduct. This could result in prosecution before the Disciplinary Tribunal, and could result in sanctions including a warning, disqualification, period of ineligibility, or a fine.²¹⁷

This part briefly explained the historical perception of Athletics as a “manly endeavour” and the history of gender regulation in sport. It also discussed four key aspects of the three testosterone regulations in relation to each other and highlighted some concerns at each stage. This review was not exhaustive, but rather exemplary of some of the issues raised by testosterone regulation in Athletics. Next, this paper considers the harm of gender regulation on athletes.

IV. *The harm of gender regulation in sport*

The previous parts of this paper contextualize Athletics. As explained above, sport is not a neutral playing field. The regulations, and sport in general, do not exist in a vacuum. Things like race, nationality, and gender shape how sport is governed in ways that harm individual athletes. This part engages in the storytelling tradition of Critical Race Theory to explain how gender regulations cause harm. The women profiled here have done nothing but show up and try to compete as their authentic selves. In return, World Athletics has labeled their bodies as “wrong” and told them to change in order to participate.²¹⁸

1. *Santhi Sandarajan*

Santhi Soudarajan competed when the 2006 Policy was in force. According to this policy, an athlete could be asked to undergo medical evaluation by a panel comprising a gynecologist, endocrinologist, psychologist, internal medicine specialist, and an expert on gender/transgender issues, if there was “any ‘suspicion’ or if there is a ‘challenge’” to their gender.²¹⁹ In 2006,

215. *Ibid*, s 5.4.2.2.

216. *Ibid*.

217. *Ibid*, s 6.

218. World Athletics uses a similar approach for transgender women, where it also labels their bodies as wrong for existing authentically.

219. IAAF, “2006 Policy,” *supra* note 144 at 4.

she won both the 800m and 1500m events at the South Asian Games,²²⁰ and became the first Tamil woman to win a medal at the Asian Games, placing second in the 800m.²²¹ She underwent sex “testing” following the 800m event at the Asian Games and “failed.” She was not told what the test was for²²² and only learned that she failed the test from the local news.²²³ She was pulled from the 1500m event and later her 800m medal was revoked.²²⁴ After her medal was stripped, the Indian Olympic Association told Soundarajan that she could no longer compete, despite having won 12 international medals for India.²²⁵ She attempted suicide in 2007.²²⁶ In 2017, she filed a human rights complaint against the Athletic Federation of India and the Indian Olympic Association.²²⁷ Her claim was rejected for being too old.²²⁸ Since 2007, she has been coaching other athletes in Tamil Nadu.²²⁹

2. *Annet Negesa*

Annet Negesa identified herself as one of the women depicted in Dr. Bermon’s 2011 report about four women being taken to France for testing.²³⁰ Negesa says she underwent medically unnecessary surgery at Bermon’s recommendation.²³¹ In 2012, at age 20, she was taken to France for “treatment.”²³² At the time, she was a top Ugandan middle-distance runner, a three-time national Champion, 2011 All-Africa Games gold medalist, and set the Ugandan national record for the 800m in 2012.²³³ She

220. See e.g. Isheeta Sharma, “Santhi Soundarajan & The Misogyny of Sex Verification Tests in Sports,” *Feminism in India* (25 November 2020), online: <feminismindia.com/2020/11/25/santhi-soundarajan-gender-determination-test/> [perma.cc/ND5G-NZML].

221. *Ibid.*

222. Abhishek Dubey, “How Santhi Soundarajan was let down by India ‘for not being a woman,’” *The Bridge* (24 June 2021), online: <thebridge.in/athletics/how-santhi-soundarajan-let-down-india-not-woman/> [perma.cc/39FQ-TUNN].

223. *Ibid.*

224. Sharma, *supra* note 220.

225. Priyanka Thirumurthy, “Don’t do this to female athletes: TN’s Santhi Soundarajan on Caster Semenya Case,” *The News Minute* (7 May 2019), online: <thenewsminute.com/article/don-t-do-female-athletes-tn-s-santhi-soundarajan-caster-semenya-case-101366> [perma.cc/X8GT-6LZQ].

226. Sanjay Rajan, “Santhi turn to coaching after suicide bid,” *Reuters* (9 June 2009), online: <jp.reuters.com/article/idUSBOM164085/> [perma.cc/4LW6-2BE3].

227. Geetika Mantri, “Human rights body rejects Santhi Soundarajan’s complaint, claims its too late to accept it,” *The News Minute* (16 February 2017), online: <thenewsminute.com/article/human-rights-body-rejects-santhi-soundarajan-s-complaint-claims-it-s-too-late-accept-it.> [perma.cc/Z5A6-U6Z6].

228. *Ibid.*

229. Rajan, *supra* note 229.

230. Fénelon et al, *supra* note 35.

231. *Ibid* at E1057.

232. See e.g. Human Rights Watch, *supra* note 5.

233. Geneva Abdul, “This Intersex Runner Had Surgery to Compete. It Has Not Gone Well.,” *The New York Times* (16 December 2019), online: <nytimes.com/2019/12/16/sports/intersex-runner-

was told that she would not be able to compete in the 2012 Olympics due to her testosterone levels. In France, Negesa was screened and tested by French doctors who spoke in French, despite her languages being Swahili and English. She said Bermon told her that she needed treatment and that a gonadectomy was her first option, which coincides with Bermon's account in his study.²³⁴ Negesa was not told that she could take medication to enable her to compete instead of having surgery.²³⁵ She opted for surgery because she believed it was the only way she could continue to compete. Her consent was not informed, and arguably invalid.

Negesa had surgery in Kampala, Uganda because she could not afford the procedure in France. She was told the procedure would be simple and that she would be able to return to competition in a few weeks. She was not told what the procedure would involve. She recalls waking up after surgery to find cuts on her body, not knowing that she was going to be cut open.²³⁶ She has said that she “was no longer a person who has importance to anyone... I was useless to people because I was no longer racing. I lost my career, I lost my scholarship, I lost income, and I was no longer able to help my family financially. I lost everything.”²³⁷

Negesa lives with depression and joint pain, and until recently did not have the energy to train. She should have been prescribed hormone therapy following her surgery to help her body adjust to the change.²³⁸ However her surgeon did not prescribe the medication because he was “awaiting further discussion with Dr. Bermon.”²³⁹ In 2019, Negesa was granted asylum in Germany after publicly disclosing her story because returning home to Uganda could lead to imprisonment and death.²⁴⁰ Negesa has not returned to competition in the middle-distance events.²⁴¹ However, she recently said she would like to compete in the 10km and marathon events.²⁴²

3. *Dutee Chand*

Indian runner Dutee Chand was 19 years old when she challenged the validity of the 2011 Regulations at CAS. Earlier, the Sports Authority for India (“SAI”) had removed Chand from the Indian national team

surgery-track-and-field.html> [perma.cc/HR36-LVHN].

234. *Ibid.*

235. *Ibid.*

236. *Ibid.*

237. Shalala, *supra* note 103.

238. *Ibid.*

239. Abdul, *supra* note 233.

240. *Ibid.*

241. *Ibid.*

242. Shalala, *supra* note 103.

and prevented her from competing in the Commonwealth Games due to her naturally-occurring testosterone levels, in accordance with the 2011 Regulations.²⁴³ According to Chand, SAI made her undergo gender testing under the guise of a “routine doping test” and creating “a high-performance profile” for her.²⁴⁴ She was never informed of the true purpose of the assessment and never consented to the procedure.²⁴⁵

4. *Caster Semenya*

Caster Semenya is arguably the most well-known athlete in this paper, due to her success on the track and her ongoing fight against gender regulation in sport since World Athletics started restricting her participation in 2009.

Semenya was born in Ga-Masehlong village in Limpopo, South Africa in 1991. By 18 she was one of the fastest women in the world, winning the 800m event at both the African Junior Championships in Mauritius and the World Championships in Berlin in 2009.²⁴⁶ Semenya went on to win numerous titles, World Championships and Olympic medals. She placed second in the 800m at the 2011 World Championships and 2012 Olympic Games, however both medals were later upgraded to gold after Mariya Savinova was disqualified from both events for doping.²⁴⁷ In 2016, Semenya became the first person to win the 400m, 800m, and 1500m events at the South African Championships, winning all three races in a four-hour window.²⁴⁸ Also in 2016, she won the 800m event at the Rio de Janeiro Olympics. In 2017, she finished third in the 1500m event at the World Championships. In 2018, she won the 400m and 800m events at the African Junior Championships, and in 2019, she won both the 1500m and 5000m events at the South African Championships.

Semenya did not participate in the 2019 World Championships or the 2020 Olympic Games. She was barred from competing because she did not comply with the 2018 Regulations.²⁴⁹ In other words, World Athletics excluded the two-time Olympic Champion from defending her 800m

243. *Chand*, *supra* note 109; Mohamed & Dhali, *supra* note 143 at 549.

244. *Chand*, *supra* note 109 at 11.

245. Lindsay Pieper, “Hyperandrogenism Regulations in Sport,” *Sport in American History* (17 September 2015), online: <ussporthistory.com/2015/09/17/hyperandrogenism-regulations-in-sport/> [perma.cc/HQE4-JQEN].

246. World Athletics, “800 Meters Women: 12th IAAF World Championships in Athletics” (19 August 2009), online: <worldathletics.org> [perma.cc/R83M-6QVU].

247. Marissa Payne, “Russian runner who admitted on video to doping is stripped of Olympic gold,” *Washington Post* (10 February 2017), online: <washingtonpost.com/news/early-lead/wp/2017/02/10/russian-runner-who-admitted-to-doping-on-video-is-stripped-of-olympic-gold/> [perma.cc/3GGT-CEFE].

248. *Semenya*, *supra* note 54 at para 80.

249. OlympicTalk, “Caster Semenya switches events: ‘It’s not about being at the Olympics,’” *NBC Sport* (15 April 2021), <nbcsports.com/olympics> [perma.cc/JN25-FAV4].

title based solely on her natural physical state. Margaret Wambui and Francine Niyonsaba, who won silver and bronze at the 2016 Olympics behind Semenya, were also barred from the 800m event due to the 2018 Regulations.²⁵⁰

World Athletics began questioning Semenya's gender immediately following her victories in 2009. At the African Junior Championships Semenya broke the national junior record. In Berlin, she finished 2.5 seconds ahead of the silver medalist. In that year, she improved her time by 7.5 seconds. A doping test would be common in this situation.²⁵¹ However, these victories, combined with Semenya's "deep voice" and "muscular build" prompted World Athletics to question her gender. It is unclear whether fellow competitors or another source initiated the complaint about Semenya's gender.²⁵² Regardless, the complaints from her fellow competitors "certainly contributed to the suspicion" about her gender.²⁵³ For example, one competitor stated, "[f]or me, she's not a woman. She's a man," while another suggested Semenya would not be able to pass a gender test, saying, "[j]ust look at her."²⁵⁴ An article in *Time* suggested that Semenya's physique was one of the characteristics that led her competitors to "predict—and hope—that her forthcoming gender results will leave her ineligible to compete with women."²⁵⁵ As explained below, physical appearance (and "perceived gender nonconformity") has always been a key factor in gender regulation in female athletics.²⁵⁶

World Athletics barred Semenya from competing for six months while it completed its assessment, which included a two-hour examination that involved photographing her genitalia,²⁵⁷ and to allow testosterone-

250. Daniel Villarreal, "Two more cis Black women banned from Olympics for their natural testosterone levels," *LGBTQ Nation* (2 July 2021), online: <lgbtqnation.com> [perma.cc/DXR6-QBEN].

251. World Athletics tests the top three finishers in each event at the World Championships. World Athletics, "Anti-doping Q&A explains how the cheats are caught" (5 August 2013), online: <worldathletics.org/news/feature/anti-doping-qa-explains-how-the-cheats-are-ca> [perma.cc/HCY7-MVGF].

252. Erin E Buzuvis, "Hormone Check: Critique of Olympic Rules on Sex and Gender" (2016) *Wise JL Gender, & Soc'y* 29; Karkazis et al, "Out of Bounds," *supra* note 45 at 3-4 (who state that a "misdirected" fax indicated that World Athletics began questioning Semenya's gender following the African Junior Championship victory); others state that World Athletics requested Semenya undergo tests the day she won the World Championships in Berlin (see Mohamed & Dhali, *supra* note 143 at 548-549).

253. Buzuvis, *supra* note 252 at 42, n 79.

254. Christopher Clarey, "Gender Test After a Gold Medal Finish," *The New York Times* (19 August 2009), online: <nytimes.com> [perma.cc/3F6U-8RML].

255. William Lee Adams, "Could This Women's World Champ Be a Man?" *Time* (21 August 2009), online: <content.time.com> [perma.cc/NCZ2-NF2Y].

256. Karkazis et al, *supra* note 45 at 7.

257. *Ibid* at 4.

suppressing medication to reduce her levels below 10nmol/L.²⁵⁸ Like other athletes, Semenya said she was not asked whether she wanted to do the Assessment. Instead, “it was an order by the IAAF” with which she had “no choice but to comply.”²⁵⁹ World Athletics did not inform her of the purpose of the test. She only realized afterward that it was a gender verification test.²⁶⁰ A panel of medical experts cleared Semenya to compete in 2010.²⁶¹ Notably, there was no formal testosterone threshold in 2010, but World Athletics required Semenya to maintain levels below 10nmol/L even before the Hyperandrogenism Regulations came into effect a year later, in 2011.²⁶² Presumably World Athletics required Semenya to do this on the basis that they believed her testosterone levels constituted an unfair advantage. Semenya complied with the 10nmol/L threshold by taking hormone-suppressing medication from 2009 until the CAS suspended the Hyperandrogenism Regulations in *Chand* in 2015.²⁶³ While she was on the medication, World Athletics required Semenya to complete two random blood tests per month to monitor her testosterone levels.²⁶⁴

Semenya has experienced significant mental and physical side effects from years of taking testosterone-suppressing medication. At CAS she described significant weight gain, becoming hot and sweating profusely at night, constantly feeling sick and nauseous, regular fevers and constant abdominal pain, all of which have negatively affected her mental state by “impeding her mental sharpness and undermining her self-confidence.”²⁶⁵ In a recent interview she described experiencing panic attacks and being unable to sleep.²⁶⁶ Semenya has also faced unrelenting public scrutiny of her gender since she was 18, which she described as “atrocious and humiliating” and continuing to haunt her.²⁶⁷ The medication and its side effects also affected her ability to train and compete.²⁶⁸

Against this backdrop, it should not be surprising that Semenya did not comply with the 2018 Regulations when they were instituted. Not

258. *Semenya*, *supra* note 54 at para 77.

259. *Ibid* at para 75.

260. *Ibid* at para 74.

261. *Ibid* at para 77.

262. *Ibid*.

263. *Chand*, *supra* note 109.

264. *Semenya*, *supra* note 54 at para 83.

265. *Ibid* at para 78.

266. Flame Bearers—The Women Athletes Blazing the Trail to Beijing, “Caster Semenya (South Africa): Who Decides Who’s Female and Why?” (November 2021) at 18m:30s, online (podcast): <open.spotify.com/episode/25JO1AkuGRACrXA3WFIEcl?si=LbF2G_GLRIKHK38V_HL2Ww> [perma.cc/7EGW-9RK8].

267. *Semenya*, *supra* note at paras 74, 76. This public scrutiny is an example of misogynoir.

268. *Ibid* at para 79.

only did World Athletics reinstate a process that CAS suspended as *prima facie* discriminatory (absent proof of unfairness) three years earlier in *Chand*, but they also reduced the threshold from 10nmol/L to 5nmol/L. The 2018 Regulations would therefore require Semenya to resume taking testosterone-suppressing medication and reduce her natural levels even further, likely exacerbating the physical and mental health effects described above. Complying with the 2018 Regulations would also mean admitting that there is something inherently “wrong” with her, or that her body is “threatening” or “unfair” to other women.²⁶⁹ Semenya has also been discriminated against and gaslit during the arbitration process. For example, before CAS, World Athletics asserted the DSD Regulations are not discriminatory by asserting that they are “an extremely progressive and fair compromise” between female athletes’ rights to compete separately from men and the “desire of certain biologically male athletes with female gender identities” to compete in female events.²⁷⁰ Either way, by complying or not competing, Semenya loses when it comes to the DSD Regulations. These losses are physical, psychological, and financial, and effect Semenya’s life both on and off the racetrack and in and outside of the courtroom.

Soudarajan, Nagese, Chand, and Semenya are some of the athletes that World Athletics has harmed.²⁷¹ Their stories are included here because they have been made public, which in itself is a harmful act. Their stories exemplify the consequences of gender regulation in sport, especially where it is built on the foundation of colonialism and white supremacy. Their stories highlight the concerns raised by the WMA that testosterone regulation is unethical and discriminatory.

Their stories also speak to the significant human rights issues at stake. Human Rights Watch has detailed various human rights issues involved in gender and testosterone regulations in its 2020 Report, including privacy and dignity, the right to health, and discrimination.²⁷² It is not surprising that the United Nations Human Rights Council (“HRC”) called on Member States to refrain from developing regulations that force harmful and unnecessary medical procedures to participate in women’s events, and to repeal those that negate the rights of women and girls to bodily integrity

269. See e.g. Bavington, *supra* note 5 at 13 (“This required the athlete to understand their bodies as inherently wrong and in need of correction for the limited purpose of their eligibility to compete in elite women’s competition”).

270. See *Semenya*, *supra* note 54 at para 285.

271. Thirteen other women from the Global South also underwent gender testing (see Human Rights Watch, *supra* note 5).

272. *Ibid.*

and autonomy.²⁷³ Regulations that discriminate on the bases of race and gender:

can lead to the exclusion of women and girls from competing as such on the basis of their physical and biological traits, reinforcing harmful gender stereotypes, racism, sexism and stigma, and infringe upon the dignity, privacy, bodily integrity and bodily autonomy of women and girls.²⁷⁴

The HRC also requested that the UN High Commissioner for Human Rights prepare a report on the intersection of race and gender discrimination in sport, which was released in June 2020.²⁷⁵ In the report, the High Commissioner notes that the discrimination that women and girls face in sport cannot be separated from the discrimination they experience in society generally.²⁷⁶ Intersectional discrimination based on race and gender leads to greater obstacles for participation.²⁷⁷ The Special Rapporteur identified race as a gatekeeper for elite sport.²⁷⁸

The UN High Commissioner has stated the 2018 (and by extension the 2023) Regulations violate various human rights, including: (a) the right to freedom from torture and other cruel, inhumane or degrading treatment or punishment; (b) the right to work and the enjoyment of just and favourable conditions of work; (c) the right to the highest attainable standard of physical and mental health; (d) the right to sexual and reproductive health; (e) the right of everyone to be free from arbitrary interference with their privacy; and (f) the right to respect for the dignity, bodily integrity and bodily autonomy of the person.²⁷⁹ Three UN human rights experts jointly authored a letter to World Athletics raising concerns that testosterone regulations:

...effectively legitimize the surveillance of all women athletes based on stereotypes of femininity, adding that the regulations would in effect single out a group of women athletes, putting them at risk of repercussions far beyond the inability to compete while also subjecting them to shame, ridicule and intrusion upon their personal and private

273. *Elimination of discrimination against women and girls in sport*, UNGA, 40th Sess, UN Doc A/HRC/RES/40/5 (22 March 2019) at para 3.

274. *Ibid* at para 2.

275. United Nations High Commissioner for Human Rights, "Intersection of race and gender discrimination in sport - Report of the United Nations High Commissioner for Human Rights," UN Doc A/HRC/44/26 (15 June 2020), online (pdf): <undocs.org/en/A/HRC/44/26> [perma.cc/YN99-K8RC].

276. *Ibid* at para 7.

277. *Ibid* at para 10.

278. *Ibid*.

279. *Ibid* at para 34.

lives. Additional harms stemmed from the implication that the women need to be “fixed” through medically unnecessary interventions with negative health impacts.²⁸⁰

The UN Commissioner recommended, among other things, that sporting organizations should commit to protecting internationally recognized human rights, and that sporting organizations should “review, revise and revoke” eligibility regulations that negatively affect athletes’ rights.²⁸¹ Not only did World Athletics not heed this advice, it made the 2023 Regulations harsher and more expansive, by reducing the threshold to 2.5nmol/L for all Athletics events.

Conclusion

When Colin Kaepernick began to kneel during the national anthem at NFL games to protest police violence against Black people in the United States, many critics argued that sport is no place for politics.²⁸² As explained in this paper, sport is political. To deny this is to render invisible the power dynamics at play and the colonial and racist legacies that shape modern sport. This paper has excavated the Global North bias that exists within the governing structure of Athletics. It has summarized the issues that exist within the CAS, particularly its partiality and connection to the IOC and sports’ governing bodies. It has explained how gender regulation in women’s Athletics is biased against racialized women from the Global South, as exemplified by Soudarajan, Negesa, Chand, and Semenya’s stories.

The structure of sports governance and the choices that sport regulators make in drawing lines around concepts like “participation” and “fairness” need to be interrogated to unpack and dismantle the racism, nationalism, sexism, and other biases embedded at their core.

280. *Ibid* at para 33.

281. *Ibid* at paras, 61, 64.

282. See e.g. Ken Belson, “The Problem With Kaepernick’s Political Views: He Plays Football,” *The New York Times* (16 June 2017), online: <nytimes.com> [perma.cc/L4JY-7HXH].

