

# Unearthing the Complexities of Sex Testing Elite Female Athletes

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## Introduction

Sex testing elite female athletes is an important topic of debate. It combines sexism, cissexism and racism all in one category, illustrating the binary and sometimes narrow assumptions of gender, sex and female ability in sport. It demonstrates intersectional issues facing female athletes of colour and those whose gender performance does not fit the 'norm' for athletic performance. Sex testing of women in sport has been around since the 1960s. Originally, it was an invasive gynaecological test performed in front of a panel to determine if female athletes were 'female' enough to compete in the women's sporting category (Ljungqvist et al. 2006). However, the testing is one sided; only female athletes are subject to sex testing, to determine there are no added advantages afforded to a woman when competing against other women (Sullivan 2011). Alongside technological developments and changes in understanding of sex and gender, sex testing has changed to DNA and hormone testing, rather than gynaecological inspections (Ljungqvist et al. 2006). Nonetheless, this form of testing is still confronting and remains flawed due to the one-dimensional take on gender, based on the belief that hormones or chromosomes are the only definitive component to sex. The tests and regulations today are done by the International Association of Athletes Federations (IAFF) and the International Olympic Committee (IOC) (Sullivan 2011).

Sex testing has, on numerous occasions, disqualified women from competing as a result of uncharacteristic hormone or DNA results (Sullivan 2011). Elite athlete Caster Semenya is an example of this. She is an elite female athlete who won a series of races substantially and convincingly, whilst simultaneously being androgynous – that is, having the physical appearance

of both male and female sexes (Dworkin, Swarr, and Cooky 2013). These factors raised suspicion amongst her competitors in the 800m sprint category, prompting the testing of her sex in 2009 (Dworkin, Swarr, and Cooky 2013). This led to the discovery of her hyperandrogenism – a type of intersex variation causing high testosterone – resulting in her ban from competing (Padawer 2016). She has appealed and since been allowed to compete. However, more recently she has been banned again for high levels of testosterone, disallowing her to compete at the 2019 World Athletics Competition (Hamad 2019). She is an example of the flaws within the system of sex testing, as well as the racism, sexism and cissexism associated with sex testing and the treatment of elite female athletes. All of these aspects will be discussed further in this essay.

Sport is prone to debates of biological difference because it is a social space that relies on biology-based criteria for determining gender (McClearen 2015). This essay will explore the sexism, cissexism and racism facing female athletes as a result of sex testing testosterone levels in women. This essay defines sexism as discrimination based on the belief that a certain gender is inferior to another, in terms of skill, intelligence or ability. Mostly, sexism operates on the basis that women are the inferior gender to their male counterparts. Moreover, cissexism is defined as discrimination against those whose gender identity does not fit the binary social model, or discrimination based on someone not appearing to fit the binary social model based on their gender performance. Firstly, the essay will analyse the fundamental flaws of sex testing in determining biological difference and how this practice is sexist. Secondly, it will discuss the impact of said sex testing and gender questioning on elite female athletes. Thirdly, it will analyse the racism apparent within sex testing. Lastly, it will consider the media's role in perpetuating the evident sexism, cissexism and racism in sex testing, and the general over-sexualisation and criticism of female athletes.

## The Importance of Testosterone

Sex and hormone testing in sport is flawed due to its focus on testosterone's role in athletic ability. It is viewed by some scholars, such as McClearn (2015) and Karkazis and Jordan-Young (2018), as sexist and cissexist. As McClearn (2015) argues, the idea of testosterone being the 'key' to great athleticism is rooted in a sexist belief of the inferiority of women. This issue is inherently sexist because the sex of male athletes is not questioned; they are allowed to have as much or as little testosterone as they were born with. Contrastingly, for a woman to be considered a 'woman' in sport she must be lacking in testosterone (Karkazis & Jordan-Young 2018). Hence, women must be biologically 'lacking' in sporting ability compared to her male counterparts to compete in the female sporting category (McClearn 2015). This argument is fundamentally flawed for two reasons. First, it does not consider the non-hormone related advantages and disadvantages apparent in sport, such as training, physical advantages (for example, height or body weight) and skill which contribute to an athlete's success (McClearn 2015). If a female athlete were to compete against a man who is not an athlete, they would undoubtedly win regardless of the man's higher testosterone levels (Karkazis & Jordan-Young 2018). Secondly, by claiming testosterone as the basis behind one's gender negates all of testosterone's other functions unrelated to sex (McClearn 2015). Thus, hormone testing in sex testing is flawed as well as sexist within its assumptions of what makes an athlete 'male' or 'female'.

The assessment that having higher testosterone than 'normal' makes a woman ineligible to compete as a woman while sexist, is also cissexist. There are intersex variations, such as hyperandrogenism, where women have high testosterone levels. However, due to weak or no testosterone receptors, they are unable to use the said athletic power 'testosterone' would have otherwise given them (Dreger 2018). Nonetheless, these women are still being classified as ineligible to compete as 'women' in the eyes of sporting organizations like the IAAF, even though they cannot access the 'benefits' of testosterone (Karkazis & Jordan-Young 2018). Not only do

organisations such as the IAAF see testosterone as an unfair advantage but also an illness which needs to be cured (Karkazis & Jordan-Young 2018). This is cissexist in its assumption of women having to be lacking in testosterone to be valid, overlooking those who do not fit the gender binary. This sexist sport system ignores the bodies outside of normative categories, such as those who are intersex and transgender, exaggerating differences between men and women (McClearen 2015). Westbrook and Schilt (2014) argue that maintaining the safety of gender segregated spaces is a significant part of the debate about the regulation of transgender athletes. Further, it is an example of why transgender inclusion is starting to be seen in some sporting realms but not others. Moreover, Nyong'o (2010) calls for the denaturalisation of gender segregation and commercially driven sports that cannot function without bodies that are outside the normative beliefs of gender and sex. Thus, the fundamental basis behind sex testing, particularly hormone testing, is cissexist in its view of what makes a female athlete and its exclusion of women who do not fit this gender binary.

### **The Transgender Experience**

The bodies of transgender athletes are strictly policed in the elite sporting system, due to the biological 'advantages' that their 'previous' gender afforded them. McClearen (2015) offered insights into the paradox faced by transgender athletes, particularly those in contact sports such as the Mixed Martial Arts fighter Fallon Fox. Fox faced a paradox of both cissexism and sexism (McClearen 2015). As a transgender athlete, Fox faced cissexism from her peers and spectators who claimed she was just a man who wished to fight women. As a result, they believed she had an unfair advantage due to her previous experience in a male body and that she did not deserve to be in the competition, regardless of her full transition as well as frequent and strict hormone and sex testing (McClearen 2015). Simultaneously, she experienced sexism from those who claimed she was woman enough, on the basis that she had lost her 'advantages' of being male and thus was a woman because she was inferior to her previous 'male self' (Karkazis & Jordan-Young

2018). This paradox meant that if Fallon won a fight she would be considered by her peers as superior, due to her ‘advantages’ from her previous male body, while if she lost she would be seen as inferior and not woman enough to compete because she had lost to other woman (McClearn 2015). This paradox is apparent for most transgender and intersex athletes. It demonstrates the apparent sexism and cissexism experienced by those who do not fit the normative expectations of the gender binaries present within our elite sporting system, and the lengths they must go to in order to prove their validity and belonging to a particular gender classification.

### **The Impact of Sex Testing on Athletes’ Mental Health and Career**

As a result of the sex and hormone testing, female athletes can experience serious impacts to their career and mental health. As Dreger (2018) explains, the testing can take a professional toll on elite athletes, causing them to lose scholarships, sponsorships and opportunities if their sex does not fit the prescribed classifications. However, more than just their job is at stake. Many athletes experience a greater mental toll as a result of sex testing and gender questioning. Intersex athlete, Caster Semenya, explains that she ‘[has] been subjected to unwarranted and invasive scrutiny of the most intimate and private details of [her] being’ (Padawer 2016, p. 1). Moreover, Doyle (2013, p. 423) highlights that ‘what makes their stories catastrophic are the terrorising systems that take the fact of these women’s existences—rather than racism, sexism, or homophobia—as a conflict that must be resolved’. The testing often is the first-time athletes discover they have an intersex variation and as a result many question their gender identity (Dreger 2018). This invasive and public testing can distress the athletes so much that it causes serious mental health issues, as reflected in the attempted suicide of Indian sprinter Santhi Soundarajan, after her sex was questioned in 2006 (Dreger 2018). Therefore, sex testing and testosterone testing can have a serious impact on the mental health and career of a female athlete, particularly those with intersex variations.

### **The Role of Race in Sex Testing**

Race is also a key factor in sex testing and gender questioning. Often the athletes who are questioned are athletes from the Global South, who do not fit the western hegemonic idea of what a female athlete 'should' look like in terms of physical appearance of sex. Karkazis and Jordan-Young (2018) explains that the process of sex testing and physical inspections of the body is similar to the European gaze directed at black women's bodies, such as South African Saartjie Baartman. Moreover, Nyong'o (2010) highlights the likeness of gender testing to historical imperialism and intrigue about the black female body. Women who are tested are often from the Global South because they do not fit the hegemonic idea of what being a woman looks like and are questioned as a result of their 'otherness' (Nyong'o 2010). However, athletes from the Global South are more likely to have unknown intersex characteristics. They come from areas with less developed technology to detect it at a young age, as often occurs in Western developed countries with greater access to such technology (Karkazis & Jordan-Young 2018). While many argue that intersex athletes from the Global South have an unfair advantage due to higher testosterone levels, they do not consider their lack of facilities, resources and technology (Shalala 2018). Moreover, many of the features of the regulation list to indicate high testosterone levels are deeply subjective, considering only aesthetic judgments about femininity and masculinity (Karkazis & Jordan-Young 2018). This aesthetic testing is inherently subjective and biased in nature, allowing for ingrained racism and subconscious assumptions about hegemonic femininity to be prevalent in the sex testing process.

This racism is apparent when looking at the case of Caster Semenya. Semenya has hyperandrogenism, an intersex variation discovered through sex testing. While the sex testing to a degree did discover what some might consider an advantage, sex testing was conducted as she did not look like her white European peers. She was scrutinized for her androgenic look and how her gender performance did not match that of her white peers. Whilst Semenya is a particular

case, said racism was demonstrated after the Rio Olympics in 2016 where athlete Joanna Jozwik came fifth but stated she 'feels like [the] silver medalist' and that she was 'glad [she was] the first European and second white' (Critchley 2016). She went on to complain it was unfair she had to compete against the top three women, all of which were women of colour including Semenya (Critchley 2016) At this point, Semenya's hyperandrogenism was common knowledge. However, the two other winners had no intersex variation or known advantage, hence Jozwik's comment based on the 'unfair advantage' of race (Critchley 2016). This situation conveys the perception of women of colour in sport as the 'other'. It also illustrates how women in elite sports can subject their peers to a similar scrutiny to that of organisations such as the IAAF. Furthermore, all of Jozwik and her peer's comments were reported by the media, which in turn conveys the role of the media in perpetuating the racism and scrutiny of elite athletes of colour.

### **The Role of the Media in Perpetuating the Micro-Management of Elite Female Athletes' Bodies**

Whilst sports organisations play a key role in maintaining the gender binary and hierarchy in sport, the media also contributes to the gender binary, hierarchy and subsequent debate about sex and hormone testing of elite female athletes. Female athletes are often over sexualised and objectified in the media in an attempt to increase ratings of certain sports. For example, as seen by the uniforms of the Olympic women's volleyball teams and the women's NFL league (Clark 2015). This inherently sexist assumption from the media about why people want to watch women's sport reinforces the gender hierarchy, demonstrating the view that women cannot be great athletes worthy of 'god-like' status, similar to male peers, without wearing revealing clothing (Lal 2015). Moreover, this over-sexualisation stigmatizes women whose gender expression does not coincide with the media's version of femininity (Lal 2015). Creedon (1994) argues that the feminine and overtly sexual media represents a modern attempt to reinforce archaic values and stereotypes of femininity, and are a tool of patriarchal oppression of women

and their bodies. The media plays into this gender scrutiny by emphasising the heterosexual femininity of athletes. For example, publishing articles and cartoons which accentuate the 'otherness' of female athletes whose gender expression and femininity do not coincide with their over sexualised peers (Fitzgerald and Grossman 2017). This is particularly apparent in the case of Serena Williams. Whilst she is one of the best athletes in the world, she is simultaneously portrayed by the media as the 'other' and 'America's sweetheart' at the same time. She is an example of how the media can be nuanced when considering this issue and use women to their advantage by portraying them as either 'other' or 'great', depending on how they wish their reports to be received. Williams, just like most female athletes, has been subjected to hyper-sexualisation. At the same time, she is often referred to as 'aggressive', showing that the media's role in presenting Williams, and black women generally, can be racially charged or sexist. This exclusion of women whose gender expression or femininity does not fit hegemonic femininity in mass media contributes to the discourse surrounding more masculine women as 'other', and the act of sex testing based on aesthetic grounds (Karkazis & Jordan-Young 2018). Thus, the media, as well as international sporting organisations, contribute to the gender binary and hierarchy in the elite sport system, alongside the negative discourse surrounding masculine women.

The media's over-sexualisation of female athletes and its contribution to gender normativity in sport is additionally racist. The prevalent western hegemonic femininity present within the media contributes to the gender questioning of women of colour, due to their divergence from the media's representation of femininity. Women who have their gender questioned are women who do not fit the antiquated archetype of what a woman should be (Nyong'o 2010). It comes from the assumption that muscular women of colour are somehow less women and consequently more male (Karkazis & Jordan-Young 2018). As a result of their difference, they are portrayed by the media as the 'other', objectified, and more often are the women who have their gender questioned than white feminine peers (Gibbs 2017). As conveyed by Allen and Frisby (2017) the 'results... imply that coverage of... female athletes [is] focused on policing behaviors acceptable



for the female gender and whether or not women [are] adhering to [those] expectations'. Hence, when the gender expression or body composition of female athletes does not fit the media's western understanding of femininity, these athletes experience gender questioning by the public and their peers. As a result, they are sometimes subjected to sex testing by international sporting organisations.

### **Conclusion**

Female athletes, particularly intersex and transgender athletes, experience sexism, cissexism and racism as a result of sex and hormone testing (Karkazis & Jordan-Young 2018). The sex and hormone testing of testosterone is flawed and often does not take into consideration the different components of gender and sex (Dreger 2018). The committed focus on testosterone's sporting advantage is inherently flawed and sexist in its assumptions of women's inferiority in sport to men (Nyong'o 2010). Moreover, sex testing has a dramatic impact on the lives of the female athletes, those who are intersex or transgender, as well as the women who have their sex questioned because their gender expression does not align with the antiquated feminine archetype (Doyle 2013). Moreover, sex testing at an elite level can be racist and centre around women from the Global South, due to their deviation from the western hegemonic idea of femininity (Karkazis & Jordan-Young 2018). Lastly, the media dialogue about sex testing and gender questioning is often grounded in sexism and racism, due to the perception of western hegemonic femininity (Creedon 1994). Ultimately the questioning of intersex, transgender and gifted muscular female athletes stems from society's wish to tend towards stability, hence, the normative gender binary and hierarchy and the archaic perception of what constitutes one's gender.

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