



**The International Association of Athletics Federations (IAAF) regulation of testosterone on hyper-androgenic female athletes: an ethical exploration.**

**OKUHLE MPHAMBA,  
212533006**

**Supervisor: Dr Beatrice Okyere-Manu**

**A dissertation submitted in partial fulfilment of the requirements for the  
degree of  
Master of Arts in Ethics in the School of Religion, Philosophy and Classics.  
College of Humanities, University of KwaZulu-Natal,  
Pietermaritzburg Campus**

**August 2020**

## **Declarations**

I declare that this dissertation is my own unaided work. It is being submitted in partial fulfilment of the degree of Master of Arts (CW) in Ethics to the University of KwaZulu Natal.

.....

.....day of.....2019

Okuhle Mphamba

## **Acknowledgments**

I would like to express my sincere appreciations to my supervisor, Dr. Beatrice Okyere-Manu. You have been an incredible mentor, thank you for your invaluable guidance throughout this research, your advice, scrutiny, patience, and your immense knowledge. Your dedication, interest, and attitude to help all your students have been solely and mainly responsible for completing my work and it is much appreciated.

## **Dedications**

This dissertation is dedicated to my primary teacher Mr. Mncedisi Nowewe who recently passed away, (may his soul rest in peace). I thank God for the little time I got to know him. He has been such an inspiration in my life that always believed in me and supported me, Most of it all, I am grateful for the change he brought to our community and the lives he inspired. This is also dedicated to my family; thank you for supporting me through the course of my studies; thank you for your prayers and love that kept me going. I am most grateful to my parents, Nonkosinathi Mphamba and Thembekile Mphamba. I want to say thank you for your encouragement, for always seeing the greatness in me even though I sometimes doubt myself and thank you for being my greatest cheerleaders.

## **Abbreviations**

IAAF..... International Association of Athletes Federation

CAS.....Court of Arbitration for Sport

CEDAW.....Convention on the Elimination of all Forms of Discrimination against Women

DSD..... Differences of Sex Development/Disorders

IOC..... International Olympic Committee

UN.....United Nations

## **Abstract**

In recent times, hyperandrogenism has become a topical issue and has generated public interest. Studies have been conducted to answer the question of whether hormones, specifically testosterone in female athletes, do really have a competitive edge. The first regulation by the International Association of Athletes Federation (IAAF) and (International Olympic Committee (IOC) on hyperandrogenic females was passed in 2011, prior to the Olympic games in 2012. It was for female athletes who were hyperandrogenic, meaning those who had higher levels of testosterone. The threshold for the 2011 regulation was 10 nanomoles and covered all the Olympics track events. Due to the lack of evidence, the regulation was ruled out by the CAS (Court of Arbitration for Sport). As a result, the IAAF came out with the 2018 eligibility rule for female athletes that focused on females with the differences of sex development. The threshold for the testosterone level was 5 nanomoles, covering the events from 400 meters to 1 mile. Since this regulation was first introduced, there have been so many debates around it as it is against the IAAF charter and human rights. Using human rights theory, the dissertation explores the issues that emanate from the regulation. The regulation violates the rights of the athletes; among them are the right to privacy, right to health, right to bodily integrity, and the right not to be discriminated against. There is also the issue of fair play that the IAAF claim is more important in levelling the playing field for all female athletes.

The regulations raise a lot of concerns, especially in women and their bodies. It has been criticized in terms of validity, targeting a certain group of people, and enforcing the white notion of femininity on all athletes. The researcher found out that the regulations do not only discriminate against female athletes, especially women of colour from poor backgrounds. It also enforces the Western white notion of femininity, their idea of what it means to be a woman, and how a woman should look and behave. The regulations require those who are diagnosed with DSD to undergo medical procedures to be eligible to compete on the international level in the women's category. The medical intervention has been found to have some serious side effects and could result in health issues that violate the right of female athletes to health. The medical requirement clause does not give those athletes the choice to choose what happens to their bodies because at the end of the day giving up their dreams is not the option to some of them so, they are forced to undergo medical intervention that is not even necessary and that violates the right to bodily integrity. The right to privacy and dignity is also violated. The suspension after diagnosis makes people suspicious of the reason why a certain athlete is suspended, and the media eventually issue some reports of the reasons behind suspension.

**Keywords:**

Hyperandrogenism, Female Athletes, Human Rights, Testosterone. DSD, Androgen, IAAF.

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# **CHAPTER ONE: INTRODUCTION TO THE STUDY**

## **1.0 Introduction**

The IAAF eligibility rule has caused so many controversies among people. There were the 2012 regulations that were deemed discriminatory by the CAS. The reason behind all these regulations is to ensure that females who compete in the female category on the international level are '100% female' and those whose gender is in question would stop competing on a female category (Mahomed, and Dhali 2019:548). Gender testing and verification in women's sport was banned due to the fact that it is discriminatory and it has been criticized by many feminist scholars like Katrina Karkazis, (2018) Eva Linghede, (2018) and Grant Robert Lounsbury, (2017). Given the current regulation on women with differences in sex development (DSD), gender testing is required for female athletes who are suspected to have the DSD sex conditions in order for the regulation to be set in motion. The 2018 hyperandrogenism eligibility regulations focuses on female athletes with the DSD, which is the type of hyperandrogenism also referred to as intersex (IAAF 2018:3). The current dissertation discusses the IAAF eligibility regulation. It explored the regulation using the human rights theory. It is a non-empirical exploratory study, which uses secondary data, and also systematic review as the data collection and analysis method. It explains the history and the current position of the IAAF on females with DSD. The study also discusses the implications of the IAAF regulations on female athletes and the ways in which the human rights theory can inform the IAAF regulation.

### **1.1. Background of the study**

According to Burke, Castell, Casa, Close, Costa, Desbrow, Halson, Lis, Melin, Peeling, Sanders, Slater, Sygo, Witard, Bermon, and Stellingwerf, (2019: 74) IAAF is an international governing body for athletes aiming at maintaining order and listing of official world records and policymakers. The CAS (Court of Arbitration for Sport) evaluates IAAF's policy. Lately, there has been some controversy in their Policies on hyperandrogenism making people wonder if their policies are targeting African athletes. This is because it appears that their rulings only target some events that are dominated by African female athletes such as Caster Semenya.

Tyagi, Scordo, Yoon, Liporace, and Greene (2017) define testosterone as the type of androgen responsible for the development of male sexual characteristics. Females also

produce testosterone but in a smaller amount. They continue that the testicles in males and ovaries in women produce this hormone and it plays an important role in the human body. Hyperandrogenism is when a female produces an excessive amount of androgen (Tyagi, et al., 2017:16). According to Wells, hyperandrogenism is a medical condition (2019) that causes a person to produce high levels of hormones. While there are different forms of hyperandrogenism, the International Association of Athletes (IAAF) focuses on the form of hyperandrogenism in female with Differences in Sex Development (DSD), where they produce testosterone at much higher levels than the average females (Wells, 2019:2). Testosterone limit for athletes has been a contestable topic on social media since IAAF first introduced it in 2011. However, the law, as it is now, is not the same as it was in when it was first introduced, and it is believed that it targets a certain group of female athletes. Researchers like Karskakis and Jordan (2018) have openly criticized the policy as discriminatory.

This testosterone suppression rule was first introduced in 2011 by the IAAF but was rejected by CAS since the IAAF did not have enough evidence to support their claim that females with a higher amount of testosterone have more advantages than those with lower levels. IAAF was then given time to come with the evidence to support their claim. Karkazis (2018: 16) posits that the 2011 hyperandrogenism regulations covered all the different kinds of hyperandrogenism, and its threshold was 10nmol/L testosterone level on female athletes. According to Haines and Marcus (2019:90) the Indian sprinter, Dutee Chand, challenged the regulation on the ground that it discriminates against certain athletes based on their natural physical characteristics, namely the level of testosterone their bodies produce without any unnatural intervention. Dutee Chand argued that it was not the female with hyperandrogenism's fault that their natural biological traits confer an advantage over others. According to her, because they were born with the condition, the IAAF had no ground for prohibiting them to compete, given the fact that they did not cheat, or doped, which would really not be fair to others. She contended that the regulation was *prima facie* discriminatory as male athletes were not subjected to it. In her contention, she stated that the eligibility regulation disregarded the anti-discrimination provision of the IAAF constitution, the Olympic Charter, and the UN "Convention on the Elimination of all forms of Discrimination against Women" (CEDAW). After hearing the wide range of scientific evidence by the IAAF, the CAS concluded that Chand really came out with enough evidence in establishing that the regulation was discriminatory in placing restrictions on

female athletes due to their naturally produced testosterone (2019:91). The testosterone restriction does not apply in the male category but only female category, is discriminatory, and also that on the evidence presented, the IAAF failed to present proof that the regulation was justifiable. In the CAS's view, 1% of the difference in the testosterone levels between female athletes could not justify a separation between athletes in the female category, given the many other relevant factors that also affect athletic performance (Haines, and Marcus, 2019:92)

Unlike the 2012 regulation which covered the whole Olympic events, the current rule or the 2018 rule only applies to restricted events like 400m race, 400m hurdles, 800m race, and 1500m race. It also focuses on athletes with Differences of Sex Development or disorders of sex development (DSD). Kun Suk Kim and Jongwon Kim (2012:3) defines DSD as the condition where a newborn has unclear external genitals, while Sandy Olivesi and Aurelie Mantanola (2019:549) define DSDs as a generic term used to describe a variety of conditions present in sexual characteristics (such as chromosomes, gonads or genitals) that prevent individuals from being distinctly identified as 'male' or 'female' according to the typical. The current regulation requires any athletes who have a Differences of Sexual Development, that is, her level of testosterone is 5 nano-moles (nMol/L) per liter or above must be recognized by law as either a female or intersex. (IAAF 2018:3). According to the IAAF rule of 2018, female athletes are required to reduce their blood testosterone level to below five Nano moles per litre for a continuous period of at least 6 months by the use of hormonal contraceptives. This aimed at maintaining their blood testosterone level continuously. This regulation was approved by IAAF in March 2018 and was supposed to come in to effect on the 1<sup>st</sup> November 2018; however, it was paused due to the ongoing case opened by the South African athlete Caster Semenya challenging the rule. Athletes are given the choice to either take testosterone suppressants, or quit competing at the international and national level, or compete in male categories. (IAAF 2018:3)

Laurel Wamsley (2019) reported that Caster Semenya and Athletics South Africa (ASA) requested that the current IAAF regulations to be deemed invalid and void due to the issues arising from it, that is, the regulations being regarded as discriminatory, unnecessary, unreliable, and disproportionate. The IAAF contended that the DSD

regulation does not infringe on any athletes' rights, including the right of equal treatment, but it is justified and proportionate since it ensures fair and meaningful treatment and competition within the female classification. By a majority, the CAS dismissed the requests on the grounds that Caster and the ASA failed to establish that the DSD regulation was invalid. The panel found out the regulations are indeed discriminatory but the majority felt like it was justifiable, necessary, and was a reasonable means to achieving the IAAF's aim of preserving the integrity of female athletes in the restricted events. However, there were some serious concerns expressed by the CAS on the future practical application of the regulations (Wamsley, 2019).

Mahomed and Dhai (2019:548), on the history of gender testing, mention that the ancient games started in 776BC. The first modern Olympics began in 1896 but women's participation in the Olympic Games started in the 1900s. It was about that time when the IOC implemented measures to ensure that participants who competed in a female category were undeniable females due to the emerging fear that some athletes did not look like females. They were too fit to be considered females, and also concerns that some men were masquerading as women to win medals. Initially, testing required humiliation of female athletes where they had to be paraded nude before the panel of doctors who were verifying their sex before the games. In 1968, gender testing was compulsory but in 1998, the compulsory aspect was terminated due to its discriminatory and humiliation traits. Nevertheless, the policies regarding eligibility in female athletes' competition are still implemented and those policies require gender verification. The IAAF had a policy in 2006 on gender verification, which was similar to that of the IOC 1968. It is the same policy that was still in motion in 2009 when Caster Semenya broke out, then in April 2011; the new IAAF testosterone rule came out, and was challenged by Dutee Chand, who was banned from performing in 2014 commonwealth games in Glasgow, due to her level of testosterone. Afterwards, the current 2018 eligibility rule by the IAAF, which was also challenged by Caster Semenya, and that 2018 rule was the response to the CAS 2015 ruling. After the CAS ruled against the IAAF in 2011, the IAAF was given 2 years period to come up with the evidence supporting their claims on the testosterone in female athletes (Mahomed, and Dhai, 2019:550).

Gender testing on female athletes has been an issue in the Olympics. The new policies are believed to have moved away from sex tests and adopted the hormonal approach, which is

considered less invasive compared to the actual gender/sex testing. When doing the hormonal testing approach, blood samples are used to check the levels of hormones in the blood as most hormones can be detected in the blood. Hormonal testing is too an invasive method similar to buccal smears except that it tests for the nanomole per litre (nmol/L) levels of testosterone within an athlete's blood serum, and those nanomoles should be below 5 nMol/L for the athlete to be eligible for the women's category at the international level. (Lounsbury, 2017: 111). However, this thesis is not about gender testing, it is about the recent IAAF's regulations on female athletes with disorders of sex differences where they are forced to reduce their testosterone levels through medical intervention to compete in the women categories at the international level. The discussion above was to explain the history of gender testing and the reasons why it is no longer allowed in the sport, and also why hormonal testing is still part or at least similar to gender testing as it will be done only on female athletes, specifically those who are suspected to have sexual disorders. Like gender testing, it involves poking; blood samples are required and taken to the lab to check the levels of hormones. It gives the suspected athletes no choice, as they are required to take tests to prove their eligibility as females. It also intrude in their privacy.

## **1.2. The motivation for the study**

Having been following athletics for years now, the researcher has noticed that female athletes are closely scrutinized or judged in terms of their behaviour, performance in the Olympics, and the way their bodies are made up. Since 2009, Caster Semenya has been a subject of gender testing and gender questioning on whether she should be categorized as either a female or an intersex. She has also been declared as having more advantage over other female athletes for the reason that she has more testosterone. The Indian athlete, Dutee Chand, was on the other hand, banned from competing at the Commonwealth Games because she refused to comply with the ruling to lower the level of her testosterone. Chand challenged the ruling and won the case in court (Karkazis, and Jordan Young, 2018: 579).

The IAAF regulation does not only discriminate against females, but it discriminates against women of colour because athletes who have been the subject and faced scrutiny under the regulations are all women of colour, all from poor backgrounds (Amy Chinn, 2012:1293). The regulation raises so many ethical concerns including the fact that it objectifies women with DSD to media attacks, making it look like there is something

wrong with them or with their bodies, to such an extent that they need to be fixed to fit in to society. Shawn Crincoli (2011:5), argues that the IAAF regulations are clear efforts to shorten the difficult process of deciding who should participate on women's sport, singling out the production of the androgen alone as the grounds of exclusion and determining the line that a female is too much to perform. Since other natural advantages such as height and lung capacity to hold breath are not regulated, the IAAF regulations construct standards on what should be seen as female and what is not female enough as the basis for exclusion in women's sport. Female athletes with higher testosterone according to the regulation are not 100% females as the IAAF sport governing body claim that testosterone is a male androgen and that females should have lower testosterone. Exclusion in terms of advantages produced naturally by a body is not fair. IAAF supports their eligibility regulation on the grounds of levelling the playing field for all female athletes. The regulations, however, do not maintain fair play or level the playing field, instead, it tries to slow down the athletes that are affected by it and pathologize their body.

### **Key Research Questions**

- What are the ethical issues that emanate from the IAAF's DSD regulations of testosterone suppressants on hyperandrogenic female athletes?

#### **1.2.1. Research Sub-Questions**

1. What rights do the IAAF DSD regulations infringe?
2. What are the implications of the IAAF regulation on DSD of female athletes?
3. How can the theory of human rights assess the rightness and wrongness of the IAAF regulations?

#### **1.3. Key Objective of the study**

To explore the ethical issues that emanates from the IAAF's DSD regulations of testosterone suppressants on hyperandrogenic female athletes.

##### **1.3.1. Objectives**

1. To study the rights that are infringed by the IAAF DSD regulations



2. To examine the implications of the IAAF regulation on DSD female athletes.
3. To explore how human rights theory can assess the rightness and wrongness of the IAAF regulations

#### **1.4. Methodology**

The study used an Exploratory and descriptive form of methodology. The study was conducted using the information available in the library and in online articles.

This study is a descriptive Research study, which described the ethical issues that the regulation poses. The descriptive part of the research describes details of the regulation and how female athletes are affected by the regulation. It describes the rights of female athletes that are being infringed by the regulations, and also how the regulation is discriminatory against African women. Descriptive research is used to describe the phenomenon. It is the type of research that is best at answering questions based on the ongoing events of the present and systematically describes the facts and characteristics of a given population or the area of interest (Burns, and Groves, 2001: 675). Using secondary sources, the current study is based on a systematic literature review as the data collection method. This involves planning a well thought out search strategy, which has a specific focus or answers the research question. The review will identify the type of information searched, critiqued and reported within known periods. The search terms, search strategies (including database names, platforms, and dates of search) and limits will be included in the review. A systematic literature review aims to address the problems by identifying the findings of all relevant studies addressing one or more research questions. (Dewey, and Drahota, 2016). As mentioned above, this study involves a systematic process to locate and address the research questions. A systematic review is like a piece of research on its own and by its nature, and it is able to address many broader questions and issues. The systematic literature review is achieved by searching and locating the studies both the library and the online sources addressing my research questions, then analysis the information. The library sources may include thesis, peer-reviewed journal articles, books and reports.

The approach for the study is critical realism. This takes the ontological position that proposes that domination and oppression are often as the result of dominant ideologies based on illusions, distortions, and myths about society and how it operates, and that they

empower some groups to exploits others. (Du ploy-Cilliers, 2014:33). Critical realist questions some norms, practices, and ideologies, since they believe that our reality is a social construct, are what we ascribe to, and therefore, not natural. Du ploy-Cillier continues that for critical realist, the role of a researcher is to uncover those structures, expose and analyze them to empower people to free themselves in those forms of oppression and exploitation. (Du ploy-Cilliers, 2014:33). On the issue of testosterone suppressing drugs that only applies to female athletes, critical realists would argue that the truth and social reality exist through several immaterial mental constructions that are experientially and socially based and dependent on the individual or groups holding the construction. What we think we know is social constructed formed through an individual or social group's experience of reality. The critical realist tries to untangle and criticize the regulation on the ground of social construction, like the fact that female athletes should have less testosterone, should be less strong than men, that those rules are not natural and are all socially constructed. They will consider normal the fact that the regulations exploit female with DSD while empowering female athletes.

Systematic review as methodology in this was used, in terms of the search using key terms or texts, once the list of sources was found, it was checked for relevance to the topic, and the methodology, which suggested in using the sources that are still relevant not outdated sources as the study was about the regulations which is of recent. Literature for the review chapter was identified by the researcher from the knowledge on the topic and through systematic quotation, and this was achieved by analysing the reference list or bibliography for each study, and through google scholar. The key search terms: hyperandrogenism, DSD, and IAAF regulations were used when searching and the results appeared which were then examined for relevance. The relevant literature or chapters on the literature we read and re-read with the aim of understanding how they should be applied.

### **1.5. Structure of the thesis**

**Chapter 1:** This chapter will provide background information, which will cover the background, to the study, the key research question, sub-questions, objectives, theoretical framework and methodology.

**Chapter 2:** literature review. This will consist of a systematic review of available information about hyperandrogenism on female athletes. The available sources will include book, journals, articles and all the information available online, both for and against testosterone supressing drugs on female athletes.

**Chapter 3:** Theoretical framework. The theoretical frameworks explains the research problem, this chapter is important because it a foundation for the analysis

**Chapter 4:** This will be the analysis chapter I will analyse the IAAF regulation of testosterone on female hyper-androgenic athletes, using the human rights theory.

**Chapter 5:** This will be the concluding chapter, with the summary to the research, recommendations and bibliography

## **1.6. Conclusion**

Rules and policies are very important in each and every organization for they are implemented to maintain order. Without policies, there is chaos nevertheless as important as those policies are, sometimes they can be exploitative toward people they are directed to. That is where human rights fit in to protect people against unfair policies, whether implemented by states or organizations. As mentioned above, the IAAF hyperandrogenism eligibility regulations have been criticized as discriminatory as it applies in females, thus, have caused a lot of controversy with people arguing that it should be set in motion as it balances the playing field in women's categories in sports. Also, that it is unfair for women whose testosterone is at the normal levels to compete with those with high testosterone. Meanwhile, others argue that every policy that violates human rights should be banned.

This chapter provided the background information to the study. It was divided into two sections; the first section was the background information of the study, the research questions, and objectives; the second section was the methodology. It tried to explain the background information to the study, the IAAF hyperandrogenism eligibility regulations and its background, what it is now and what the previous policies were, and the research questions and objectives. Lastly, a brief description of the methodology was given. Here, the research method for the study and how the data is collected and analysed were explained.

The next chapter, Chapter two, is the literature review which reviews the available literature to the study. Following this is then chapter three, which is the theoretical framework that explains the chosen theory, which in this case, is the human right theory. Chapter four is the analyses, which assesses the IAAF regulation using the human rights theory. The last chapter, chapter five, is the concluding chapter, which provides the conclusions, summary of the study, and recommendations.

## **CHAPTER TWO: LITERATURE**

### **REVIEW**

#### **2.0 Introduction**

The previous chapter was the background information, where the background of the study was stated. There was also an introduction to the research problem, research questions, and research objectives. What the IAAF regulations is about, when and why it was introduced and also athletes affected by it were explained. In this chapter, the study reviews relevant literature to the study. The literature is presented in thematic form, which according to Moira Maguire and Brid Delahunt (2017:333) is a process of identifying patterns and themes within the study, doing that with the aim of identifying the important and interesting themes, and patterns, and use them to address the research or say something about the issue. The reason behind presenting the literature in themes is because of the organized nature of theme and how clear it makes the review. The chapter begins by explaining what testosterone is, as it is the term frequently used throughout the literature review. This is followed by an explanation of what the fair play theory is in sport. Afterwards, authors or researchers who are for and against the IAAF testosterone regulation are grouped together. Lastly, there is a review of the works of feminist in female sports with the differences of sex development (DSD) which mostly focuses on the case of Caster Semenya.

#### **21. Defining Testosterone**

Testosterone is the most important circulating and naturally occurring androgen both in men and women. Men are known to naturally produce more of this hormone as it is originally produced in the testicles while women produce a certain amount which is far less than men. In women, it is believed to be produced in the ovaries. There are some conditions in women when this kind of androgen is produced to almost the amount in men, conditions like the difference of sex development where the sex of a child is atypical and hyperandrogenism. There is also a condition in men when this kind of androgen is too low known as Testosterone Deficiency syndrome (TD) or the Low Testosterone (Low T) which may result in reduction in muscle bulk, increase in body fat and loss of body hair. In both men and women too much testosterone can result in infertility (Sowers, McConnell, Randolph, & Jannausch, 2001). This hormone also plays an important role in metabolism and has a major influence on body fat composition and muscle mass in male, as it ensures that muscles and bones stay strong during and after puberty and also enhances libido both in men and women (Kelly & Jones, 2013).

## **2.2. Fair play: the ethics of sport**

Loland, (2002:32) defines the principle of Fair play as the moral ideas of the value and meaning in sport and those moral ideas are as old as the sport itself. The fair play ideal has

Roman-Celtic roots. The Roman occupation of England brought a certain group called the sons of affluent citizens who pledged to act in agreement with a rigid moral code. Honourable and just conduct in battle was held as a basic characteristic of a good soldier. This concept gradually developed as a standard referee for moral rights and good behaviour in competitions. Fair play is the attitude towards the game, to the competitors, and the officials. It is the quality of opportunity and respect for opponents as person and partners. Fair play according to Joanna Piecha and Magdalena Kunysz-Rozborska (1994: 214) is an important standard of ethics in sport, and outside sport, it is a principle that is also adopted by both the IAAF and IOC. It sets out the rules on how athletes should behave, how they should treat other athletes, and how they should look after themselves in terms of health. It is the principle that recognizes that athletes can do anything for victory, cheating, and brutal behaviour towards their counterparts, and that would result in the game losing its elements of pleasure. Fair play calls for equal opportunities in competition, avoiding any unfair advantages, and winning with respect for the dignity of the defeated, without causing extreme damage to him or her. It is based on the honour of loyalty, which can also be primary to an individual, regardless of their position in society. Fair play rules are of particular importance today because the desire of athletes to win at all cost, and at the expense of their health and sometimes their opponent's health, causes a kind of drainage of ethical values in sport, and also the media that broadcasts the images of bad behaviour in sport and even criminal acts.

According to Henne (2014), Fair play is advocated as an important value in sport. This principle has roots in the foundation value of amateurism. In the 1970s, under this ethic, the athletes were not to receive payments for their work, and they would compete in the spirit of chivalry, brotherhood, and fair play, united by the bond of loyalty, a bond stronger than that of friendship. This ethic of fair play is still articulated in Olympic Games even though there is no longer an amateurism requirement, but rather the idea of purity and naturalness, where athletes are not allowed to use drugs and have an unfair advantage over others. The regulation of doping in sport is one of such applications, drug testing, and recently, sex testing, chromosome or hormone testing (Henne, 2014:790). Fair play principle is the ethical principle in the sport that was introduced to make sure that the athletes do not behave in an unethical way during the competitions. It ensures that there is no discrimination in sports, and everyone gets a fair chance and no one is left behind. It ensures that no one is discriminated against because of their socio-economic background,

race, religion, and ethnicity. The principle is all about fair winning, and also aims at ensuring that no one has an unfair advantage.

According to Robert Simon, Torres Cesar, and Peter Hager (2018), fair play is about fair winning in sport. They believe that winning should not be the athletes only aim but also the focus in the competition and overcoming the challenges presented by worthy opponents. They go on to argue that performance-enhancing drugs are not only harmful but also unfair to other competitors who do not use them. The athlete wins through cheating and unfair means. The fair play principle in sport is important because it deals and addresses the ethical and moral issues in sport, making sure that every athlete wins fair. (Simon, Torres, and Hager, 2018: 22). The principle of fair play in sport is non-discriminatory. It states that the opportunity to perform in sport should be for everyone, be open to all regardless of ethnic background, race, economic background, sexual orientation, and religion. The principles are against cheating in sport, e.g., using drugs to win. However, the question here is does genetic present unfair winning in sport? It is important to note that those sportsmen or women or athletes, especially, female athletes with high testosterone levels on this issue, work as hard as, or even harder than those with normal levels of testosterone, is it fair to claim that their genetic advantage is unfair to those who are normal?

### **2.3. High testosterone in sport, and unfair advantage**

Katrina Karkazis and Rebecca Jordan-Young (2012) believe that the claims made by the IAAF on testosterone giving female athletes competitive advantage are merely assumptions as there is not enough scientific evidence to support the notion. They argue that even if the naturally occurring testosterone did give the athlete an advantage, it is not advantage that is unfair. The question is why the IAAF targets testosterone out of all the natural occurring advantages. They also argue that the athlete's excellence is the result of biological advantage otherwise they would not make it to the international level of the competition. Thus, setting hyperandrogenism apart from other biological advantages is not only illogical but also unfair. Female athletes who are legally considered female should be allowed to compete with their female counterparts regardless of their hormonal levels provided the hormones are naturally produced by their bodies. They also raise the concern of athlete's health hazards that may come with the treatment they are forced to undergo in order to be accepted as full females and be able to compete with other females. Also, is the harmful effects that come with gender testing and evaluation, both socially and medically.



Karkazis and Jordan-young (2012: 13) continue arguing that athletes should not be forced to take medicine to treat what is natural, and not harmful to their bodies, forcing them to medical intervention is to imply that there is something wrong about what their bodies are made of. There is a lot that makes an athlete competitive and as such testosterone should not be singled out. It is argued that the IAAF does not have enough evidence to prove that testosterone really has a competitive edge.

Maayan Sudai (2017) does not believe that testosterone really provides a competitive edge on female athletes. Why is testosterone giving the greatest importance out of all the traits individuals have that make them stronger and faster than others? Sudai also supports Karzakis and Jordan's argument that:

hyperandrogenism should be viewed as no different from other biological advantages derived from exceptional biological variation and list documented biological conditions that provide an advantage in certain sports, like runners and cyclists who have rare mitochondrial variations that give them unusual aerobic capacity; basketball players with acromegaly, a hormonal condition leading to large hands and feet, etc. (Sudai, 2017:68).

High testosterone levels in female athletes should not be treated any different from other advantages athletes have. However according to Bhasin, Storer, Berman, Callegari, Clevenger, Phillips, Bunnell, Tricker, Shirazi, and Casaburi,(1996:4),high testosterone levels in female give them higher muscle mass and stronger bodies than their average female counterparts. This makes female athletes with high testosterone more like a male than female and makes them withstand more extreme training and environment effortlessly. Nevertheless, these advantages come naturally. Also, female athletes should

not be compared to male athletes irrespective of their hormonal levels, and that individuals respond differently to the same amount of testosterone. According to Karzakazis and Young, “testosterone is just one element in a complex neuroendocrine feedback system, which is just as likely to be affected by, as to affect athletic performance” (Karzakazis and Young, 2012: 6). They should not be forced to compete with male athletes. They may have a performance advantage however, it does not mean that those advantages are not fair; it is what they are born with and should not be changed but rather be embraced

Comparesi and Maugeri (2015) argue that the IAAF policies place the eligibility to compete within the discourse of fair that is situated within a medicalized notion of sex. Like Kidd (2018), Comparesi and Maugeri (2015) argue that answers to who should and should not compete are not to be found through the lens of science or medicine. The IAAF eligibility policies run against the fair play principle that they advocate for. Thus, depriving female athletes with hyperandrogenism the spirit of sport, the possibility to push their bodies to their limits them and deprive them opportunities. This is due to their talent and their dedication not because of the unfair advantage the IAAF believes they have. Not allowing hyperandrogenic athletes to compete is the failure to achieve the ideal fairness they aim for. This Forces the affected female athletes to take medication to enable compete, which does not only pose health issues, but also financial issues as the cost of medicine are on the athletes. An example is the case of Caster Semenya and Dutee Chand, both of whom came from a poor background. Dutee Chand the Indian sprinter born to a weaver who make 8 dollars a week and Caster Semenya who grew up in the village of Limpopo are both affected, and they are both from poor background (Comparesi & Maugeri, 2015:56). Comparesi and Maugeri raise many issues that arise on the IAAF regulations, including the issues of fairness, where they argue that the regulations contradict with what the IAAF stands for: the issue of medical intervention, where they argue that it is not only wrong as it raises health concerns but also pricey and most athletes affected by the regulation would not afford the medication: and also there is the issue of exclusion which is also against the fair play principle, where hyperandrogenic females are deprived the chance to prove their talents, because it is deemed unfair.

Bruce Kidd (2018: 789) questions the IAAF’s claim of fairness, as the IAAF claimed that their decision in the regulations was not driven by the policy of gender verification and that they had abandoned that policy. They claim they are rather motivated on the ground of fairness of women’s competition, and that high testosterone gives to such women an unfair

advantage. He argues that humans are not just the number of hormones and that the understanding of human biology is not enough to judge humans' sexuality and human societies. He believes that the definition of gender in sport should not only require biology or science but also, social, legal, ethical consideration and biophysical. It should recognize the different socioeconomic backgrounds, political, cultural and individual diversity, and also promote acceptance and respect for that diversity. He continues that the IAAF put too much responsibility in medical and scientific commission, and that they should remove those responsibilities and transfer them, one: for gender definition, to women's and athletic commission, and those of fairness to athletic and ethics commission athletes, instead of making everything about science (Kidd, 2018:789).

According to Haynes and Marcus (2019:97) hyperandrogenism regulation is objectionable because it discriminates against women by subjecting them to a restriction that does not exist for men. There is no naturally produced testosterone above which men would be considered to have an unfair advantage to compete against other men. It is true that male athletes do not suffer similar scrutiny that women undergo. This is likely because of the socially constructed view of men and women, that is, the view that men are naturally strong while women are weak. As a result, if the society sees a physically strong woman, she is frowned upon. According to Alsop (2002) it is even worse with athletes. They (female athletes) are not allowed to be weak or allowed to be as strong as men can be. The society celebrates little masculinity they have but at the same time frown upon it (Handelson, Hirschberg, & Bermon, 2018: 818). The higher the testosterone level for male athletes the better and they are celebrated for it (Bermon et al., 2018: 818). One wonders why it cannot be the same with women. They should be seen as athletes who, after all, also need all the natural advantage they can get.

Daniel Heinz (2019) believes that the IAAF is just obsessed with hyperandrogenism because of the way they went about the whole issue of hyperandrogenism eligibility rule of which she believes that after losing the case to Dutee, and when asked to support their claims they only came up with the new term 'levelling the field', which focuses on female with differences in sexual development. There is also the fact that it only applies to certain track field events from 400 metres to 1 mile, and that it affects a certain group of runners only. The IAAF study was examined by Roger Pielke, who found the study to be based on a flawed data and unreliable results, resulting in the IAAF refusing to release the data associated with the study to other researchers. Since the policy only affects 400 meters to 1 mile events, Heinz claims that the IAAF paper states that more than 400 meters to 1 mile

events will be affected, but the policy states something else. Heinz (2019:78) believes that it qualifies for the assumption that the IAAF policy targeted Caster Semenya. The IAAF have been advocating the rights of female athletes for, as one of their purpose is to respect and protect them, it would be disappointing if really their policy targeted certain women, and that it is not what they claim it is. It is too believable that the regulations targeted Caster Semenya since all of the events she competes in and the one in which she is the current champion are covered by the regulation. Thus, it makes one wonder why that is so. It is also quite hard to believe that the group of doctors and lawyers sat down and planned the regulations just to exclude Semenya from competing. One wonders if there is something about her that makes them so determined for her decline in the Olympics.

#### **2.4. Ethics of medical interventions**

Karkazis and Carpenter (2018) argue that medical intervention of lowering testosterone can result in many side effects in the well-being of the athletes, and those side effects are a medical concern. Surgery can cause irreversible harm, like compromising bone and muscle strength and risking chronic weakness, depression, sleep disturbance, poor libido, diabetes, and fatigue. The regulations state that those who do not meet the requirements of the required level of testosterone and refuse to lower their levels may have to compete with men. Karkazis and Carpenter criticize the regulations saying that those covered by these regulations are women. This forces them to compete with men, violates lifelong legal, and social identity as a woman, and that it publicly placing them in the category that they do not belong to is a public judgment of their sex and gender (Karkazis and Carpenter, 2018: 585). According to Sonksen, Malcolm, Ferguson-Smith, Bavington, Richard, David, Catlin, Kidd, Davis, Davis, Edwards, and Tamar-Mattis, (2015), there is a serious error in the IAAF's claim that their regulations' purpose is to protect the integrity, the health and the private life of the female athletes with DSD hyperandrogenism. They believe that even though surgical and medical intervention were deemed necessary by the IAAF for fair play on hyperandrogenic female athletes, those interventions are unnecessary as they bring about a lot of ethical and health concerns. They show this by citing an instance of a surgery that was done on DSDs female athletes, where four athletes agreed to the procedure. According to them "each athlete underwent partial clitoridectomy with a bilateral gonadectomy, followed by a deferred feminizing vaginoplasty and oestrogen replacement therapy in order to continue competing in the women's category". Sonksen, et al, (2015) Argue that the removal of gonad and clitoral mutilation for a purpose of eligibility to women's category in sports is unethical and that there are short and long term effects in using hormonal screening programs (Sonksen et al., 2015:326). In as much as

the 2018 IAAF regulations do not really require surgery; there are still health issues that are caused by the medical intervention to lower one's testosterone. Sonksen et al. (2005) argues that changing one's nature using medicines comes with serious side effects.

According to Seema Patel (2019), athletic excellence is the product of different biological factors and material resources that influence the performance and the athletic advantage. He argues that the IAAF regulations seek to separate the androgen (testosterone) from other biological factors that are not included in the regulations but might also influence the athlete's performance. He considers this attempt to be illogical and unfair. The regulations raise concerns about balancing the aim of creating fair playing field for female athletes, against the aim of ensuring fairness for the individual athletes. The regulations also fail to protect the rights of those affected by it, such as the rights of privacy and confidentiality, as they have been real documents for those who had undergone the evaluation and sex testing, and the fact that they suspend athletes who undergo treatment, which raises assumption from the media and society. They undergo treatment that might be medically and socially harmful (Patel, 2019:78). The regulation raises health concerns since it is believed that medical intervention has some serious side effects. It seems like the IAAF places more importance over the claim of levelling the playing field, over the health of the affected athletes, and fairness for the individual, as fairness means that all female athletes should be given a chance to compete, as long as their testosterone is naturally produced by their bodies. Fairness forbids cheating and promote winning fair and square through hard work, dedication and training.

## **2.5. The scientific basis of the regulations**

Roger Pielke, Ross Tucker and Erik Boye (2019) believe that the IAAF testosterone regulations are based on a flawed scientific foundation. After the 2012 IAAF rule on hyperandrogenism was dismissed, the IAAF was given a certain period to do more research and correct the errors it had. In 2019, it was introduced again, and Pielke believes that the IAAF findings still have some errors and as such it is unreliable, and that the IAAF does not have reliable data to ascertain their findings (Pielke, Tuck, & Boye, 2019: 22-24). On the other hand, Jonathan Cooper (2019:36) argues that the whole regulation by the IAAF has an agenda because not all the race categories included in the regulation athletes with higher testosterone levels have an advantage, hence, the reason why they were included in the regulations is unknown. The cut-off point for testosterone in the blood is 5nmol. The reason for that is unknown, just like who decided that and why. Like Sudai, (2017) Copper (2019), it is difficult to see why one's natural biological advantage is unfair without having evidence of the advantage that other natural biology plays. Does testosterone provide a significant advantage beyond other genetic advantages, Cooper (2019:14-15) asks.

According to Erik Vilain and Maria Patiño (2019), the current IAAF regulations lowered the starting point of testosterone from 10nmol/L to 5nmol/L although its application is limited to a smaller number of events. The new eligibility rule is significantly more restrictive than the 2012 one with no convincing scientific argument for either the new starting point of testosterone level or the selection of the events. There is no evidence that proves 5nmol/L or above this level of testosterone in the blood produces a competitive edge, so, the choice of this starting point is random. The IAAF took its decision based on the reviews that state that females with 5nmol/L testosterone in their blood are intersex or the ones with other sex development disorders. E. Vilain and M.J Martinez Patino continue arguing that the eligibility rule is not generous as it claimed to be, and that changing testosterone limit from 10nmol/L to 5nmol/L does not make it generous. Women did not choose to be born with both conditions, and the underlying reasoning preserves the idea that women with the DSD conditions are not 100% women. The performance of athletes with high and normal testosterone has not been shown to be significantly different in some restricted events like 1500m, but it has been to some events that are not in the list in the regulation, for example, hammer throw and pole vault events, which raises more questions about the neutrality of the regulation. If the policy is legislated, it will create an absurd sex-shifting situation, that is, it is possible for the same athlete to be eligible to compete in one event as a woman and in another event as a man, since the regulations cover only certain events (Vilain & Patiño,

2019:1504). Science has not been reliable in justifying the discriminatory policies, take Semenya and Chand for example, who were competing in women's events then were told to be ineligible, then eligible again, then ineligible again, all due to the fact that science does not get the facts straight and fails to establish their claims.



According to Bermon, Vilain, Fénichel, and Ritzén, (2015). Testosterone levels in the blood may not accurately predict female athlete's performance but with the experiment done by sports scientists, there is enough evidence that the high amount of testosterone in the blood does increase athletes' performance in females. There are female athletes with a high level of testosterone like male athletes, but they have been shown to have a disadvantage as females when competing with male athletes. So, limiting their testosterone level, with medicine or surgery to remove the source of the hormone would make it fair for other female athletes. They cannot compete with male athletes and should not compete with females either if the testosterone level is not dropped to a normal level for females. Therefore, the current regulation by the IAAF is important as it guarantees fairness and respect for all. Bermon et al. (2015: 829) also believe that it is the responsibility of the sport governing body to do their best to guarantee a fair playing ground. In as much as hyperandrogenism gives female athletes some advantages over other females, there is no reason why the advantage is deemed problematic. It is their natural hormones produced by the bodies and not a case of doping. Also, changing one's biological makeup because they are better and stronger than others is not ethical. It only weakens them so that they can be accepted by society.

Bermon (2017) states that the implementation of female eligibility with hyperandrogenism policies by major sport governing bodies to enable one to compete in women's sport has raised a lot of attention and it is still a controversial issue. Biological limits of sex are not neatly limited so, regulating eligibility policies for women with both clinical and biological hyperandrogenism will always be criticized because biological sex is not neatly divided into two in the real world. It is the responsibility of the sport governing bodies to make

sure, that the playing field is levelled for all athletes. The study conducted studying athlete's endurance in sport, reported that hyperandrogenic subgroup showed more advantages as they have a higher total bone mineral density and upper to lower fat mass as well as the highest maximal oxygen uptake and the overall performance value, than athletes with normal androgen level lacked (Bermon, 2017:249)

## **2.6. Feminist view on Caster Semenya**

Eva Linghede (2018) explored hyperandrogenism as a key to understanding binary gender using the feminist posthuman understanding of gender. She argues that the hyperandrogenic female athletes crash or challenge the pre-programmed binary nature of gender in society. The IAAF and IOC use technology to enforce those gender binary or gender norms. Female athletes who challenge those traditional gender norms have through the last century been subjected to humiliation and medical examinations, requirements to undergo certain processes and even change their biological makeup to fit into the scientific category of women. They also receive offensive media attacks. The technologies that are used to keep the competition fair and morally sound have worked perfectly well as guards so that athletes do not transcend the traditional gender categories and become the characters who challenge the male-female dichotomy (Linghede 2018: 577). Linghede believes that the IAAF regulation is beyond levelling the fair playing ground for female athletes but rather a feminist issue. It is about making sure that the social gender norms stay intact. The suppressing of hormones for those hyper-androgenic females are as a result of the traditional gender binary, and technology and science are just used as an excuse. She also argues that there is more at stake than just testosterone levels and fairness. If that was the case, it would have been equally important to determine whether men with high levels of endogenous testosterone have an advantage over men with lower levels of testosterone. IAAF policies only deal with women, not men.

Lindsay Parks Pieper (2014) looked at gender testing in sport using Caster Semenya's case, where she says that although gender testing was terminated in 2000, the IAAF authorities warned that they would test any female that raises suspicion. Like those of the 1960s some examination was done without the athletes' knowledge. Take for example, an Indian middle-distance runner Santhi Soundarjan, who in 2006 learnt from the news that she had failed the examination, got stripped off her medals and later attempted suicide (Pieper, 2014: 176). Three years later, South African Caster Semenya was on the public radar after she won the 2009 championship in the 800 metres race. She was criticized by those she defeated who accused her of being a man. Her powerful build, improvement, and deep voice were all the

sources of suspicion. This led the IAAF to request a scientific verification of her sex. Caster Semenya's public scrutiny and the focus on her genitals reflected that of Saartjie Baartman's exhibition by the Europeans. Caster Semenya is another South African targeted by Western scientists. The 2012 IAAF hyperandrogenism regulations were influenced by both Semenya and Soundrjan's physical appearances and susceptible to racialized sex/gender norms. Sex testing/gender verification, whether based on anatomy, chromosomes or testosterone, criminalizes women who do not subscribe to conventional notions of white Western femininity (Pieper, 2014: 1568). The issues of white femininity seem to apply to the current IAAF eligibility regulation for a female with hyperandrogenism, since the rule states that those who are suspected to have the conditions will be tested and those found with it will be required to take medicine to reduce the testosterone.

Amy Chinn (2012) believes that in sport, the genetic advantage only allows male athletes to have outstanding performance, and those genetic advantages are celebrated. Nevertheless, when women do so the situation becomes rather complicate. They get criticized and are accused of not being women just because they do not conform to the normal standards of heterosexy femininity. This was made clear on the press coverage of

2009 when Caster Semenya had an impressive performance and she was questioned whether she was a genuine woman. Chinn continue saying that Caster Semenya was raised a girl, her genitals are female, and she identifies herself as a female, but the IAAF and the public questions that as her performance is more than impressive and ever improving. Chinn challenges the binary gender system in sports. She believes that it is structured to marginalize women based on the belief that women are inferior mentally and physically, and that this belief is still acceptable in sport no matter how they try to make it look like it is not (Chinn 2012: 1301). Sport is the patriarchal arrangement where females are oppressed in every way. Their talent is not celebrated without being questioned; however, men are celebrated in every way for being strong, aggressive and fast. Caster Semenya is one of the female Athletes who have been criticized because of her body build-up, looks and speed, and because of the fact that she kept improving her performances. Instead of giving her credits, for her talents and training, her gender has been questioned and she has undergone series of testing.

Zine Magubane (2014) believes that the issue of gender/sex testing that Caster Semenya has been subjected to is coded as white and in opposition to blackness, so as the feminine and masculinity state of being. Magubane quoted Caster Semenya's father who voiced concern over the gender testing. Saying he does not know how the testing is done, and he does not even know what the chromosomes are, and that in their culture they live by certain rules that they do not intrude. This means that in their culture they accept what occurs naturally and do not believe in changing one's nature, because changing would be unnatural. They also do not see the intersex bodies that defy the gender binary unnatural, but rather changing them as the intrusion on the body that one is born with. Even South African politicians supported the statement, for example, Julius Malema, who was then the president of the ANC Youth League said that Westerns should not come with the hermaphrodite concepts in Africans, and that brought up the question of intersexuality and blackness. According to Magubane (2014), intersex is the issue of stigma and trauma and not biology. The trauma of surgical correction arose to address a gender panic that was racially and nationally specific in order to retain whiteness. The ambiguously gendered black body was seen as confirming the essential biological difference between whites and blacks. The correction surgery was to secure the gendered distribution of racially exclusive privileges such as the right to inherit and own property, the right to vote, the right to marry, and the right to education, and those privileges were extended only to whites. A

Parallel set of cultural and political required the invisibility of the intersex body if it was white in South Africa. In both instances, the black body was rendered invisible. (Magubane, 2014:781)

Like Linghede (2018), Wackwitz (2003) believes that sex testing and exclusion of female athletes who do not conform to the binary gender notion from the Olympics is far from levelling the playing field for female athletes but rather it is the making sure that the binary gender nature in the society is not disturbed. Wackwitz (2003) believes that sex testing is an injurious practice that is only applied to women based on the assumption that there are only two forms of human body male and female. The acceptance of sex-gender descriptions is indicative of the extent to which the myth of a binary sex-gender system is fixed in the international athletic community. Sex testing defines who does and who does not belong to the standards of acceptable sex that are socially constructed. There is a traditional notion of femininity in society and when women challenge these notions of femininity by becoming seriously competitive athletes they are called into question (Wackwitz, 2003: 557). The binary gender notion and binary division in sports are both socially constructed, each for different reasons, and that this binary gender notion is very important in the West. Women who seem not to fit in this socially constructed norm are either suppressed or the society tries to shape them in what they believe is the right fit for the society, and if they resist, they are discriminated against and called names. The western society needs to realize that their careful constructed gender norm is no longer relevant as there are those who do not conform to such norms. The society needs to accept that not every society in the world have the same standards on what makes a woman like the Westerns do.

A number of scholars such as Bermon et al. (2015), Ildus , Ahmetov, Thomas, Roos, Albina A. Stepanova, Elnara M. Biktagirova, Ekaterina A. Semenova, Irina S. Shchuplova, Larisa V. Bets (2019), Epstein have written on testosterone's effects in female athletes mostly from the scientific perspectives. Their works are mostly on experiments about determining whether testosterone is providing a competing edge on hyperandrogenism female athletes. From my research, I realized that there are few studies that are based in social science. Researchers like Hirscherg (2018), Epstein and Ahmetal et al. (2019:5) believe that testosterone provides an advantage especially for sprinters, and not every category of sporting events. Ahmetal et al. agree with the regulation only on the terms that,

it is based on the type of sporting event. David Epstein (2018), on the other hand, believes that female athletes with hyperandrogenism should have their categories or limit their testosterone to make for a fair game. The current study seeks to explore the IAAF regulation on female athletes from an ethical perspective using the human rights theory as a framework to guide the study. To my knowledge, the effects of the regulation on the rights of the female athletes have not been adequately explored and this is the gap this study is going to fill.

## **2.7. Conclusion**

This chapter was a review of the literature. It is where the wider readings on the issues about the regulations has been made. It first explained what testosterone is, and then explained what fair principle in sport is. Presented the available literature on the regulation of hyperandrogenism and testosterone, and the literature on feminist view on the issue using Caster Semenya, and also tried to present the gap in the literature. Where feminists see the issue of gender testing as the tool that strengthens patriarchy and ensures that women conform to the standards placed on them by the society, where they are not allowed to be too strong, even worse for the athletes as they cannot be weak, but cannot be too strong at same time.

The next chapter is the theoretical framework. The chosen theory is the human rights theory, and it is going to be explained in the following chapter.

## **CHAPTER THREE: THEORETICAL**

### **FRAMEWORK**

#### **3.0. Introduction**

In the previous chapter, there was a review of literature on the testosterone rule by the IAAF concerning hyperandrogenic female athletes. After an explanation of what testosterone is, then the fair play principle in sports was explained, which was described as the principle of fairness. It was shown that the aim of athletes should not only be about winning but also about overcoming the challenges posed by the worthy opponents. It is about winning fairly against cheating and that cheating is not an honourable thing to do in sport. The fair play theory recognizes advantages of winning in sport, but believes that as long those advantages are the results of hard work, and genetics, not drugs. This was followed by the review on the IAAF testosterone regulation. Many of the literature considered were from scientific sport doctors who conducted research on hyperandrogenism and fairness and felt like hyperandrogenic females do have the advantage due to their higher levels of testosterone. However, Pielke (2019) argues that the IAAF regulations are based on flawed scientific foundation making it unreliable. He also questioned why the cut off level of testosterone in the blood is 5nmol. According to him, there is no evidence that shows that the level of testosterone is too much. He also questions the agenda of the regulations.

In this chapter, an explanation of the theory used by the study is given. The theoretical framework is human rights theory. This is explained further in this chapter. Firstly, an explanation of the history of human rights theory is presented. This is followed by a discussion on what human rights theory is, some of the proponents and the critics of the theory, its characteristics, and the responsibilities, that goes along with the rights. Finally, there is a presentation of the arguments, for and against the theory followed by a brief demonstration of how this theory guides the study.

#### **3.1. History of Human Rights Theory**

According to Muller (2009), every society has its own ethical standards, norms, and beliefs that address what is right or wrong and what is permissible or not permissible. These moral standards are established by people and differ over time to time and among societies. These moral standards are made by people and not divine, or of scientific discovery. They are socially constructed. These standards reflect shared values among people in a society

although, historically some authorities have imposed moral values on their people and claimed they were of divine origin. During the enlightenment, philosophers began to defend the existence of natural rights which were seen universal across social class, although excluding women and children. These rights were created and defined to protect people from emperors, exploitation, and dominance by kings, then later from state oppression. Many of these rights signify the origin of, what we call today, civil and political rights. Although, many believe it was only created during the time of the UN universal declaration of human rights. Human rights theory has been around for a very long time. The theory of human rights according to Risse and Sikkink (1999) is traceable to the early 1500s. Early philosophical proponents of the idea of human rights include Francisco Suarez (1548-1617), Hugo Grotius (1632-1694), John Locke (1632-1704), and Immanuel Kant (1724-1804).

However, the process of documenting, codifying, or institutionalize, rights into instruments or documents began in the 18<sup>th</sup> century and it was one way of safeguarding them as ethical standards. Famous instruments from this period included American declaration of independence (1776) and the French revolution's declaration of the rights of man and the rights of citizens (1789). In both cases, the declared human needs were both civil and political needs that demanded human dignity against hegemony and dictates of kings. Jonsson (2013:13) continued that all the rights that were created in those periods had a direct aim of achieving civil and political participation and protecting human dignity. The abolition of slaves, recognition of trade, and the quest for universal suffrage in the 19<sup>th</sup> century were of the results of the human rights ethic which was instrumental in achieving a key number of human development transformations, despite the criticism of liberal economists. The understanding of human rights today came with the birth of the United Nations, and these rights are preserved through the 1948 UN universal declaration of human rights, from international covenants, the international covenants on civil and political rights and the international covenants on social, economic and cultural rights.

According to Gussman (2015: 6), the main aim of the contemporary conception of human rights is the universal declaration of human rights. Human rights are norms that help to protect people everywhere from severe political, legal, and social abuses. Examples of human rights are the right to freedom of religion, the right to a fair trial when charged with a crime, the right not to be tortured, rights to privacy, and the right to engage in political activity. These rights exist in morality and in law, at the national and international levels,



and are universal. Human rights are defined as legal and moral. The legal representation at the national and the international level provides a far more secure status for practical purposes, but they could also exist independently of legal representation by being a part of actual human morality. Since a human right is independent of actual conventions in society, the basis for its existence must be found elsewhere, and the natural place to find this is in a moral theory.

### **3.2. Human rights as a moral theory**

According to Winston (2007:284), human rights are moral rights that are embodied in a contemporary rule of international human rights law. The law that is the approximately eighty international declarations, treaties, and covenants that have been adopted by the United Nations and ratified by nation-states since the end of the Second World War. Beginning with the Genocide Convention and the Universal Declaration of Human Rights, both of which were adopted in December 1948. Due to fact that there is no international body to enforce the international human rights laws, it is regarded as soft. As a result, the enforcement of these legal norms depends on their translation into the ‘black letter’ law of various states. According to Kasia Solon Cristobal (2016:182), “Black letter refers to basic standards elements of law that are generally known without doubt or dispute. they are basic principles of a subject in the law” (Cristobal, 2016:182). However, the human rights claim can be justified by making reference to the relevant portions of the canon of international human rights law. (Winston, 2007:284) Metz (2011: 537) posits that every human being has a strict duty to treat one in a certain way that is obtained because of some shared qualities between human beings and these duties must be fulfilled. Human rights are moral rights against others who in return have a natural duty that ought to be taken into account by morally responsible decision-makers, irrespective of whether they recognize that they ought. This theoretical framework in which human dignity is the focus value has become the dominant view in the South African constitution, where human rights are the key models and also legally binding.

Muller (2019:55) explains what it means to be a person using Kant’s categorical imperative, and why humans are deserving of rights. To Kant, the nature of rationality of human beings makes them the citizens of the kingdom of ends, and that makes humans persons who by nature have the right to be treated with respect, and by that, to be treated as an end rather than as a means to an end. That is the standpoint on humanity in which

every one of us belongs to a world of universal standards, and that what makes us persons. Humans are beings capable of reflecting on the principles of morality that guides their actions and are therefore able to learn, what Kant calls, the ‘categorical imperative’. According to David Misselbrok, (2013: 211) Categorical imperative is type of obligations that are absolute, and these types of obligations guide certain types of actions. In categorical imperative there is an idea which is about treating humanity as end itself, not as means to an end. It also states that every rational being exist as an end in itself, not as means, therefore every rational being has an absolute worth (Misselbrok, 2013:211) for the individual or a group of people to be moral in general, they have to develop this inner self-reflection. Muller continues that human rights are based on the universal idea of human dignity, and this idea is in turn based on the general view of man. For example, the preamble to the UN declaration of human rights speaks of ‘an inherent dignity’ and of ‘inalienable rights’ possessed by human beings. It also mentions that humans have unchallengeable rights just by being humans, thus, they earn their rights by the virtue of their nature. As mentioned above, rationality in this sense play a vital role in human being earning their rights, as the human right places equality in dignity and rights due to the rationality and moral nature of human beings. Thus, they are gifted with reason and conscience to act towards one another in the spirit of unity.

According to Horn (2016:726), “human rights are pre-institutional claims that individual has against other individuals in virtue of interests characteristics of their common humanity”. This means that they are rights that individuals have just for being a human being, and respecting the rights that others have against him or her (Horn 2016: 726). Therefore, the human being is the subject of human rights and is not restricted on rational capabilities and material needs but puts an additional strong focus on psychological, social vulnerabilities, and needs of human beings. Human rights are important for the maintenance of an individual’s self-esteem, especially if the individual suffers from suppression from his or her membership in the community. Human beings that are especially in need of human rights guarantees are poor families, migrants, disabled persons, and all the vulnerable groups in the community (Horn, 2016:726). Unlike Muller who argues that humans earn rights, for example, equality and dignity, due to their rationality. Horn does not disagree with the claim since she also holds that rights are born out of natural law. However, she believes that rationality is not the only focus like those who use Kant’s approach to human rights theory claim, but rather other characteristics that

make up a human being. For her, human rights essentially focus on vulnerable individuals to make them secure and attain the respect they deserve in the community.

### **3.3. The characteristics of the Ethical theory of Human Rights**

According to Jonsson, (2003:18), human rights have been recognized as necessary as they are for enjoyment, protecting people from the state and other people, safeguarding human life, protection of human dignity, the advancement of human security, and achievement of human progress. These make human rights interdependent and indivisible. They are formulated to promote peace, tolerance, solidarity, and human dignity. For human rights to be described as universal means that they are for every human being and every society. Thus, universality is one of the defining characteristics of human rights theory. Human rights are to be enjoyed by everyone without discrimination on the bases of colour, gender, age, ethnic background, attributes over which one has no control over, and attributes which would result in an infringement of other rights such as religion and political ideology as everyone has the right to freedom to choose. Another characteristic of human rights is that they cannot be taken away. As a result, it is vital to safeguard human rights against violations, abuse, or neglect. Human rights are morally powerful and constitute a strong instrument for encouragement to improve values preserved in the UN charter (2003:18)

Besides characteristics, Human rights have many issues, but this section is going to focus on issues that affect the IAAF regulations. Privacy and dignity, discrimination, health, and bodily integrity are human rights issues that are disregarded by the IAAF regulations.

### **3.4. Human rights and responsibilities**

Haule (2006: 395) mentions that the ethical foundation of human rights makes one aware of the personal responsibilities of living together with other people, under the moral of ‘to do to others what to you want others to do to you’. This means that every right comes with duty. For example, the acknowledgment of the right not to be reduced to a slave implies the responsibility to slave owners to free slaves, and the right to not be tortured is a duty to those who torture other people to stop. The exercise of human rights and freedoms acknowledged is subject to responsibilities. Natural rights are connected to every person, just for being human or a person and the very person is subject to those rights in as much as the respective duties, and both rights and duties are natural law. In human society, one

person's right entails a duty for others, the duty, of respecting, protecting, and recognizing the right in question (2006:395)

According to Perry (2005:137), "in the language of rights and duties, those whose conduct a rule governs are duty bearers with respect to the rule, and those to whom the duty bearers are not to do something or for whom the duty bearers are to do something are rights holders". For example, say that someone has a particular right, is to say in a way that there is a rule according to which, that some are right holders. To say someone has violated someone's right is to say that there is a particular rule to which the person's right is violated. That person is the rights holder and the person who violated that right is the duty bearer. This means, a duty bearer has done to what according to the rule, what the duty bearers are not to do to the rights holder, or that the duty bearer has not done, according to the rule, what the duty bearers are to do for the right holders (Perry, 2005: 137) Except for children, every individual has rights and duties of respecting, protecting and fulfilling the rights of others, since others too have duties towards other individual's rights. Haule (2006:388) claims that human rights represent a specific relationship between the individual who has a right and another individual, group, institution or even a state with a duty to the right. These duties towards rights are there to ensure the realization of the rights since without duties rights would not be valid. People would not have obligations towards the rights of others, resulting in respecting and protecting the right of others as an option which many would not choose. For example, the right to life forces others not to kill as they have responsibilities towards it.

### **3.5. The argument for the human right theory**

According to Winston (2007: 287) human rights norms are as results of sad stories, humiliation, discriminations, exploitation, marginalization, tortures, crimes, murders, and many more of the bad experiences people experienced in the past. He believes that the contemporary norm of human rights theory is socially constructed against such forms of historical oppression. It is constructed to make sure that the past brutalities are avoided and that the societies are as peaceful as they can get. The universal application of human rights theory has something to do with the fact the all of the historical bad experiences experienced by mankind was universal, not that the human rights itself is universal as there are cultures who are all about the community. The universality and moral authority of human rights derive from the fact that they are not just a set of random, culturally

comparative agreements. They are rather the doctrine of human rights that provides an understood theory of the main forms of systematic social, political, and economic oppression. The oppression that takes the form of a clear set of legal norms designed to neutralize, prevent, and improve many of these kinds of threats. Human rights theory is not indestructible, it has been criticized and it is not the perfect theory, it still needs extension, adjustments, and revision. However, it is the best theory the world has right now, in order to deal with the issues that were present in the past and are still present now but minimal due to the theory. This is because it has set the conditions necessary for people to lead minimally decent lives, free from human oppression, and therefore ought to command a certain degree of moral authority (Winston, 2007: 287)

### **3.6. The argument against the ethical theory of Human Rights theory**

Like any other theory, human rights theory has had many criticisms as it is expected of any theory, Human rights theory may not a perfect theory but what is important is the relevancy of the theory and how it contributes to human lives. According to Lous (1977: 65). Human rights theory is one of the most celebrated, practiced, and respected theories that have made a huge difference in communities. Nevertheless, it is also very controversial with great strengths and qualities. One of the famous criticisms of the theory is its universality. This has been criticized by some who argue that the notion of universality ignore bs and undermines the cultural differences that exist between societies in different parts of the world (Lous, 1977: 65). The view of the world and our role in it is shaped by the society in which we live and therefore our moral standards and the values that we emphasize as individuals differ depending on our cultural upbringing. The idea of the human rights declaration having the same meaning for everyone in the world is still in question (Henkins, 1990:320). According to Barbara De Mori (2007: 4) the human rights document emphasizes individual rights as opposed to communal rights that tend to be more heavily emphasized in the non-Western world. The declaration represents a neo-colonialist attempt by the West to control the lives of those in the developing world.

### **3.7. How the theory was used in the dissertation**

It is important to note that the human rights approach is particularly suitable for ensuring that the weakest and vulnerable group receive equal treatment like everyone. For example, hyperandrogenic athletes and athletes with the difference of sex development are the minority and vulnerable group in the sports industry. The human right theory is there to

make sure that they are treated with respect like everyone else. Human rights theory will guide my project in exploring the regulation of the IAAF in female athletes with the differences in sex development. The study will explore the human rights issues on the regulation and how it affects those vulnerable female athletes. The theory will guide my research by outlining how those rights are infringed upon. It is important to note that hyperandrogenic female athletes are already under stress in society because they are different. The theory is going to help explore the issues faced by hyperandrogenic athletic females, that is, those with (difference sex development). It will help to analyse the issues at stake using Dutee Chad and Caster Semenya as case examples since both athletes have been subjected to scrutiny and humiliation by the policy and also because they both publicly challenged the ruling of the testosterone limit for female hyper-androgenic athletes.

The reason why the human rights theory has been chosen is because human rights as a theory is about the rights that every human being have against others, and it the responsibility of every human being to protect and respect the rights of others. The IAAF hyperandrogenism regulation is about fair play, disqualify those who are viewed as having unfair advantage due to their level of testosterone. The IAAF believe that protecting athletes' rights is important, and that by excluding hyperandrogenic female from competing in female categories, they are protecting the categories and so that only deserving female could win fairly. By disqualifying athletes with hyperandrogenism there are human rights that are being violated, and that the organisation seem to only focus on the rights of the non-hyperandrogenic females, and the fair play principle. The dissertation studies the rights of hyperandrogenic athletes that are being violated by the regulations.

### **3.8. Conclusion**

Human rights theory has much strength, it is the theory that has helped move societies from war, slavery, human rights exploitation, and discrimination since it was first drafted. It is a moral theory that is not only about the rights of the individuals but also their obligations towards others. For example, an individual's right to life goes hand in hand with the responsibility of respecting life, e.g. a duty of not taking a human life. Society would be chaotic without moral authority, as Winston (2007) says that human rights theory is far from perfect and still needs some revision and adjustment, but it is by far the best moral theory we have. It is about protecting everyone and treating everyone equally while giving everyone obligations to protect others. This chapter was about the theoretical framework of the study, which is the human rights theory. The chapter explained the history of human rights theory, what the theory is about, some of its proponents, the characteristics of the

theory, the rights and responsibilities that come with right, the arguments for and against the theory, and how it guides the dissertation.

The next chapter is the analysis chapter, which analyzes the IAAF hyperandrogenism eligibility regulation, using the human rights theory. It assesses the rightness and wrongness of the IAAF regulations

## **CHAPTER FOUR: ANALYSIS**

### **4.0. Introduction**

The previous chapter was the theoretical framework of the study. As explained, the study uses the human rights theory as its theoretical framework. The study explained the history of human rights theory, what the theory is about, some of its proponents, the characteristics of the theory, the rights and their associated responsibilities, the strength and the weakness of the human rights theory and how it guides the study.

Human rights both moral and legal rights are very important in modern society, and without them, people would do as they please as they pursue their own happiness at the expense of others. Each and every country has its set of rights including organizations Rights are also a universal and therefore, applies to everyone although not legally binding. In this case, even the IAAF has their rules and guidelines and the set of rights, and to them those rights are binding, they are bound to follow, respect and protect, both the IAAF officials and athletes. The IAAF is the sport governing body that makes policies and has the responsibility above all to the athletes.

This chapter is dedicated for the analyses of the key issues found in the literature using the theoretical framework as a guide. The chapter explains the binary sex division in athletics. It further discusses whether the IAAF regulations enforce the Western notion of femininity, using the cases of Caster Semenya and Dutee Chand as archetypal examples. In addition, the chapter explains the ethics of fair play to determine whether it gives the IAAF authority to infringe on the rights of the athletes. It also looks at the eligibility testosterone rule and how it infringes on the rights of the athletes. This is then followed by an explanation on each right. The right to health, bodily integrity, right not to be discriminated against, and the right to privacy, and how it is violated upon by the regulation. Lastly, there is a look at the Olympic Charter and the IAAF constitution, and how the IAAF managed to violate their own rules.

### **4.1. Binary sex division in athletics, fairness, and levelling playing field**

With a few exceptions, competitive sport is organized into binary sex categories namely, male and female. (Kretch, 2017:265) believe that this division is meant to create and maintain a level playing field due to the nature of male's physical advantages. As a result, men cannot compete against



females. Although this reasoning does not hold true across all sports, it is largely acknowledged with respect to the athletes. However, this notion of fairness achieved by this binary sex clarification must consider other functions as well as challenges and contradictions. The rationality of binary classification in sport is beyond doubt as it is adopted in sport for many reasons. Not only does it serve multiple purposes beyond ensuring fairness, but it also functions as a tool to control respect, to generate economically, and to prevent feminization of the traditional domain of men's sport. As the international athletics competition began a celebration of hyper-masculinity, where physical strength, power, aggression and dominance were the characteristics women were excluded altogether. The dependence of binary sex classification as a levelling playing field in sport shines over the fact that there are natural attributes to consider advantages and disadvantages in competitions, from height, and lung capacity to coaching and training facilities, none of these attributes are used as the basis for separation. It is important to note that rather than being a levelling playing field, athletics is a site where differences are accepted, tolerated, and ignored, so too all biological differences besides age, certain recognized disabilities, and sex (Kretch, 2017:266). The binary sex division in Olympics is to ensure fairness, and to make sure that no man is masquerading as women, to compete in women's category, as men are believed to have more advantage against women, and that their biological make up allows them to be strong and faster than women (Kretch, 2017:266)

#### **4.2. The white notion of femininity**

Both Caster Semenya and Dutee Chand have been a subject of controversy as both women were diagnosed by sports medicine experts as having a disorder/difference of sexual development known as DSD. Hyperandrogenism is caused by high levels of testosterone in females, often incorrectly referred to as the male hormone. This controversy surrounding South African middle runner Caster Semenya started in 2009 after she won her world championship. There were complaints from other female athletes she defeated and their coaches, questioning her gender and claiming Semenya is way too strong and built for a female. They also raised issue with the fact that her voice is deeper than that of a normal female, and she does not look like female. As if that was not enough, the IAAF released what was supposed to be private details of her health status and physiology to the media. The first regulation by the IAAF was drafted in 2011 and supporters of the rule, who were

mainly white athletes and coaches relied on the argument of levelling the playing field. (Olivesi, 2016:89)

After this came the case of an Indian sprinter Dutee Chand who according to Haines and Marcus, (2019: 90) was also diagnosed with hyperandrogenism, under the 2011 regulation, and forced to undergo medical intervention if she wished to compete. Instead of agreeing to take medicine, Chand appealed to the Court of Arbitration for Sport (CAS) The court ruled that the regulation was founded upon unsupported claims since there is no proof that the higher testosterone really gave a competitive edge. They also found the regulation discriminatory. Dutee Chand runs 100 meters races, and Caster runs 400, 800, and 1,500 meters events. After Chand won the case, the IAAF was given two years period of time to come with enough evidence to support their claim. Then the 2018 IAAF eligibility rule which only included certain track events and it was set to commence in 2019 November the track races from 400 meters to 1,500 meters. it can be said that the rule targeted Caster Semenya.

The IAAF and the International Olympic Committee has always favoured Western or European concept of femininity or what makes for a woman in a Western or European perspective. By that, they have in mind how women should behave and should look like, forgetting that the world is vast with different people, different background, and different body types. According to Pieper, (2019) since the wake of World War II, the West has dominated the IOC. The two major sides were Eastern Western Europe. Eastern Europe women were well built, had strength, and masculine while those from Western Europe were petite, graceful athletes. As a result, the women from Eastern Europe were ridiculed for their looks and considered as different and non-feminine according to the Western standards. Additionally, within the west, white women were treated differently to women of colour, as black women faced hostile disdain for not displaying white femininity. Consequently, today, women from the third world countries are questioned about their gender because they do not conform to the notion of western femininity. Semenya, for example, was questioned because of the way she dresses because she does not show more skin as other female athletes do and also because she prefers male clothing. Dutee Chand was also criticised for her strength. (Pieper, 2014: 1560). The current IAAF regulations are not only exclusionary and discriminatory they also promote a bad stereotype about the appearance of women how the female should look and how women's bodies should be

shaped. If one is suspected to have the condition by the look of how those female bodies are built, for example, their muscle mass, strength and how they look. The question then is who has the authority to decide how the females should look like. Is it the Western people, with their Western perspective of femininity? Caster Semenya has been the subject of controversy with some people saying she is too fast, strong, and not good looking to be female and that her voice is too deep. She is the athlete, she trains a lot for that strength, and also athletes need to be fast.

#### **4.3. The ethics of fair play and the IAAF regulations**

According to Cooper, given the meaning of fair play and what characterises the principle, it should be appreciated that the concept of fair play in itself captures more than ensuring estimated equality of opportunity and playing by the rules. There is no way one can justify the infringement of a human right and human dignity to preserve the principle of the fair play even before considering the wider purposes of fairness, such as ensuring solidarity and integrity (Cooper, 2019:36).

The IAAF's main goal to level the playing field can be said to be only a myth. Other than testosterone, there are other natural occurring physical traits that give athletes a competitive edge. The traits that are not singled out by the IAAF's regulations, thus, making the claim of the IAAF levelling the playing field illusory. If they really want to level the playing field then all those natural occurring physical traits in athletes would all have been looked at and included in the regulations, not just the androgens. According to Buzuvis (2016), the elite athletic nature is self-sorting, and that increases the likelihood of the presence of the physical advantages in various conditions, and there is absolutely nothing that can be done. The sporting world tolerates other aspects of physical diversity and the advantages that come with those advantages are celebrated. The hyperandrogenism is singled out as the basis of exclusion (Buzuvis, 2016:45). The playing field will never be truly levelled when other natural occurring advantages like hyperandrogenism are overlooked and celebrated. The whole unfair advantage of hyperandrogenism is based on the IAAF not being able to accept what is different. It is about the IAAF trying to enforce their idea of Western normality on everyone. It is about the IAAF trying to maintain their idea on what makes female, and trying to control, fix and normalize the bodies that do not fit on what the society believes is right, and normal. The IAAF and the IOC only looks in one side of the fair, that no athletes should have unfair advantage over the other forgetting that excluding other athletes due to their natural advantages is not fair. Fair play is all about inclusion, and equal opportunities.

#### **4.4. IAAF eligibility regulations and human rights**

One of the fundamental principles of the Olympic movement to which the IAAF belongs to is to protect the rights of the athletes. They are also aware that sport is the human right of every individual and that no one should be discriminated against, however, their regulations contravene their principles. These eligibility regulations contradict everything the IAAF stands for, it infringes on the right of the athletes with DSD by forcing medical intervention on them or excluding them from the competitions altogether.

As already explained in the first chapter, the IAAF specifically targets women with DSD based on traits such as their natural physical traits, for example, a high level of naturally occurring testosterone in their blood. The women it focuses on were assigned female gender at birth and their social and legal identities are those of women. It is important to note that most of those female athletes with hyperandrogenism or DSD traits, to be specific, did not even know they had them. This discrimination and revelation interfere with the way they perform in sports. It creates doubts about who they are and what place they have in society. It takes away their rights to human dignity, privacy, health, freedom to make health-related choices, as they are forced to take the medication with some serious side effects and also their rights to employment and livelihood (Mahomed and Dhai, 2019:549) . Such speculation about their femininity, scrutiny, and surveillance are legitimized by the regulation. This brings about risks to those women. They are, in addition, ridiculed, they have their rights violated, their personal lives are intruded upon and they as well face other social harms which would then lead to some serious issues in their well-being. Interestingly, the IAAF has not applied similar regulation to male athletes whose performance can also be influenced by natural and biological traits. Male athletes who excel in their respective events are applauded and celebrated but females who excel in their abilities are questioned. They are subjected to scientific testing, have their femininity and gender questioned, and then forced to treat and suppress what they are born with (2019: 550)

It is quite clear that the regulation has some racial and cultural bias leading to prejudice and discrimination. Semenya is a black woman from the Global South, and her physique differs from that of what traditional Europeans view as femininity. According to Mahomed and Dhai (2019), this scrutiny of African women's physique is not new because it has happened before when the Europeans exhibited Saartjie Baartman as a freak and was offensively termed "Hottentot Venus." Baartman was exhibited as a freak because of her

large buttocks in Europe in the 19<sup>th</sup> century. Europeans viewed the native people of Africa and people of Asia as being of inferior unintelligent ability and therefore in need of the patriarchal rule of European powers. The IAAF's regulation requiring Semenya and other women from similar backgrounds to change their bodies is similar to that thinking (Mahomed & Dhali, 2019:548).

#### **4.4.1. Discrimination**

When one looks at the IAAF regulation through the lens of the theory of Human rights, an important issue that surfaces is discrimination. Cooper (2009) argues that it would be easier to justify the limits of fair advantage in sports when the advantages in question are clearly separate from the qualities that are being ranked in sport. For example, it is easier to justify the advantage of the kit wearing by athletes which gives them an advantage to perform better than others, as the sport does not rank the athletes on how good their equipment is. However, when the advantage in question is genetic and directly influences the qualities that are being ranked in sport limiting then is not fair. The advantages like the ability to generate speed, power and demonstrate endurance in athletes are all genetic, to limit such advantages to others, while they are celebrated to other groups, raises ethical questions about fairness, discrimination and the role of sport in society. If there is a need of testosterone threshold in sport, it should not only apply in females but in males too. The IAAF became the first international sporting federation to exclude athletes due to their natural genetic traits. Their claim is that they have an unfair advantage over others. This eligibility regulation was first introduced in 2011 (Cooper, 2009: 3). South African Caster Semenya and Jamaican Usain Bolt are both athletes who have dominated their respective events for a considerable period of time. While dedication and training were part of Bolt's success, it would be hard to maintain that his recent domination was not due to genetic advantages. As being said by Montanola, (2016), Usain Bolt, like any other athlete, has a sprinting gene, making him particularly fast with real fast-twitch muscles. His height also gives him the advantage over most sprinters. All these advantages contributes to what makes him the best in a respective event, yet, there has never been any questions regarding the advantages he has over other athletes or any debate on whether he had unfair advantages or a combination of these genetic factors, or the role such genetic factors might play. Instead, his success is simply credited to his talent, positivity and fairness. (Montanola, 2016:123)

Caster Semenya and Dutee Chand's experiences are the prime examples of the discrimination women track athletes face, which men do not. The male track athletes do not have to take drugs to suppress their naturally occurring testosterone, they do not have to undergo surgeries, and they do not have to undergo series of tests to ensure their sex is what they claim it is. They also do not undergo social backlash, called names and their private lives exposed. The IAAF discriminate against women, intersex and hyperandrogenic women, in particular, and that is totally against the Olympic charter (Wells, 2019: 14).

#### **4.4.2. Privacy and dignity**

Another important ethical issue that comes to the fore when analyzing the IAAF regulation with the ethical theory of Human Rights is the issue of infringement of privacy and dignity. Athletes do not really have choices when it comes to the issue of privacy as the media eventually find out. The decision to undergo a medical procedure is never private due to suspension during those medical procedures. Also, the decision not to undergo a medical procedure means ineligibility to compete with other females, which means the media and people around the world would eventually find out about the athlete's condition due to suspension or they being made ineligible to compete. Given the nature of society, that is, a society that is so keen in keeping and maintaining the binary gender norms, anyone who breaks the norm is usually not accepted and called names. The regulation infringes on the right to privacy either deliberately or by default.

According to Karkazis, Young, Davis, and Camporesi (2012) both hormonal testing, and medical or surgical intervention raises issues of confidentiality and privacy that the IAAF is bound to respect and protect. First, the process of testing, screening, and treating takes months, and during that time, the athlete would be ineligible to compete. This period of non-involvement can raise suspicion about their condition. In the case of Caster Semenya, due to suspension, her absence from the Olympics will not only arouse suspicion but also will have a psychological toll on her. Also, her case is not so private any more since the IAAF disclosed the information about her biological make up long before she even challenged the regulations. This can be said to be a violation of her right to privacy. The IAAF policy states that those who are suspected of having DSD will be targeted for testing. There is the concern that most of the indication they consider in identifying whether the

individual is hyperandrogenic are deeply subjective and stereotypical to the Western definition of femininity. (Karkazis, Young, Davis & Camporesi 2012:13).

#### **4.4.3. Right to health**

The right to health is one right that should never be infringed upon because doing so means punishing one to death. It is the right that is connected with one's right to life. The right to health is another human right that is violated upon by the IAAF regulations. As already mentioned above, lowering testosterone can lead to some serious side effects. The lowering of testosterone can be done either by surgery or medical intake. Through surgery, there is Gonadectomy, which according to Döhnert, Wunsch, and Hiort (2017), is the generic term that refers to the removal of either the testis in males or ovaries in females. There is also clitoridectomies, which is the surgical removal or reduction, or partial removal of the clitoris (Döhnert, Wunsch, & Hiort 2017). Gonadectomy can cause irreversible harm including the compromising of bone and muscle strength, diabetes, poor libido, fatigue, depression, and risking chronic weakness. The procedure requires long term hormone replacement and it may also sterilize women. In a surgical procedure, Karkazis and Carpenter (2018) claim that the clitoridectomies procedure was unnecessary and should not have been advocated for because it was not related to the regulation, and has been challenged by the intersex advocates and the human rights system. Pharmacologically lowering testosterone poses some risks because it can have some serious side effects for athletes ranging from diuretic, which causes excessive thirst, urination, and electrolyte imbalance to disruption of carbohydrates metabolism, headache, nausea, fatigue, and liver toxicity (Karkazis and Carpenter, 2018:583)

#### **4.4.4. Bodily integrity**

According to Jessie Hill (2015:130) Right to bodily integrity is one of the important rights that humans have and the violation of that right leaves that helpless feeling when one does not have the control of their body. It is one of the rights that are violated upon by the IAAF regulations. The right to bodily integrity refers to the right to control all aspects of one's health, to respect bodily autonomy and integrity and to decide freely in matters relating to one's sexuality and reproduction, free of discrimination, coercion, and violence. Nguyen (2018:69) argues that the regulation requires targeted female unnecessary intrusive specialist medical investigations. The examinations may be requested by the IAAF medical manager and those examinations of the most intimate details of a person's body

and physiology, including genital exams, chromosomal testing, and imaging of sex organs as well as the assessment of behaviour. Such probing and poking are invasive and may be felt as deeply shameful, humiliating and abusive, and may have lasting psychological impacts especially as they are not medically necessary. The testing leaves the affected women no choice but to comply given the fact that their careers and dreams are on the line. Also, the entire process is deeply degrading and stigmatizing for the targeted women and that it is merely on the basis of suspicion about their natural physical bodies and harmful assumptions about their sexuality and physical competence. Women with differences of sex development have a long history of being subjected to abusive exhibition and medical treatment. Apart from bodily integrity, this may infringe upon their right to informed consent, to be free from interference, from non-consensual medical treatment, and may amount to violations of the right to be free from cruel, inhuman or degrading treatment (Nguyen, 2018:69).

#### **4.5. Violation of the Olympic Charter**

Olympic charter is the set of principles and the rules adapted by Olympic committees, as the Olympic charter rules are binding for both the IAAF and IOC, violating those rules is not what the committee and the IAAF organisation stands for. Nguyen (2018) argues that the IAAF eligibility for hyperandrogenic female athletes does not only violates human rights but also the Olympic charter. This is the same charter that the IAAF should know better not to violate as they the body organization is sworn to protect it. According to the Olympic Charter, every individual must be given the opportunity to practice sport without any discrimination of any kind and in the spirit of the Olympics, which requires mutual understanding with the spirit of solidarity, friendship, and fair play. The enjoyments of the rights set out in the Olympic Charter should be enjoyed without any discrimination of any kind such as race, colour, sex, sexual orientation, language, religion, political or another opinion, national or social origin, property, birth or another status. These words are binding on both the IOC and the IAAF and other organizations as recognized by the IOC. They are not just some ethical standards. The IOC and the IAAF have disregarded the terms of the Olympic charter when they implemented the testosterone rule (Nguyen, 2018: 73).

The implementation of the testosterone rule is inconsistent with the anti-discrimination principles expressed in the Olympic charter and the IAAF constitution because only female athletes are subjected to such rules. Without a doubt, there are occasions where it is reasonable to treat males and females differently, however, this one is not it. The rule promotes unequal treatment because men continue to enjoy freedom from the medical





examination, even though there is also variations when it comes to their testosterone levels. Some men have more testosterone than others, including other variations in natural qualities that affect athletic performance, as mentioned in the previous section. Irrespective of this, there is no regulation for male athletes and the advantages they may have over other athletes (Nguyen, 2018).

According to Karkazis and Young (2012), consideration of fairness support in a sport is needed; the fairness that allows all legally recognized females to compete with other females regardless of their hormonal levels provided it is produced naturally by their bodies. They do agree that the legal definition of sex may open up a lot of inspection on its own, as countries and religions define sex in different ways. Karkazis and Young believe that defining sex through legal definition is the best sex definition by far that everyone has to rely on, since the scientific one raises a lot of ethical issues. The legal definition allows countries to categorize sex how they see fit. Taking Caster Semenya as an example, she was born female and lawfully recorded as a female and as such elite sport should treat her as such. This is because there is nothing that is male about her and the condition, she has does not make her a man. The fair play ethics is about diversity and ensuring that everyone or every woman, and in this case, including those with intersex or hyperandrogenism as the terms are used interchangeably have fair chances in competing. Ensuring that they have equal treatment and opportunity to participate in sport, they are treated humanely and that they are not forced to undergo unnecessary medical intervention that may damage their bodies. They are also not considered ineligible to compete due to the advantages they may not even have. IAAF should not only claim to be fair to everyone while they discriminate and exclude others. (Karkazis, Young, Davis (2012), & Camporesi, 2016: 76)

#### **4.6. The CAS ruling**

The CAS argued that the case presented by Semenya in 2019, had its references from Chand's case. However, the findings on Chand's case were not binding on the panel for Semenya's case. The panel outlined that their duty was to determine issues on the 2019 case, based on the evidence and argument presented by both parties in the context of the proceedings. However, the CAS panel did highlight some aspects of Chand's case (CAS 2018/0/5794: 122). The CAS panel acknowledged the scientific complexity of the case, and that there may be a lack of evidence to prove how testosterone may or may not affect performance, so the panel had to make determination based on the available evidence. The majority of the panel outlined that the restrictions imposed by the DSD regulations, for ensuring fairness in athletics was necessary. Therefore, the majority of the panel concluded that the regulation was necessary, proportionate and reasonable. "The CAS concluded that

it is a common ground that a rule which imposes differential treatment on the basis of a particular protected characteristics is valid and lawful if it is a necessary, reasonable, and proportionate means of attaining a legitimate objective”(CAS 2018/0/5794: 144). The CAS panel recognised that the DSD regulations do violate the rights of female athletes with DSD, but the regulation is necessary to achieve fair play in competitions. The panel outlined that the scientific evidence presented to them provided adequate support of the IAAF claim that athletes with DSD do enjoy unfair performance advantage over other female athletes.

#### **4.7. Conclusion**

The IAAF has been doing a great job in making sure that the competitions are fair, athletes behave well, and also ensuring solidarity towards the athletes and sports officials. One of the remarkable jobs is to make sure that no athlete cheats. Cheating here mean a situation where athletes inject drugs or hormones in their blood to be stronger and endure many extreme exercises. The testosterone rule is not one of those achievements like cheating, which are not fair, as it comes naturally, and the rule does more harm than good. It brings division among the athletes and officials. Unlike the Anti-Doping Code, the Testosterone Test is not meant to prevent cheaters from competing, rather, it is preventing women who

were born with an abnormality from athletic competitions. Taking in excess testosterone is cheating. Producing an excess of testosterone is a genetic advantage and there is nothing wrong with that. Genetic advantages are the norm and not the exception in competitive sports. Testosterone rule requires athletes to change who they are and what they are born with in order to be accepted as females. This is asking for far too much from them.

This chapter was the analysis chapter. It analyzed the ethical effects of the IAAF testosterone rule using the human rights theory. It firstly explained the idea of binary sex division in the sport and how it links to the IAAF regulations, which aims at levelling the playing field in sport. Then it explained Western notion of femininity that the West imposes on everyone, and how it is imposed on female athletes: using Caster Semenya and Dutee Chand as examples. This was followed by an explanation on whether the ethics of fair play gives the IAAF authority to infringe upon the rights of the athletes. The IAAF eligibility rule on human rights and how those rights are affected were discussed. Lastly, the Olympic Charter and the IAAF constitution, how the IAAF went as far as to oppose their own constitution just for the testosterone rule were also analysed.

In the next chapter, chapter five, the study is summarized and concluded. It contains the summary of the study, the conclusion, the recommendations and the bibliography.

## **CHAPTER FIVE: CONCLUSION**

### **5.0 Introduction**

The previous chapter was the analysis of key issues in regard to the study's focus. It analysed the IAAF eligibility rule using human rights theory. It explained the IAAF regulations, the binary gender classification system and how it exploits female athletes, and the Western notion of femininity. It also discussed how the IAAF tries to enforce this Western notion of femininity on everyone. There was also the discussion on which rules the IAAF eligibility regulations violate and also how the regulations reject the Olympic Charter and the IAAF Constitution.

This chapter is a conclusion chapter, which consists of the summary of the whole dissertation, the general conclusion remarks, and recommendations.

### **5.1 Summary**

The dissertation was about the IAAF hyperandrogenism eligibility rule for female athletes. The first chapter started with the explanation of the aims of the IAAF as an organisation, the history of gender verification in sport and how it is related to the current regulations. The main question of the research was: what are the ethical issues that emanate from the IAAF's DSD regulations of testosterone suppressants on hyperandrogenic female athletes? The ethical issues that arise from the IAAF regulation as explained in the previous chapter include that fact that the regulation is discriminatory and only limits female athletes while male athletes enjoy their advantages without scrutiny. It also requires those who are suspected to have a DSD, which is the differences in sex development/disorders, to undergo hormonal testing, and if they are confirmed to have the condition they are required to either stop competing at the international level or take a medical intervention. The medical intervention to lower the levels of testosterone have been proven to have serious side effects and may have also caused financial problems for the athletes because they pay for their own treatments medicine they use to manage the side effects of the testosterone suppressants. The research is exploratory and a desktop study, meaning that the data relied on was mainly from books, journals and online sources.

The second chapter brought together different literature on hyperandrogenism and the IAAF regulations. Most researchers, such as Linghede (2018), Haynes and Marcus, (2019) argue that the IAAF regulation is not really about levelling the playing field but rather

about maintaining the binary classification of gender, and that it violates human rights. While Bermon, Vilain, Fénichel and Ritzén (2015) argue that it is necessary to have a level playing field. He also argues that the medical intervention is necessary because the IAAF role is to ensure fairness in the Olympics. The third chapter explains human rights theory, the history of the theory, the characteristics, and the responsibilities that go hand in hand with rights. Each and every human being have rights, meaning that when the person has a right the next person has a duty to protect and respect the other person's rights. Human rights were formed to protect people against other people and also against tyrant rule, government, and organizations that might exploit people. In this case, the athletes have rights and the IAAF as a governing body has a responsibility to protect and respect those rights.

The fourth chapter analysed the IAAF regulation using the Human rights theory and broke down ethical issues that arise from the regulations. First, there is the binary sex classification in sport, where there is a male and female category. In the male category, one needs to be just a male and there will be no complex requirements while in the female category one needs to be a 100% female. To be a 100% female means that the female athlete must not be built like a man, have a normal range or what is considered the normal range of female testosterone by the IAAF in their blood. The binary classification was designed to ensure fairness in sport since males are naturally known to be stronger than female. Also, gender testing and verification was designed to make sure that there is no man masquerading as women during competitions. There is also what is known as chromosomes testing, which was to ensure that females had no male chromosomes, that is, to ensure that female athletes had that clear XX chromosome. These days, there is hormone testing that test the level of androgen in the blood, in this case, a testosterone level. It is said that natural, normal female should have a small amount of it which is 10 times lower than that of males. All these testing and verifications only affects women, but male athletes are not tested. Thus, it appears that the sport governing body move from one type of testing to another just to make sure that their standards of femininity in female categories stay intact.

## **5.2. Conclusion**

In conclusion, the researcher is not arguing that testosterone does not matter. This is because each and every part of the body, androgen, and chromosomes in the body matters,

and each has its purpose. However, the problem is who is to decide the amount of testosterone the female should have and why. We are all different and have our unique biological makeups. As a result, who is to decide what is normal and abnormal. Men also have different levels of testosterone with some having much more than others yet, male athletes with lower testosterone are not required to boost their testosterone through medical intervention. It appears wrong to allow doctors to decide what is normal and abnormal for other people. Testosterone cut off should not only be in female categories, but male categories should also have the testosterone threshold to make these IAAF regulations fair. There have been arguments on whether testosterone gives a competitive edge. Bermon, one of the doctors doing the hyperandrogenism study for the IAAF, agrees that testosterone levels in the blood may not accurately predict female athlete's performance but rather increase chances of good performance (Bermon, 2015). This should be a good enough reason to make female athletes undergo medical intervention.

Each and every rule that requires people to change what they were born with, and that excludes people from doing what they like because of the biological makeup, is discriminatory. It is also unethical to force them to change because they do not fit in what the society considers normal. The IAAF has responsibilities not only to athletes but to the individuals, which they seem to be ignoring; rather, they have their focus on larger groups of athletes. Individuals should not have to go through humiliating procedures to prove their sex and eligibility to perform in sports. Scientific-based methods in determining one's sex and eligibility in sport have failed and proven to be unethical. The IAAF has no right to dictate what is normal and abnormal about one's body, sex, and biological makeup, as long as the body is healthy. However, the argument to that would be, analysing and determining whether the athletes are 100% females with no elevated testosterone or androgen is necessary for the IAAF to ensure fair competition. The IAAF forgets that there is more to what affects the athlete's performance than just their sex and androgens and this can range from nutrition, specialized training, coaching, and other biological makeup.

According to Katz (2017), the arbitration panel mentioned the preternaturally large lung capacity which may give an individual an advantage in sports that require endurance, and many sports do require endurance (Katz, 2017: 240).

Taking a look at the CAS conclusion or judgement on Caster Semenya's case as the majority of the CAS panel concluded that even though the regulations do violate the rights it was necessary, reasonable, and proportionate to ensure fair play in sport. The panel looked at both health and law aspects of the regulation to reach the conclusion. Even though there was

not enough evidence that proves that females with higher levels of testosterone do have a competitive edge. For example IAAF relied upon data demonstrating the deterioration in performance coinciding with suppression of testosterone levels in 3 athletes, which may not be due to the fact that their testosterone was suppressed but rather the fact that they were experiencing the side effects of the suppressants, and could not train or even compete to their full potential. Looking at the ruling of the CAS panel, and how they reached it, it seems like human rights weighed less to them because they considered fair play more important, and regardless of the evidence provided on testosterone suppressants having serious side effects, they still concluded that it was the matter of necessity,

The main objective of the research was to explore the ethical issues that emanate from the IAAF regulations. As I have mentioned above, that the regulations violate the rights of the



athletes including the right not to be discriminated against, the right to dignity and bodily integrity, and the rights to health. The dissertation explained those rights and how they are violated upon. It explained the history and the current IAAF regulations on athletes with hyperandrogenism. It explained the 2011 hyperandrogenism regulations and how it came about, and the decision that CAS took in suspending the rules. It also explained the 2018 hyperandrogenism rule that focuses on the DSD as the type of hyperandrogenism and the changes it came with, and the CAS rule after Caster Semenya challenged it. It also explained how the regulations affect female athletes.

The dissertation was about the IAAF eligibility regulations for female athletes with hyperandrogenism. Chapter one was the background information, which was divided into two sections; the first section explained the background of IAAF regulation and how it came about: the second section was the methodology, which was about how the research was conducted, which is an exploratory research using a systematic literature review as a data collection and analysis method. Chapter two was the literature review where the literature about the issue of hyperandrogenism rule was reviewed and arranged thematically. Chapter three was the theoretical framework; it explained what the human rights theory is, the history, the characteristics, and argument for and against the theory. Chapter four was the analysis chapter where the human rights theory was used to explore the IAAF hyperandrogenism eligibility regulations.

### **5.3. Recommendations**

Sports and Olympics connect people around the world. It is mostly that one time during games when people stand together as one, supporting and encouraging athletes and players. Most people are uneducated and know nothing about most of the things that are happening around them, especially when those things are scientific. The study recommends this to the sport governing bodies that they need to first examine their policies, and make sure they cater for everyone before passing. This is not to say they do not already know that most of the policies they pass have serious effects and that they do not only affect athletes but also those close to them. They need to be aware that not everyone understands science and that not everything can be solved through science. The IAAF is quite aware of the issues the regulations have. The governing body needs to look back at it, change some clause that has issues and make sure that their regulation is inclusive and actually protects and respects the rights of the athletes as it should. They also

need to stop making everything about science, and let ethics and law play their course and decide on issues regarding gender.

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