
# *Steroids in the Gym. The law, strong bodies and masculinity in South Africa*

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# Declaration

This work has not been previously submitted in whole or in part for the award of any degree. It is my own work. Each significant contribution to, and quotation in this dissertation from the work(s) of other people has been attributed and has been cited and referenced.

Tamsanqa Munyaradzi Mashasha

# Abstract

We know little about the use of steroids in the fitness industry in South Africa although the media frequently features stories about sportsmen who are charged with illegally taking steroids and subsequently issued with bans against continuing to participate in competitive, professional sport. In this study I examine the status of steroids in terms of pharmacology and the law.

Steroids is a shorthand for Anabolic-Androgenic Steroids (hereafter AAS). As I show, these substances are evolving compounds with important medical utility but also with the capacity to rapidly build muscle and strength. It is for this reason that they are used in competitive sport but also in the fitness industry where strength and bodily appearance tempt people, mostly men, to take AAS.

AAS are defined as a drug and thus cannot legally be bought without a prescription or over-the-counter. But for a number of reasons the control of AAS by regulatory authorities is weak. There are many laws that refer to AAS but these laws overlap and produce inefficiency and consumer confusion. In this grey area, AAS operate as an element of the country's gym culture.

The gym as a space for fitness activities has become exceptionally popular in the last few decades. Gyms are primarily a middle class institution, attracting men and women of all races. The desire to get fit and strong and look good is strongly supported by media campaigns**.** For many men, particularly those that attended sports-focused, single-sex schools, the connection between a fit, strong and good-looking body is an extension of sports participation. For some young men, the habit of taking supplements as part of a fitness regime starts during the school-going years. The line between supplements and AAS is not always clear.

This study included a survey of male gym-goers in East London and Cape Town. The survey asked questions about a knowledge and use of AAS and linked these questions to issues of masculinity. The survey was augmented with one-on-one interviews with gym-goers. This primary research is used in a chapter to investigate AAS use amongst gym goers.

This thesis compiles and analyses pharmacological and legal material that defines and regulates AAS. To our knowledge this is the first academic work to attempt to understand AAS, their regulation and therefore their accessibility to the public. It shows that because the development of AAS is ongoing in the drug industry, definition is not easy and this, together with the absence of a coordinated set of laws which bear on the production, sale and use of AAS, results in grey areas of uncertainty.

The final part of the study is based on a survey of 150 gym users and interviews with a select group of gym users known to the author. Using insider knowledge (the author is himself a gym-user) 30 interviews were conducted. The interviews explore the path along which young men travel as they develop their bodies. This path involves ideas of fitness and strength and these are bound up with the construction of masculine identity. The interviews help to explain why young men seek strong bodies and fitness and why some of these men take or have taken AAS.

The thesis argues that the allure of AAS is that it allows young men quickly to build muscle and strength and thus to realize bodily aspirations that are built by the popular media and supported by peer groups. Sport participation is often, but not always, a feature of the body-focussed approach to performing a masculine identity. The lack of clarity regarding AAS is a contributing factor to gym-goers using steroids. Steroids can easily be purchased, are widely used and prosecutions for leisure use are unheard of giving the impression that they are not illegal.

# Acknowledgements

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I would like to acknowledge and thank the participants in this research who willingly invested their time and energy in the study. Anabolic-Androgenic Steroids draw immense criticism and condemnation. The respondents who participated in the study were able to look past this so as to help.

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# Dedication

*In memory of a dear friend and role model, Boithabiso Letsholo Matubatuba. You were the compass that helped me find my way and your memories continue to provide direction.*

*I wish you could have read this.*

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# Preface

Walking to the gym one late Monday night, I asked myself whether I really needed to punish myself. I mean, I had pushed very hard the day before, academically and physically.

Surely, I deserved some rest. This question kept on being debated whilst I changed into gym apparel, the agony of having to promptly make a decision on whether to go home or simply 'push through' displayed on my face. Making my way towards my nemesis, the squat rack, I consoled myself with personally established gym knowledge – I have, after all, been lifting weights for more than a decade, and have worked in numerous gyms as an instructor and personal trainer – that when one purposefully side-steps the torments of leg day, one cannot claim to be a 'real' weightlifter. Period.

Sports, particularly rugby, has always been an uncomplicated pleasure for me. Growing up in an Eastern Cape coastal city, I was afforded the luxury of attending one of the best schools in the city. One of the school's major attractions is the grooming of pupils, particularly boys, via the provision of excellent sports facilities and sports-specific coaching staff. Teachers, parents and pupils all encouraged participation in as many sports as possible.

Whilst depositing a large volume resources, time, money and energy, into sports training, I never excelled in any of my favourite sports, specifically rugby, cricket and fishing. However, I received unfaltering support from my family, particularly my dad. In my junior years he would compassionately console me for not making the A-team, and then suggest that we grab a milkshake on our way home. Driving home, he would remind me that while making the A-team is a celebratory achievement, another notable accomplishment is being able to congratulate and support those who did. His encouragement and guidance never faltered.

Transition into high school was not particularly difficult, nor was it as scary as described in the fables told by family elders, older siblings and friends. I did not find the appearance and attitudes of adolescent boys to be odd and overbearing.

This was due to me having spent a great deal of time with my elder brothers, cousins and their friends. I was accustomed to the look and build of teenage guys. For example, hairy chests, defined mid-sections and big muscles. Additionally, I was familiar with how these bodies were utilised. Firstly, when playing sport, such as rugby and soccer, aggressive tackling was the

favoured method of defence. Second, when in close proximity to girls, I was used to my cousin and his friends readily taking off their shirts and competing in muscle flexing competitions, telling the giggling girls that their manly bodies could 'take care' of them.

Also, while I did not in any way enjoy being a 'scivvy' at school, the experience of having to perform tasks under the instruction of an elder boy was not new. My brother and cousins considered me as being their 'errand boy', constantly ordering me to perform a variety of menial tasks. For example, I would have to run to the shop to buy bread and make sandwiches for them.

Three years into high school – a time when my parents evolved from loving beings to 'overbearing and restrictive relics' – I began to wonder whether I could consider myself as a 'real' guy. As often reminded by friends, the pitch of my voice mirrored that of a girl, not to mention my short body being as round as a soccer ball. Also, and most dishearteningly, all my advances aimed at girls, no matter their level of attraction, were laughed off. My only saving grace was my academic performance which, not in itself exemplary, outmatched that of most boys. Reports of my continual failure in the pursuit and 'conquest' of women – a stiff competition amongst the family's young men – resulted in me being ascribed the nickname *isishumane* (cannot attract women).

On my 17th birthday, in an attempt to prove my manliness to others, but more so to myself, I turned to my older brother, my mentor. A man of humility, grace and charm, his smile alone gained him favour with men and stimulated temptation amongst women. Not to mention his body, a gym-forged structure of aesthetic symmetry the envy of men and dream of women. While not my first day at the gym, but the first day I was to lift weights, he made it explicitly clear that although I would never be as handsome as him – he never could stop teasing me – there was no reason why my body could not look as good if not better than his.

After two years of gruelling training, SS and AAS use and a regimented diet – somewhat compromised by rebellious binge drinking with friends – I stripped down to my underwear and let my brother examine my body. He didn't say a word. All he did was smile. I felt myself overcome with feelings of accomplishment and pride, and ever since, the gym has acted as a place of emotional upliftment and physical relaxation, a paradox due to the tension placed on the body while training.

Many amaXhosa boys consider undergoing the traditional rites of passage into manhood an efficient and all-encompassing claim to the title of manhood, and thus masculinity. Having myself undergone the rites, I returned to my community and my family recognised as a man, my female relatives joyously ululating and my dad smiling silently. However, it was at the conclusion of my first graduation that my dad offered me his hand and stated that by having fulfilled my academic obligation, very obviously developing my body and miraculously acquiring a girlfriend, I had finally succeeded in exhibiting the key masculine attribute of intelligence, muscularity and sexual prowess. He said that he was proud to recognise me as a 'real' man.

Now, ten years after gaining my father's approval, I still gym. The core of my training is more focused on maintaining my aesthetics and size rather than my fitness and health. In fact, on numerous occasions, I have been told to 'calm down and chill'. While I agree – constantly being asked by gym-goers where steroids can be purchased does eventually becomes annoying – training in a 'chilled' manner is simply not possible. Why? Because the root, but not the totality, of my masculinity lies in the gym.

Yes, the seeds of masculinity have spread into other veins of my life where they continuously grow in a healthy fashion. For example, academic progress and more self-confidence, the latter has resulted in making a better impression on people, and thus making new friends. Nonetheless, I cannot deny that the gym and all it stands for, both negative and positive, still forms the 'channel' through which the majority of my masculine identity flows.

During the course of this study, I attended gym five days a week, every week, week after week, month after month. I consumed generous portions of SS, whey protein the most expensive of which. Gym is one of my passions but also a place of familiarity and friendship and at times a haven from the demands of academic research and routine. In the pages that follow I have woven my own journey and knowledge into the narrative and analysis, all the time reflecting not only on my fellow gym users, but also on myself and my body.

# Chapter 1. Introduction

## 1.1 Aim of the Study and Research Questions

The main aim of this study is to investigate and understand AAS in South Africa (hereafter SA[1]). The study also aims to explore men's varying notions and perspectives regarding AAS's impact on contemporary SA masculine attitudes. Lastly, the study considers the boundary between the legal and legitimate as opposed to the illegal/illegitimate use of AAS. The primary research question examines why (and how) men used AAS in the context of gym culture. The discussion builds on four main questions that are examined through an in-depth desktop analysis of global and South African AAS literature, a quantitative survey and qualitative interviews. These questions are:

- What are AAS?
- What is the legal status of AAS?
- How widely are AAS used?
- What are the motivations for the use of AAS amongst men?

Each question will be separately addressed in each of the substantive chapters.

## 1.2 Study Motivation

The study stemmed from my extensive personal background as a former AAS-using, highly devoted weightlifting gym-goer/personal trainer. Firstly, I was motivated to consider and thus investigate AAS using and non-using gym-goers' gym experiences.

Secondly, the administration of AAS in SA is encompassed under a murky, grey blanket: AAS are regulated via a host of independent laws. The combination of these laws results in a confused understanding of whether AAS are legal or not. Consequently, their regulation is misinformed and uncoordinated. As such, I aim to gain a deeper understating of AAS pharmacology, history and regulatory laws. Furthermore, I am keen to realise why some men willingly or maybe unwittingly break AAS law by involving themselves in all sorts of AAS activities.

[1] See Appendix 9 for list of acronyms.

Thirdly, AAS are globally touted as dangerous, addictive drugs that have, on the other hand, a beneficial effect on the appearance and strength of the body. Thus, I am interested to learn why many trainees, in a generally uninformed manner, readily add AAS into their health regimes.

Lastly, my study will contribute to an understanding of a little-studied substance (AAS) and in this way possibly contribute to debates about the uses and abuses of AAS.

## 1.3 Main Argument

When used as training aids, AAS are powerful, result-guaranteeing drugs that accelerate muscle acquisition. Such attainment is largely driven by a desire for physical enhancement (increased strength, power and stamina), improved athletic ability and bettered aesthetics.

In South Africa, AAS are largely, but not completely, socially perceived as unnecessary and unhealthy substances. There are two reasons for these perceptions.

Firstly, the SA population lacks information regarding AAS. Also, information received is onesided: anti-steroid opinion is rife due to the well-publicized adverse side-effects. However, Hartgens & Kuipers (2004) argue that the media tends to exaggerate the 'wickedness' of AAS by focusing on the most dramatic cases involving adverse AAS consequences. Further, SA society is mostly unaware of AAS medical benefits because, intentionally or not, they are barely acknowledged and sparsely reported.

Secondly, SA's bias against AAS is a result of the nation's very strong ethical sports code which condemns the use of AAS as giving an unfair advantage during competition. However, a small social segment comprised mainly of gym-goers and sportsmen has no issue with AAS. Keen to gain the benefits AAS offer, they perceive AAS to be acceptable and legitimate.

Thus, it can be argued that SA society's understanding and perceptions of AAS are clouded in a shadow of ambiguity.

Unlike in other states, SA does not have laws specifically devoted to AAS regulation. For example, the United States of America's (hereafter USA) Anabolic Steroid Control Act of 2004 and Designer Anabolic Steroid Control Act of 2014 provide clear guidelines regarding the use of AAS in the USA. In SA AAS are regulated by numerous, confusedly intertwined laws stating that the possession of and any activity involving AAS is illegal.

However, ASS are classified and regulated as Schedule 5 pharmaceutical substances. The law governing such scheduled drugs dictates that they can be legally acquired via a medical script that is provided by a licensed medical practitioner. Such legislature results in AAS enjoying a *quas*i-*legal* status. But this status has contributed to misunderstanding and confusion, and has allowed for the construction of a thriving nationwide underground AAS black market. Cracks in AAS governing legislature have provided individuals involved in AAS activities with gaps through which AAS can be obtained in an uncomplicated and risk free manner.

Muscularity and fine sportsmanship have historically been and continue to be associated with masculinity in SA. This agrees with Monaghan's (2001: 332) suggestion that "the body, culture and self are intertwined: bodies have social meanings conferred upon them and [they] confer meanings that are constitutive of [their] self-hood".

Numerous elite sportsmen, primary rugby players, have used AAS to better their athletic performances. For example, former Springbok hooker Chilli Boy Rapelle who, in the last 10 years, has failed three drug tests. And, former Springbok lock Johan Ackermann who was banned in 1997 for two years after traces of nandrolone were found in his system.

To avoid detection, AAS are administered in an informed, proportional manner. To play at the professional level, sportsmen are required to learn the codes relating to anti-doping for their respective sports. When sportsmen are found to be using AAS (doping) they are immediately condemned as cheating and illegitimate. What generally follows is a formal enquiry which often culminates in a long period of being banned from sports participation.

Most AAS use occurs in the commercial, recreational gym sphere. Like elite sportsmen, recreational gym-goers use AAS to enhance their aesthetics and sports abilities. However, unlike their counterparts, most recreational gym-goers use AAS in an uninformed manner and their knowledge regarding AAS (il)legality is unclear and vague.

Also, AAS use is not considered as cheating because gyming is not a sport but a *lifestyle* (Kaufman & Kirchheimer, 1997).

This study's main argument that responds to the question, why do people use AAS for nonmedical purposes, is that to successfully realise training objectives, and thus gain a feeling of self-fulfilment which evolves into augmented masculinity, a small cohort of gym-goers has

included AAS into their health regimes. AAS provide a means to an end and not an end in itself – self-fulfilment via enriched aesthetics and sporting prowess.

Also, this study argues that the lack of explicit AAS law(s) has resulted in regulatory ambiguity. This vagueness has provided individuals involved in activities, positive or not, with numerous legal channels via which to manipulate AAS administrative policies. For example, internet purchases from countries, such as Mexico, where they are legal.

## 1.4 Expansion of the Pharmaceutical Industry

### 1.4.1 Sports Supplements Defined

Competitive sports generate the search for competitive advantage among athletes. This includes turning to the products of pharmacology (Calfee & Fadale, 2006; Bishop, 2010). Ancient Greek Olympians ingested multiple substances including "dried figs, mushrooms and strychnine" (Naidoo, Naidoo & Bangalee, 2018: 166) as ergogenic aids.

Currently, there is no universally accepted definition of ingested substances that potentially boost sports performance.

While popular, I avoid the term 'ergogenic aids' because it "could refer to anything that enhances performance (e.g. dietary supplements, psychological strategies or biomechanical techniques)" (Bishop, 2010: 998). Also, I avoid the terms 'nutritional supplements' and 'nutritional ergogenics' because this implies that the substances definitely have nutritional value which might not be the case.

Therefore, I employ the term 'sports supplement' throughout the study. I define sports supplements (hereafter SS) according to Bishop's (2010: 998) definition of dietary supplements that states "[SS are] any [products] taken by the mouth, in addition to common foods, that [have] been proposed to have a performance-enhancing effect". For example, whey protein, creatine, sports drinks and human growth hormone (HGH).

### 1.4.2 South African Sports Supplements Market

The past four decades have borne witness to the phenomenal expansion of the highly lucrative global SS industry (Scofield & Unruh, 2006; Atkinson, 2007; Naidoo, Naidoo &

Bangalee, 2018). The SS industry is equally profitable in SA, where it is growing at an annual rate of 7.7% (in line with the global compound annual growth rate of 6.8%) (Naidoo, Naidoo & Bangalee, 2018).

There has been a consistent increase in the quantities, types and variants of SS produced, sold and consumed both professionally and recreationally (Atkinson, 2007; Molinero & Márquez, 2009; Bishop, 2010).

The SS industry's marketing is aggressive, diverse and innovative. Although costly, SS are readily purchased by millions of sportsmen, recreational gym-goers and health-conscious beings hoping to improve their performance and general health (Scofield & Unruh, 2006; Molinero & Márquez, 2009).

However, in some cases, SS can be potentially harmful and/or ineffective. Thus, some products are likely to be little more than unsafe placebos, Morrison, Gizis & Shorter (2004: 481-482) stating that numerous SS:

> have been shown to have no effect or to be dangerous. Many adverse effects from the use of various [SS] have been reported to [authorities].

This is due to SS companies not being legally required to produce empirical evidence illustrating the efficacy and safety of their products – SS manufacturers do not invest money in rigours, detailed studies and clinical trials (Harris, 2000; Molinero & Márquez, 2009). However, this does not hamper product sales because SS consumers are:

> all eager for [implicitly suggested] anabolic-steroid-like gains through [SS use]. [SS] appeal to a large number of consumers willing to pay for alleged benefits that are too good to be true (Molinero & Márquez, 2009: 129).

The impact of SS is most prominent in the athletics sphere, adolescent and university athletes (hereafter AUA) reported as being the SS industry's primary target market (Scofield & Unruh, 2006; Molinero & Márquez, 2009). This is due to AUA's excessive use of SS in a continuous attempt to improve their performance. According to Molinero & Márquez (2009), global SS usage among all athletes usually ranges between 40% and 88%, and depending on the sport, up to 100%. For example, most rugby players use SS such as protein, creatine and sports drinks.

### 1.4.3 Sports Supplements in the South African Gym Sphere

As above-mentioned, SS are no longer explicitly associated with sportsmen. Currently, more SS are consumed in all tiers of SA society, thus resulting in the accelerated growth of the state's SS industry. Increased SS consumption is more notable in the gym sphere (Naidoo, Naidoo & Bangalee, 2018).

Two factors are thought to have played a role in the steady expansion of the SS use in the gym-sphere. Firstly, more contemporary men aim to construct 'Ideal' physiques: men's perceptions of an ideal body differ: some consider it to be muscular and strong. Others consider an ideal body as being slender and fit. Thus, men endeavour to build bodies they *personally* consider as ideal. Therefore, gym-goers consume SS in the hope that they will aid in the quick and safe accomplishment of the desired task (Yesalis & Bahrke, 2000; Atkinson, 2007).

However, it must be kept in mind that social culture and trends play an active role in what one perceives as ideal (Yesalis & Bahrke, 2000; Atkinson, 2007). Thus, modern men are under increased pressure to develop bodies that, to a certain degree, resemble the contemporary *social Ideal*, that being a lean, toned and reasonably muscular body.

Further, recreational gym-goers' consumption of SS has expanded due to their lack of SS knowledge and understanding, Naidoo, Naidoo & Bangalee (2018: 166) stating that "The lack of consumers' awareness concerning the supplement industry creates a false perception that products are regulated as medicines". Gym-goers' primary sources of SS information are athletic trainers, strength and conditioning coaches, SS store employees, medical practitioners (doctors and dietitians), media (television, internet videos and magazines) and personal relations (friends and family) (Calfee & Fadale, 2006; Scofield & Unruh, 2006). But, most of these information sources lack in-depth knowledge of SS. Thus, they are unable to provide sound advice regarding possible benefits, potential side effects and risks associated with SS use (Harris, 2000; Scofield & Unruh, 2006; Molinero & Márquez, 2009).

Secondly, SS regulation is globally and domestically contentious. There is no universal SS legislature/regulation system, and countries differ in their administrative approaches and strategies (Harris, 2000; Morrison, Gizis & Shorter, 2004; Molinero & Márquez, 2009). The USA's Dietary Supplement Health and Education Act (DSHEA) of 1994 removed control of SS

supplements from the jurisdiction of the Food and Drug Administration (hereafter FDA) Thus, SS do not have to be approved as safe and efficient by the FDA before they are marketed. The FDA is only able to take action once SS are on the market and are reported as unsafe (Harris, 2000; Morrison, Gizis & Shorter, 2004; Molinero & Márquez, 2009).

The lack of a global or local regulatory body that specifically scrutinises all aspects of SS products before they are cleared for sale has resulted in a wide variety of SS becoming readily available.

In South Africa, SS are sold and purchased as legal, over-the-counter products by anyone of any age at shopping outlets and chemists. This is due to a lack of explicit SS law (Bishop, 2010; Naidoo, Naidoo & Bangalee, 2018).

Legislation currently used in the regulation of SS includes the Misuse of Drugs Act 1971, the Drugs and Drug Trafficking Act No. 140 of 1992, the South African Institute for Drugs-Free Sports Act 14 of 1997 and the Advertising Standards Authority (ASA) Code of Advertising Practice.

However, the use of these independent laws in such a tangled way has resulted in many administration issues, the cause of which being the lack of a clear distinction between food, medicines, drugs and SS. A clear distinction between these substances has not yet been established because, as above-mentioned, there does not exist a universally accepted definition of SS (Bishop, 2010). This has hindered the development and implementation of explicit SS legislation.

However, the SS industry in SA is expected to undergo several regulation changes within the next few years. This is due to the introduction of the implementation of the SA Health Products Regulatory Authority (SAHPRA) which is due to supersede the Medicines Control Council (hereafter MCC) (Naidoo, Naidoo & Bangalee, 2018).

Products such as SS that make medical claims are expected to be marketed as medicines, and thus fall under the Consumer Protection Act (CPA) 68 of 2008 (Naidoo, Naidoo & Bangalee, 2018). For example, testosterone boosters and fat loss agents.

Having defined and briefly examined the SS industry in SA and the two main factors contributing to increased SS use in SA gyms, I can proceed to the investigation of Steroids in SA sports below.

## 1.5 Steroids and South African Sports

According to several authors (see, Grundlingh, Odendaal & Spies, 1995; Alegi, 2004; Ndlovu, 2010; McGregor, 2011; Grundlingh, 2013; Odendaal, 2013), sports is deeply embedded in SA.

School and university rivalry is intense. Annual and eagerly anticipated rugby matches between renowned sports schools stretch back more than a hundred years and are now televised. For example, Paarl Boys High vs Paul Roos Boys High, and Grey College vs Grey Boys High. Also, all national sports teams are hugely supported.

To gain greater degrees of social, peer and personal recognition as 'young men' and not 'old boys', more AUA now use SS in conjunction with AAS. AAS use is stimulated by AUA's desire to gain the *guaranteed* performance improving effects provided by AAS (further discussed below). Enhanced sports performance resulting in the swift accumulation of social capital and higher status among peers. For example, the annual University Rugby Cup (popularly known as the Varsity Cup) is a fervently supported tournament.

Fixtures are played at an incredibly intense level because players hope to make good impressions on national selectors and thus potentially earn a place in the national SA rugby team (popularly known as the Springboks) (McGregor, 2011).

Thus, "athletic activity defines masculinity for high status males" (Rees, Zarco & Lewis, 2008: 331). As such, AAS are employed as 'quick fixes' to improve performance (Calfee & Fadale, 2006; Scofield & Unruh, 2006).

A 2011 study discovered that 4% (n=100) of adolescent boys from several Johannesburg high schools reported to be using and/or having used AAS. The main reasons reported for SS use were increased performance, enhanced endurance during strength training, bettering aesthetics, increased health and coping with stress. When asked if AAS use is unfair, 61% (n=100) agreed and 29% (n=100) disagreed (Gradidge, Coopoo & Constantinou, 2011).

A 2014 Nolte *et al.* study illustrated that 3.9% (n=346) of adolescent athletes from Gauteng admitted to be using and/or having used AAS and other banned substances. Also, 14% (n=346)

of participants said that they would consider using AAS if they would not get caught. Reasons for substance use were the same as above. Regarding doping, more than 63.0% (346) of recruits strongly agreed that using AAS and other prohibited substances is morally wrong; however, 15.9% (n=346) did not have a moral objection to doping.

In 2011, *Sports Illustrated*, a national popular sports magazine, surveyed 110 (n=110) rugby players from first teams, playing for 19 of the top Schools in SA and personally interviewed 18 (n=18) of these players. Most interviewees reported knowing other players who use AAS and other banned substances. From the surveyed sample, 67% (n=110) of the boys claimed to know other players who had and/or were using AAS.

Many interviewees believed that AAS use is increasing and proposed consistent AAS testing throughout the competitive year. Most interviewees suggested the desire to play for the Springboks and/or obtain university scholarships as the main drivers of AAS use (van Aswegen, 2013).

A longitudinal study showed that the use of banned substances, primarily AAS, in sport in SA is on the increase, van Aswegen (2013: 38) stating that:

> Urine samples (N=2066) were obtained at 17 different sporting events over a duration of six years and in the first year of testing (1986) 5.3% of samples tested positive for banned substances, in the following year (1987) it dropped to 3.7%, but thereafter it went up to 5.2% of samples testing positive in 1988, 5.5% in 1989, 5.6% in 1990 and 5.9% of samples tested positive in 1991.

Thus, it is evident that, although still limited, AAS use in SA is increasing. This is further displayed by the increased cases of AUA rugby players testing positive for AAS during the Varsity Cup and at Craven Week[2]. But doping is still strongly condemned as unfair and a form of cheating. As demonstrated by the two studies above, adolescent athletes perceived doping

[2] The Craven Week is an annual rugby tournament that features SA's most prominent rugby schools (Henson, 2020). The tournament began in July 1964 and is named after Dannie Craven, a former Springbok player and coach. Also, he was appointed as the president of the South African Rugby Board (SARB) in 1956 and served as the chairman of the International Rugby Board (IRB) on several occasions (Grundlingh, Odendaal & Spies, 1995). Boys compete in a highly aggressive manner so as to attract the attention of domestic and international talent scouts. More boys have started using AAS to enhance their performances in an attempt to increase their odds of being favourably observed (Henson, 2020).

as cheating and 'just wrong'. Further, the shame of getting caught was highlighted (Nolte *et al.*, 2014).

Almost the entire *Sports Illustrated* sample 96% (n=110) believed that doping degrades sports ethos and ethics; and militates against friendly, highly competitive but fair play. Moreover, most of the sample felt that doping is emasculating (van Aswegen, 2013). I explore this issue at great length later in the study.

### 1.5.2 Steroids in South African Gyms

Besides increased and intensified practice, most athletes seeking to gain a competitive edge develop their bodies in gyms. But their training autonomy is limited due to social and professional contracts: as earlier mentioned, elite sportsmen are legally bound to adhere to local and intentional anti-doping law and AAS use is condemned as a breach of ethical sports code.

By contrast, recreational gym-goers have more leeway regarding the use of AAS. Increased scope regarding social gym-goers' use of AAS in gyms is a consequence of the perception that gyming is a lifestyle, not a sport (see below).

SA law prohibits all AAS activity. However, the possession and use of the drugs is legal when they are procured via a medical script provided by a licensed medical practitioner. But, AASusing gym-goers argue AAS use, and thus its procurement to be legitimate. The drugs are used as a means to an end, not, they are not an end in themselves; Also, AAS are not synonymous with narcotics. Furthermore, most, but not all, gym-goers are unaware of and/or do not understand state legislature governing AAS. This is not surprising due to the number of different laws that impact and relate to AAS.

Some AAS-using gym-goers are aware that non-medically sanctioned use of AAS is illegal. These AAS-users justify (rather than excuse) their violation of state law by arguing that self-fulfilment and increased masculinity were only possible through the AAS-induced bodily development. Thus, they acknowledge the illegality of AAS use but advocate their use of AAS as legitimate. As earlier mentioned, literature focused on the SA fitness sphere is scarce. The same is true of and for AAS use in SA gyms.

## 1.6 Sports Administration and Steroids

SA sports protocol is governed by the South African Institute for Drug-Free Sport (hereafter SAIDS). Established in 1997, SAIDS aims to fight doping in SA sports and further consolidate society's already well-established ethical sports culture. Sports protocols are developed according to and governed by the South African Institute for Drugs-Free Sports Act 14 of 1997. Nevertheless, this law does not have complete autonomy regarding AAS regulation; it does not explicitly have primary as the law governing AAS.

As earlier mentioned, AAS are classified as legal schedule 5 prescription pharmaceuticals. Thus, they fall under medical administrative legislature: classified as pharmaceuticals, AAS are subject to Pharmacy Act 53 of 1974 guiding protocols. But, schedule 5 pharmaceuticals are classified according to the Medicines and Related Substances Act 101 of 1965 (Sections 22A). Therefore, these Acts are simultaneously employed in AAS administration. Also, the Drugs and Trafficking Act No. 140 of 1992 plays a part in AAS regulation because AAS contain several salts and esters used in the production of narcotics. Besides the Pharmacy Act, all the above mentioned Acts explicitly dictate that all AAS activities are illegal.

The lack of centralised regulation of AAS in sport by one body with a clear set of laws and policies has meant that the management and control of AAS in sports is currently failing. Regulation will continue to fail until an explicit 'black and white' AAS supervisory system is constructed and enforced, thus throwing off the grey blanket currently suffocating AAS administration.

## 1.7 The Fitness industry

Since the 1970s, gym[3] and fitness culture has developed into a booming multibillion-dollar global industry (Sassatelli, 1999a; Smith Maguire, 2001; Andreasson & Johansson, 2014; Rojas, 2016). According to the International Health, Racquet & Sports Club Association (IHRSA,

[3] I use the term 'gym' throughout the study. This is a contestable description. For some, gyms invoke images of grunting bodybuilders and swearing powerlifters using old equipment, the environmental attitude being 'train hard or fuck off!'. Oppositely, 'health clubs' are perceived as more accommodating, friendlier and luxurious spaces with a 'train how you like in our pristine institutes' attitude. However, I use the term 'gym' because most participants were recruited from the health clubs' gym (free weights and/or machines) area.

2019), which is the trade association serving the health and fitness club industry, the global fitness industry generated $94 billion in 2018, up from $87.2 billion in 2017. The annual rate of growth of profits is estimated to be 2.6% (IHRSA, 2019).

The roots of the modern fitness industry can be traced back to the physical culture of late 19th century inspired by the teachings of the forefathers of bodybuilding, specifically Eugene Sandow (1867-1925) and Charles Atlas (1883–1972) (Andreasson & Johansson, 2014, 2016). Originally, this subculture was viewed and understood as a male preserve, Andreasson & Johansson (2014: 95) stating that:

> building muscles and devoting time to strengthening the body [was] mainly a male preoccupation closely related to warfare, violence, and later on to the building of nation-states—thus, a practice that could be related clearly to what … [is referred] to as the masculine stereotype.

Through the 1970s, the masculine stereotype was illustrated and glorified through books and movies featuring internationally recognised bodybuilders and muscular, 'macho movie stars. For example, Arnold Schwarzenegger and Lou Ferrigno in *Pumping Iron*, and Sylvester Stallone in *Rambo*: *First Blood* (Andreasson & Johansson, 2014).

The meaning and understanding of fitness has changed over time. The introduction of various training activities, primarily aerobics and spinning, resulted in an influx of women members, thus expanding the fitness movement. According to Sassatelli (2011, cited in Andreasson & Johansson, 2016: 144):

> Since the 1970s there has been a marked increase in the number of exercise premises presenting themselves in a new guise. They have addressed an increasingly large, mixed public. They have shifted the notion of the gym from a [male] sub-cultural passion to a mass leisure activity, intertwined with pop culture.

While the ultimate goal of the fitness industry is the promotion of an overall betterment of one's self, contemporary fitness is without a doubt a commercial venture – modern fitness takes place through various markets (Smith Maguire, 2001, 2002; Andreasson & Johansson, 2014, 2016; Stewart & Smith, 2014; Rojas, 2016). For example, SS, training equipment, health food and fitness literature (magazines, books and videos). Thus, the fitness industry has been tightly woven into contemporary consumer culture. It is important to understand that fitness is not just a popular technology for improving one's physical condition and well-being

(Stewart & Smith, 2014). Fitness is a consumer *lifestyle,* (Smith Maguire, 2001, 2002; Crossely, 2006; Rojas, 2016). Kaufman & Kirchheimer (1997, cited in Smith Maguire, 2002: 454) commented that:

> We need to stop thinking of fitness in terms of whether we got to the gym three times last week. Rather, think of fitness as a lifestyle that touches on everything we do. Just as our work life helps define who we are, so does our fitness life … Fitness is a lifestyle, not three visits to the gym a week.

By encompassing all aspects of one's life, a fitness lifestyle not only influences but defines who one is.

A central fitness lifestyle element is that bodily improvement is a sovereign and autonomous task conducted during leisure time. To reap personal desired training rewards, body, health and wellbeing enhancement, the body has to be self-managed and developed through dedicated and consistent self-work and correct market choices (Smith Maguire, 2002; Andreasson & Johansson, 2014, 2016).

According to Smith Maguire (2001, 2002) and Stewart & Smith (2014), modern consumer culture has become fixated with the body health and appearance having evolved into 'dilemmas' in need of urgent attention. Bodily obsession is based on the enhanced modern relationship between the body and livelihood: most fitness consumers are members of the middle class. A large segment of this class occupy managerial and/or other high profile positions (Smith Maguire, 2001, 2002).

Thus, their work requires performative and appearance management skills. These individuals are required to appear as friendly, aesthetically pleasing and healthy individuals. Therefore, more investment in the maintenance and betterment of the body must be made (Smith Maguire, 2001, 2002).

Consequently, greater emphasis on improving the state of the body has stimulated fitness consumption, leading to an increase of specific fitness and other commercial products, resulting in a globally enlarged fitness industry. The expansion of the Australian fitness industry clearly illustrates this:

> [Between] 2004-05, health and fitness centres and gymnasia generated a total income of $679.4 million. The primary source of income comprised membership and competition fees of $535.1 million which represented 79 per cent of total income. Other key sources of income included: casual fees ($46.4

> million); rent, leasing and hiring income ($16.5 million); and food sales ($9 million) (Fitness Australia, 2009: 4).

Between 2007-2008, the fitness industry:

> contributed a total of $872.9 million to the Australian economy … This comprises a direct value added contribution of $486.5 million, with $374.2 million being paid in wages and $112.3 million returned to capital owners as operational profits (Fitness Australia, 2009: i).

These figures illustrate an increased economic contribution of more than $193 million in just two years, a clear indication of the accelerated growth of the fitness market.

### 1.7.2 The SA Fitness Industry

The SA fitness industry dominates all others in Africa and is one of the most prolific in the world (Iwuoha, 2015). It has expanded at a remarkable pace, resulting in notable economic growth (Iwuoha, 2015; Statista, 2020). According to Statista (2020), the industry generated $151 million from 191 gyms which accommodate 5 million customers. This profit is expected to show an annual growth rate of 4.7%, thus resulting in a market volume of $181 million by 2024 (Statista, 2020).

The majority of gym consumers are members of the middle class. The growth of the country's middle class has resulted in more men occupying professional and/or managerial jobs. Thus, they are required to improve their bodily appearance and presentation. Also, training allows members to socialise and interact with one another (Draper *et al*., 2006).

While there is good research on the global fitness industry and gym culture, the situation in SA is different. Relatively few studies have been undertaken to describe and analyse the current state of the fitness industry and the gym culture.

### 1.7.3 Masculinity

In SA, a patriarchal society, masculinity is emphasised by sports and the aesthetically muscular, competitive body. Sports participation, compulsory in most single-sex boys boarding schools (hereafter SSBBS), is an indicator of masculinity. Boys most successful at sports command the highest statuses of power. In an attempt to increase their chance of sports success, adolescents invest heavily in the development of strong and powerful and dexterous bodies. Gyming becomes a staple activity performed during leisure time. A large

cohort of boys continue training after school; their well-developed bodies reinforce their masculine identity.

In order to assuredly maintain and improve their bodies, some adolescents and men are tempted to use ASS. Most resist, but a small troop of gym-goers succumb to the temptation and include AAS into their health regimes.

## 1.8 Methodology Overview

This study is based on a review of laws and the pharmacology literature which are the foundations of Chapters 4 and 5. I gathered data by survey and interviews for Chapters 5, 6 and 7. The methodology I used will be discussed in Chapter 3.

## 1.9 Dissertation Outline

This dissertation is structured into a series of chapters. **Chapter 1** introduced the research topic and outlines the reasoning, motivation and rationale behind the research.

**Chapter 2** reviews the secondary literature. Key areas include a) an overview of the increased global use of AAS influenced by enhanced social and personal pressures to present physically able, aesthetically appealing physiques and b) the distorted understanding of AAS both globally and in SA. The chapter concludes with a critical discussion of several gender theory pillars, specifically the Body and Masculinity and Sports as a masculinity construction site.

**Chapter 3** presents an outline of the research design and explains the utilised research procedures. Further, the chapter discusses issues relating to quantitative and qualitative sampling, data collection, data analysis and some of the key challenges faced and how they were overcome. The chapter concludes by outlining the ethical considerations undertaken to protect the research participants from undue distress.

**Chapters 4, 5, 6 and 7** detail the empirical findings.

**Chapter 4** begins by providing a discussion of testosterone and a definition and description of AAS. A detailed historical AAS account which highlights AAS being initially developed and employed as therapeutic agents and then evolving into (il)legal physical enhancing agents follows. This leads to a comprehensive explanation of the drugs' pharmacological structure(s) and their mechanism of action. Then, a description of ASS administration techniques and

dosing schedules and an explanation of the AAS Therapeutic Table are provided. The chapter concludes by illustrating various types of AAS globally and domestically favoured, and then discussing AAS' adverse effects.

**Chapter 5** explores the confusing nature of SA's complex AAS administration system which has resulted in the drugs' unclear, grey *quasi-legal* status. An investigation of the nationwide underground AAS black market follows. The chapter concludes with a brief outline of how and at what cost (social and economic) AAS are policed.

**Chapter 6** provides an outline of the study's survey and an analysis of the collected data. The questionnaire was designed to obtain information regarding respondents' perceptions and experiences and understanding of the (il)legal/(il)legitimate use of AAS, AAS in relation to masculinity and AAS regulations.

**Chapter 7** focuses on the study's interview findings. The biographies of a small cohort of interviewees are presented to provide a detailed and rich understanding of the views of gymgoers regarding AAS use. Also, the chapter addresses numerous gym experiences described by interviewees. These are analysed using the insights of Critical Masculinity theory.

**Chapter 8** concludes the research project by discussing the overall implications of the main findings, providing suggestions for future research, and identifying its major limitations.

# Chapter 2. Literature Review and Masculinity Theory

## 2.1 Introduction

There are many mental, physical and emotional motivations behind the phenomenon of attempting to achieve a personalised ideal masculine physique. Currently, bodily development is motivated by the stronger relationship between body and livelihood, increased pressure to present the social ideal physique and athletically capable bodies.

In an attempt to hastily realise their training objectives, a small number of males have included AAS into their health regimes. They argue that AAS use is a legitimate means to an end mainly because gyming is not a sport but a lifestyle. However, most AAS users do not understand the pharmaceutical aspects of AAS. Also, the interpretation of AAS and the understanding of AAS law in SA is shrouded in a grey cloud of ambiguity due to the lack of a clear, explicit AAS status. Also, media fails to report an accurate account of AAS administration policies. Members of the public are thus left uncertain regarding whether AAS are legal or not. Consequently, AAS legal ambiguity constricts individuals' ability to understand the boundary between the legal and legitimate as opposed to the illegal/illegitimate use of AAS.

This chapter examines AAS literature. It is divided into two sections, the first beginning with an exploration of adolescents increased use of AAS. This includes an examination of AAS as 'addictive' and harmful drugs', the use of which is suggested to have provoked cultural disorder. In the second section, gendered perspectives on masculinity and the embodiment of masculinity in sports are addressed.

I do not investigate AAS pharmacy or AAS law literature in this chapter because they are thoroughly examined in respective chapters (see 'Steroids and Pharmacy' and 'Steroids and the Law in South Africa').

## 2.2 Steroid Use Among Adolescents

AAS has expanded to include athletes participating in a wide variety of sports at virtually all levels of competition, and non-athletes emerged during the 1980s (Scott, Wagner & Barlow, 1996; Miller *et al*., 2005). For example, AUA rugby players and recreational gym-goers.

Although great concern has always been expressed regarding elite athletes and doping, stress regarding the increased use of AAS by recreational gym-goers has overtaken doping hassles.

According to Scott, Wagner & Barlow (1996) and Miller *et al*. (2005), adolescents form a large segment of AAS using recreational gym-goers. AAS are used primarily by males, the largest group of high school AAS users made up of 15-18-year-old boys. As earlier mentioned, adolescents are particularly susceptible to the temptation to use AAS to improve their sports performance, enhance their physical appearance and meet peer approval. However, contrary to common beliefs, only a minority of teenagers actually employ AAS as a means for achieving a good looking, athletic body.

Scott, Wagner & Barlow (1996) and Miller *et al*. (2005) contend that the logic of using AAS as a method to enhance the body does not block adolescents use of illicit substances and/ or engaging in risky behaviours. This is shown by AAS use in the general juvenile population having been found to be associated with other forms of problem behaviours. For example, binge drinking, fighting, using cocaine use and unprotected sex. According to Jessor & Jessor (1977, in Miller *et al*., 2005: 1640), it may therefore be "more illuminating to conceptualize AAS use as part of a larger constellation of substance use and other problem behaviours, rather than primarily as an adjunct of physical conditioning".

Drawing on the authors of Problem Behaviour Theory, delinquent-type behaviour such as binge drinking and illicit substance use, are all part of the same pattern and constitute a 'problem behaviour syndrome'. Thus, adolescents involved in one area of problem behaviour tend to engage in others (Jessor & Jessor, 1977).

The cause of this behaviour has been suggested to be adolescents drive to "gain adult status, which their body is prepared for, but which society denies them" (Wichstrøm & Pedersen, 2001: 5).

It must be noted that the majority of data used in the research of adolescent AAS use is drawn from the USA and UK. While there are several studies that mention adolescents use of AAS in SA (see Lambert, Titlestad & Schwellnus, 1998; Martin & Govender, 2011, 2013; Nolte *et al*., 2014), the lack of adolescent AAS use research in SA is a major lacuna in our understanding.

## 2.3 Masculinity

The past two decades have witnessed the growth of the study of masculinity. Its distinction as a subject of critical academic thought is a consequence of the positioning of gender as social construction by the feminist and gay liberation movements (Morrell, 1998). There is now a sizeable volume of literature devoted to the subject. The bulk of the literature has been produced by a constantly increasing number of transatlantic researchers (Morrell, 1998; Morrell *et al*., 2013). Scholars from post-colonial English speaking states, specifically Australia and New Zealand, have also contributed a significant volume of literature. One of these most prominent scholars is Raewyn Connell, a historian by training but writing in the discipline of sociology. Her landmark texts, *Gender & Power* (1987) and *Masculinities* (1995), played a crucial role in the development of the notion of gender regimes (Morrell, 1998; Morrell *et al*., 2013).

### 2.3.1 Gender and the Sex Role Framework

Until the late 20th century, gender studies were based on sex role theory. Despite extensive criticism and a substantial loss of approval, it helped in the development of gender theory (Carrigan, Connell & Lee, 1985; Connell, 1987, 2005). According to Connell (2005: 22), sex role theory is founded upon the notion that "being a man or a female means enacting a general role of expectations definitive to one's sex – the 'sex role'". Rephrased, an individual's gender is defined by their enactment of a general set of social practices biologically defined.

Connell (1987) writes that the masculine and feminine characters are produced via 'socialisation' into the respective male and female roles in a particular culture. In western culture (SA included), girls are given dolls and taught to behave in a submissive manner. Boys are taught to be more aggressive than girls, not to cry and act like a man. They are given sports equipment and expected to engage in rough sports such as rugby and boxing. By the time they reach adulthood, children will have learned a socially respectable sex role or script that they can act out as adults.

Individuals who fail to, no matter the effort made not to, perform their sexual expectations are viewed as having failed the socialisation process. In some instances, this leads to feelings of personal inadequacy and insecurity (Connell, 1987). Sex role theory focuses on the analysis of a normative standard case. Generally, the standard case is the family, with the conventional

structure of power and the sexual division of labour. Men are the designated breadwinners and women are housekeepers (Connell, 1987)

This is regarded as 'standard' because the majority of the population functions according to its design. Consequently, this is regarded as 'normative' because most people perceive it to be the proper or way to live – it defines actual role expectations. Also, it is regarded as the biologically proper or 'natural' and thus correct way to live (Connell, 1987).

But what is considered normative may not be standard: in sex role theory it is a taken-for granted fact that all men are heterosexual and that they are superior to women on all fronts. And, men undertake endeavours to acquire and then succeed at work in an amicable and supportive manner (Carrigan, Connell & Lee, 1985; Connell, 1987). Homosexual individuals are regarded as social deviants or failed males.

According to Parsons (1953 cited in Carrigan, Connell & Lee, 1985: 556), "Homosexuality … is universally prohibited so as to reinforce the differentiation of sex roles". Frequent attempts using an array of methods such as spiritual cleansing and, paradoxically, sexual abuse, are used to 'fix' and make 'real' men out of homosexuals (Carrigan, Connell & Lee, 1985; Connell, 1987).

Connell (1987) suggests that what is 'normative' is, in fact, not a definition of normality or ordinariness. Rather, ordinariness is the definition of what the holders of power (government and tribal leaders, for example) wish society to accept and enforce. Sex role theory advocates the notion that there is only one form of masculinity, which rests on an internalised role and feeds into social expectations of what a man should do. Role norms are social facts that change in lieu of altered social processes. This occurs whenever socialisation agencies such as families and schools, transmit new expectations (Kessler *et al*., 1985; Connell, 1987).

Simplified, sex-role theory is linked to a structure of biological difference. It assumes that men and women behave, feel and think the way they do as a function of their sex. These perceived differences function in a complementary fashion, are determined at birth and fixed throughout life. Sex role theory assumes the natural superiority of men over women. Role comparisons are based on intelligence and access to social power. Quality of character and women's fitness to perform in work roles traditionally performed by men are also evaluated; sexual division of labour.

Standing alone, sex role theory is not an adequate theoretical framework. This is due to a number of limitations in its approach to gender construction (Kessler *et al*., 1985; Connell, 1987). Logistically, social theory is vague. It simultaneously exaggerates the magnitude of individual attitudes while deflating the importance of the socio-economic forces to which those attitudes are a response (Kessler *et al*., 1985, Connell, 1987).

Also, sex role theory is fundamentally static (Carrigan, Connell & Lee, 1985; Connell, 1987). It fails to grasp social change in history, as "transformation generated in the interplay of social practice and social structure" (Connell, 1987: 53). Messner (1991, cited in Drummond, 1995: 42) states that:

> Taken by itself, socialisation theory tends to lead social analysis into a simplistic functionalism in which people are viewed as passive receptacles into which cultural values are instilled by essentially static institutions. This kind of analysis risks losing sight of real people's experiences, their own definitions of their motivations, as well as their ability to think critically and act and change their own lives.

This is not to say that social change is overlooked. Not in the least. Change has been a leading theme in discussions focused on the changing definitions of the female sex role and men's sex roles. Change is always something that happens to sex roles, that impinges on them (Carrigan, Connell & Lee, 1985; Connell, 2005).

Change is facilitated via society at large (as in discussions of how technological and economic change demands a shift to a 'modern' male sex role). Or, from the direction of the asocial 'real self' inside the person, demanding the lessoning of the constricting sex role; an individual's demand for more room to breathe (Carrigan, Connell & Lee, 1985; Connell, 2005). The issue is that sex role theory is unable to grasp change as a dialectic arising within gender relations themselves. As such, Connell (1987) persuasively presented four basic considerations for the abandonment of sex role theory as a framework for social analysis of gender. These include its a) voluntarism and inability to theorise power and social interest, b) dependence on biological dichotomy and its consequently non-social conception of structure, c) dependence on normative standard case and systematic misrepresentation of resistance and d) the absence of a way of theorising the historicity of gender.

### 2.3.2 Concepts of Masculinity

Masculinity is a concept that is particularly difficult to define. It is not a fixed entity embedded in individuals' personality traits. It embodies a malleable, socially constructed set of meanings, values, identities and practices and, therefore, can differ according to the gender relations in a particular social setting (Morrell, 1998; Connell, 2005).

There is not one fixed and static pattern of masculinity which is found in all cultures and at all periods of history. Rather, masculinity is constructed differently with respect to culture in different historical periods – multiple patterns of masculinity exist at the same time (Morrell, 1998; Connell, 2005).

Cultures differ regarding test(s) and/or symbol(s) of manhood (Connell, 2005). In western society, at particular periods of history heroes are made of aesthetically pleasing and physically capable soldiers, and their violent activities regarded as the ultimate test of manhood. For example, Sylvester Stallone in *Rambo* and Gerard Butler in *300.*

In Eastern society, academic success, technological development and political power are viewed as striking symbols of manhood (Donaldson, 1993; Demetriou, 2001). For example, achieving a high-level managerial position in a globally recognised technological company such as Samsung is considered to be stellar symbol of masculinity. Masculinities are constructed according to their distinct set of features, Morrell (1998: 607) stating that:

> Class and race factors are constitutive of the form that masculinity takes. This means that in any society there are many masculinities, each with a characteristic shape and set of features. The contours of these masculinities change over time, being affected by changes elsewhere in society and at the same time, themselves affecting society itself.

Morrell (1998) and Connell (2005) note that there is a plethora of definitions regarding what it means to be a 'real' man, and there are multiple and different ways for men to live in gender relations. For example, military and/or sports masculinities. Also, various forms of masculinity are often hosted within a single institution (Connell, 2005). For example, in schools, boys employ a multitude of methods in the construction of their masculine identities Most boys, especially in SSBBS, focus on toughness and sporting prowess, academic success as access to a career and/or displays of delinquent behaviour (Connell, 2005). Also, for some boys, schools provide a space where they are able to explore their unconventional identities and sexualities.

However, as below discussed, different versions of masculinities do not march side-by-side like legionaries in the Roman army; there are definite relations between them.

### 2.3.3 Hegemonic Masculinity

The concept of hegemony was developed from Antonio Gramsci's *Prison Notebooks* which focused on the examination of class relations (Connell, 1987; Connell & Messerschmidt, 2005). Hegemony refers to a cultural dynamic in which a particular assembly of people develops and maintains a position of power and leadership in social life (Connell, 1987; Donaldson, 1993).

In any culture or institution, there is a particular pattern of masculinity that is socially dominant. This is referred to as 'hegemonic masculinity'. In any given setting and historical period, hegemonic masculinity is the pattern of masculinity most associated with authority and power, and thus the masculinity most exalted (Connell, 1987; Donaldson, 1993).

Hegemonic masculinity signifies a position of cultural authority and leadership, not total dominance of other masculinities, Morrell (1998: 607) stating that "the control of one type of masculinity is 'never totally comprehensive' nor does it 'ever completely control subordinates'".

Donaldson (1993) notes that hegemony focuses on the formation (and destruction) of social groups based on winning and holding of power. Continuing, he suggests that hegemony involves influencing and persuading the majority of society, particularly through the media, and the organisation of social institutions in ways that appear 'natural' 'ordinary,' 'normal'. Hegemonic masculinity presents an idealised version of masculinity which respectively defines and dictates what it means to be a man and how 'real' men should behave.

However, only a minority of men are able to enact it because it is naturalised in the form of the hero and presented through forms that revolve around heroes (Donaldson, 1993). For example, school prefects vs 1st team rugby players: while they hold significant social/institutional power, prefects do not embody hegemonic masculinity. The bulk of their power is facilitated and maintained via school rules and ethics codes, traditions and peer respect. Prefects do not invoke the cultural ideal associated with the term hegemonic masculinity. Rather, hegemonic masculinity is synonymous with 1st team rugby players. After older, gyming men and sports stars, they represent SA's ideal or heroic masculinity that is

constantly promoted by civil society (Connell, 2000; Demetriou, 2001). Consequently, prefects are not considered the mobilising model of manliness to which all boys should aspire.

According to Connell (1987, 2005), in addition to sustaining the dominance and the oppression of women, hegemonic masculinity subordinates and marginalises other masculinities, positioning these in relation to itself such that the values expressed by these other masculinities are not those that have currency or legitimacy, Morrell (1998: 608) stating:

> The concept of hegemonic masculinity provides a way of explaining that though a number of masculinities coexist, a particular version of masculinity holds sway, [and sustains dominance over women].

Hegemonic masculinity can thus be understood as both 'hegemony over women' and 'hegemony over subordinate and marginalised masculinities.

Donaldson (1993) suggests that compulsory heterosexuality, misogyny, homophobia and racism are the bedrock of hegemonic masculinity. Hegemonic masculinity is not fixed and trans-historical. It is unstable and under constant attack. Rather, hegemonic masculinity embodies a 'currently accepted' strategy (Connell, 1987, 2005; Morrell, 1998).

In an attempt to retain power without the use of violence, the incumbent patriarchy attempts to, as Gramsci argued, develop and instil a suitable and consensual strategy (Connell, 1987, 2005; Morrell, 1998).

### 2.3.4 Hegemony over Subordinate and Marginalised Masculinities

#### *Subordination*

Hegemonic masculinity refers to a social ascendancy of a minority group of men over others. In modern western society (SA included), this is best exemplified by the subordination of heterosexual over gay men (Bird, 1996; Connell, 2005).

As suggested by Connell (2005: 78), such a relationship is much "more than a cultural stigmatization of homosexuality or gay identity. Gay men are subordinated to straight men by an array of quite material practices". For example, legal violence (imprisonment under sodomy statutes), economic discrimination and personal boycotts. Homosexuality is viewed as a negation of masculinity, and homosexual men must be effeminate. As such, homophobia

(hostility towards homosexual persons, particularly gay men) is required to protect one's image as a 'real' man (Bird, 1996; Connell, 2005).

Connell (1987, 2005) proposed that oppression, through subordination, homosexual masculinity is not eliminated, but placed at the lowest point on the gender hierarchy; gayness is equated to femininity. Sometimes physically abused, gay men are generally attacked through verbal abuse. The words chosen are mostly symbolically linked with feminine qualities. For example, fairy, pussy, poof and sissy.

But subordinated masculinity can also be temporary (Drummond, 1995). Subordinated masculinities are often played out in various institutions such as the workplace and schools. For example, in co-educational schools: young boys and girls are dominated by their seniors. However, ascendancy through grade levels and an increase of social capital (sports proficiency and rebellious behaviour) can eliminate subordination for some boys, but never girls (Drummond, 1995). Thus, boys who were once subordinated now have the capacity to "legitimately subordinate others. Such a pattern of domination is perpetual and based upon ideological warfare" (Drummond, 1995: 46-47).

### *Complicity*

Only a minority of men are members of the elite hegemonic masculinity men's club. Yet, almost all men benefit from its hegemony through what Connell (1987) labelled the 'patriarchal dividend'.

This refers to men's general advantage gained from the overall subordination of women. Complicity, which recognises partial embodiment of hegemonic masculinity, is, therefore, an important notion in the theorisation of masculinity Connell, 1987, 2005, Morrell, 1998). Again, drawing on Connell's (2005: 79) framework, "if a large number of men have some connection with the hegemonic project but do not embody hegemonic masculinity, we need a way of theorising their specific situation". As such, complicity is perceived as men, while not enacting hegemonic masculinity, gaining the benefits provided to them as a consequence of being male (Connell, 1987, 2005; Demetriou, 2001). For example, in 1$^{st}$ world capitalist countries, men's average incomes are approximately double women's average incomes.

### *Marginalisation*

As just outlined, homosexual masculinity is the masculinity most subordinated. Although less frowned upon, effeminate masculinity is also subordinated by the hegemonic model. Other masculinities such as working class and/or African masculinities are 'marginalised' (Demetriou, 2001; Connell, 2005). The concept of marginalisation describes the relationships between the masculinities in dominant and subordinated classes and/or ethnic groups.

The relations that result from the interaction of gender with other structures, such as class and ethnicity, generate further relationships between masculinities. As a result of social dynamics, both are in a constant state of flux which is taken into consideration within the framework of the gender order (Bird, 1996; Demetriou, 2001; Connell, 2005).

The term marginalised sounds somewhat oppressive and degrading. Connell (2005), however, insisted that its improvement is an arduous task because marginalisation is always relative to the authorisation of the hegemonic masculinity of the dominant group. According to Connell (2005: 81), "The relation of marginalization and authoritarian may also exist between subordinated masculinities". Continuing, she cited two types of relationships – hegemony, domination/subordination and complicity on the one hand, and marginalisation/authority on the other. Also, she suggested that they provide a framework upon which examinations of specific masculinities may be conducted.

Hegemonic and marginalised masculinities are not universal and static throughout all historical periods. Rather, hegemonic and marginalised masculinities involve constantly changing structures of relationships. Modern frameworks, such as gender order, are obligated to consider such action and provide an account for this dynamic process.

### *Patriarchy*

Hegemonic masculinity is a key element of patriarchy (Morrell, 1998). Hill (2009: 628-629) defines patriarchy as "an organization, institution, or society in which power, social control, material wealth, and high social status accrue predominantly to males rather than females".

It is the uneven distribution of power between men and women to the detriment of women and certain groups of men (Walby, 1983; Hill, 2009). For example, homosexuals and Africans.

Patriarchy is one of the most enduring or reproduced and universal social patterns. It appears in all historic eras, among all races, social institutions and economic classes. And, it is

recognised in almost all cultures. Patriarchy derives fundamentally from early forms of family organisation.

Men were positioned as the head of the household. Although not household heads, young men's domination over women was just as important via the household (Walby, 1983; Hill, 2009). Considering all the above discussed, hegemony masculinity can be defined as:

> the configuration of gender practice which embodies the currently accepted answer to the problem of legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women (Connell, 2005: 77).

## 2.4 The Ideal Body

The quest for a perfect physique amongst men is not a new phenomenon. The fascination with physical perfection has been one of unquestionable importance since time immemorial. Bodily captivation gave birth to a lifestyle dedicated to the celebration of the human body achieved via the art of sculpting aesthetically attractive Herculean figures – bodily constructivism (Wyke, 1997; Giraldi, 2009). Also, bodily development is not just a lifestyle but an evolutional process of physical perfection: the ultimate aim of such a process is the realisation of a dream, the nexus of which being the creation of a self-described ideal physique. Such a process requires a participant's resolute devotion to strenuous training regimes and the preservation of strict, instrumental diets (Wyke, 1997; Giraldi, 2009).

The physiques of legendary 'Golden Age' (early 1960s – 1980s) bodybuilders, Steve Reeves and Frank Zane (see Appendix 7) are widely advocated by many men as the most aesthetically proportioned bodies of all time (Linder, 2007; Robson, 2012). The perfect male physique has evolved. The contemporary idea physique is described as mesomorphic in structure – lean, well-toned and muscular and healthy (Pope, Phillips & Olivardia, 2000).

Rephrased, the possession of a muscular body is increasingly viewed as a symbol of masculinity due to the age-old positive correlation of muscularity and masculinity having been significantly amplified (Pope *et al*., 2001).

Possession of the ideal body is linked with success, good looks, popularity and wealth. However, for most men, perfect physical attributes set a standard that is seldom, if ever, attainable (Pope, Phillips, & Olivardia, 2000; Olivardia *et al*., 2004). Perfection is something most often seen within others, and the toughest critique of one's appearance is oneself.

Males, specifically adolescents and young adults, invest a tremendous amount of resources, chiefly time, finance and energy, into the pursuit of the socially idolised physique (Pope, Phillips, & Olivardia, 2000; Olivardia *et al*., 2004).

A critical point misunderstood and/or overlooked by most males is that the pursuit of perfection can only be achieved by meeting one's own bodily image desires. For example, some men may desire to simultaneously increase their muscle mass while burning fat. Others may concentrate on increasing their strength.

This raises the interesting question of whether it is possible to describe what a 'normal' male body looks like. This question cannot be answered here, but it would be usefully investigated in another study.

### 2.4.1 Exposure to Muscular Models.

#### *Action Figure Toys*

Recent studies have shown that there is an increased social pressure regarding the acquisition of the ideal mesomorphic body, the muscle density of which consistently increasing. This is undisputedly displayed by the incredible muscularity of contemporary action figure toys (Pope *et al*., 1999). Action figures are small plastic toys with which some boys play and frequently collected by adult hobbyists. Their height ranges from 9.5 cm to 30.5 cm (Pope *et al*., 1999). For example, G.I. Joe and Action Man.

Children are exposed to these toy action figures from a young age. They are unable to construct and review independent decisions regarding realistic levels of muscularity and the possibility of reaching and/or surpassing that level (Pope *et al*., 1999; Leit, Gray & Pope, 2002). Although it is difficult to prove that action figures have an effect on boys' body image, Barlett *et al*. (2005) suggest that young men's body esteem is negatively affected after handling unrealistically muscular action figures.

Action figure toys have undergone significant transformation over the past three decades. The figures of professional bodybuilders whose hyper-muscular bodies are attained via AAS use now serve as the templates according to which contemporary action figures are modelled (see figure 1 in Appendix 8) (Pope *et al*., 1999). This has led to action toys' increased muscular density (see figure 2 in Appendix 8). Pope *et al*. (1999: 67-68) write that:

> Not only have the figures grown more muscular, but they have developed increasingly sharp muscular definition through the years ... The modern figure also displays distinct serratus muscles along his ribs — a feature readily seen in bodybuilders but less often visible in ordinary men.

When extrapolated to human size, the attainment of the contemporary G.I. Joe figure is an impossible task; the toy's biceps would be larger than any bodybuilder in history (Pope *et al*., 1999).

### 2.4.2 The Man in the Media

The media exert a substantial amount of influence over modern day culture (Morrison, Morrison & Hopkins, 2003; Cafri & Thompson, 2004). The past four decades have witnessed a significant increase in the exhibition of male bodies in the media and popular culture. Since the late 1980s, the portrayal of muscularly flawless, semi-naked muscular models has also increased (Pope *et al*., 2001; Morrison, Morrison & Hopkins, 2003; Morrison & Morrison, 2006). This was facilitated by a variety of magazines which began to target average men to promote the mesomorphic muscular body, and how to attain it (Law & Labre, 2002).

In Western society, individuals are constantly exposed to the media. Popular media presents males with images of mesomorphic muscular physiques that exemplify the contemporary vision of the ideal male body (Olivardia *et al*., 2004). For example, the *Playgirl* magazine centrefold models: Leit, Pope & Gray (2001) discerned that, over the last two decades, the average *Playgirl* centrefold model had shed roughly 5.44kg of fat while gaining approximately 12,24kg of muscle. Also, Law & Labre (2002) determined that muscle density in males portrayed in popular men's magazines such as *Men's Health, Fitness and Health* and *GQ* (Gentleman's Quarterly), had increased by almost 30% over the last three decades. Furthermore, sportsmen's bodies are more muscular. One may propose that, when combined with the images of men in popular, the ideal male body is now represented by the hypermuscular prototype only attainable by using AAS.

The visualisation of the perfect male body has been made possible by the media via an array of methods – television commercials, magazines, music videos and movies (Leit, Pope & Gray, 2001; Leit, Gray & Pope, 2002).

Male models who featured in the media of past times represented a significantly different role than those of today. The media portrayed images of men working hard, smoking and/or

having a beer with friends and performing military service (Pope *et al*., 2001). Advertisements featuring males were generally utilised in the promotion of products unrelated to aesthetics such as cigarettes and alcohol (Pope *et al*., 2001).

The purpose of male models in older media was a portrayal of muscular ability more than muscular appearance. For example, the Marlboro Man: The Marlboro Man was a figure used in the advertisement for Marlboro cigarettes from 1954 to 1999 (Shirk, 2015). The advert was based on the theme of a well-built, rugged, hard-working man dressed in classical American cowboy clothing smoking a filtered Marlboro cigarette whilst riding his horse out in the field where he performed the traditionally masculine chore of cow herding.

Contemporary media representation of masculinity moves away from older representations. The media has shifted away from portraying aesthetically appealing and functional bodies such as the Marlboro man to those that emphasise aesthetics such as the *Playgirl* centrefold model. As such, bodily aesthetics are more emphasised and valued as masculine instead of the body's instrumental quality (the functionality of the body) (Franzoi, 1995).

This correlates with the second definition in a pair of male body definitions provided by the author (1995: 417) which proposes that the male body can be defined as, "a dynamic *process* where function is of greater consequence than beauty". In contrast, the male body can be defined as an 'object' i.e. a structure composed of distinct parts large biceps, wide shoulders and a toned abdomen which are assessed based on their aesthetic value (Franzoi, 1995).

Male models popularly portrayed aesthetically perfect bodies have become the sociocultural valuation standard regarding the Ideal masculine physique. This has resulted in males feeling an augmented amount of pressure when trying to attain the perfect physique (Pope, Phillips & Olivardia, 2000; Cafri & Thompson, 2004). This may result in the adoption of health threatening issues. For example, depression, eating disorders, excessive exercise, AAS use and Muscle Dysmorphia which are discussed below.

## 2.5 Body Image

Body image is a multidimensional construct central to an individual's being. Its constitutional facets have strong leverage in manipulating an individual's thoughts, emotions and behavioural patterns. This is illustrated by an individual's self-perceptions, attitudinal displays and social interactions (Thompson *et al.,* 1999; Pruzinsky & Cash, 2002).

Cohane & Pope (2001) and Cafri *et al*. (2005) note that, historically, most research on body image focused on women.

Before the 1980s, it was generally agreed that women faced more bodily social pressures than men. They were pressured to present particular shapes and sizes. Women perceived to be unnatural women (tall and/or short and overweight) encountered prejudice which, for many, resulted in psychological and health issues. For example, depression, multiple plastic surgeries and/or anorexia.

Consequently, the majority of theories, hypotheses and measurement tools utilised in 'first generation' male body image literature are derivatives of female body image assessment tools (Cafri & Thompson, 2004). This is primarily due to:

> [Women's] thin appearance … historically been the focus of body image research … The exact nature of male body image concerns appears to have been neglected by the paradigm of research emphasizing thinness because males are more concerned with a muscular appearance (Cafri & Thompson, 2004: 18).

The past two decades have witnessed a strikingly rapid growth of literature focused on men's body image (Cafri & Thompson, 2004; Cafri *et al*., 2005). Contemporary literature refutes the idea that men are immune to body image anxieties. Men do suffer body image concerns but not at the same levels that females do. This is due to men generally having better self-image perceptions than women do (Pope *et al*., 1999; Pope *et al*., 2000).

Although the construction of beautiful athletic bodies has been idealised for centuries, aesthetics has become a central issue for most males. Failure to achieve the popularly advertised ideal body, a prominent characteristic of masculinity for many men, has led to more males experiencing decreased body satisfaction and, ultimately, deflated levels of body image confidence (Cohane & Pope, 2001; Cafri & Thompson, 2004).

### 2.5.1 Social Comparison Theory

Body image constitutes an individual's internal interpretation and representation of their physical appearance (Thompson *et al.,* 1999; Pruzinsky & Cash, 2002). Individuals have an internal drive to continuously compare themselves with other individuals to evaluate their abilities and characteristics (Morrison & Morrison, 2003; Morrison, Kalin & Morrison, 2004). This is explained by Social Comparison Theory, which suggests that individuals acquire

information about themselves by comparison with the opinions and abilities of other people (Festinger, 1954). Recent research indicates that men are inclined to engage in social comparison if they perceive the target to illustrate a desirable and possible attainable figure, but refrain from engaging in social comparison if the target's physique appears to be unrealistic to achieve (Morrison, Kalin, & Morrison, 2004). For example, men are likely to engage in social comparison with assumedly well-built friends and/or colleagues, not professional bodybuilders.

Research suggests that comparing one's self appearance with aesthetic, mesomorphic celebrities may lead to reduce body image (Morrison, Kalin, & Morrison, 2004; Hobza *et al*., 2007). Being constantly subject to the media's portrayal of the perfect ideal sometimes results in some men experiencing a decrease in appearance self-esteem and negative body image (Morrison, Kalin, & Morrison, 2004; Hobza *et al*., 2007).

However, it must be noted that not all body image studies support the common thread that assumes exposure to the perfect male physique effectively results in negative body image self-evaluations and a decreased level of body satisfaction. Several recent studies, according to Nieuwoudt (2014), did not find that exposure to the media's ideal man stimulated fluctuations of body satisfaction and discerned that initial levels of the drive for muscularity did not change after images of the ideal male figure were viewed.

Whilst not conclusive, most body image information suggests that more males consider their physical appearance as lacking after viewing images of the advertised idyllic male. This has led to a notable increase in male body dissatisfaction (Hobza *et al*., 2007).

### 2.5.2 Body Dysmorphic Disorder

Body Dysmorphic Disorder is characterised by a preoccupation with a slight and/or perceived defect in appearance causing significant distress and/or impairment in functioning (Pope *et al*., 1997; Pope *et al*., 2005). For example, large ears and/or small genitals.

Typically, individuals suffering from Body Dysmorphic Disorder (hereafter BDD), are pathologically dissatisfied with a single body part such as the nose or skin. BDD patients are compelled to constantly examine, improve and/or conceal the perceived defect (Pope *et al*., 1997; Pope *et al*., 2005). Also, according to Pope *et al*. (2005), BDD patients experience a decrease in both life satisfaction and life quality. This often leads to difficulty in establishing

and maintaining close interpersonal relations, social phobia, major mood depression and suicide attempts.

### 2.6.3 Muscle Dysmorphia

Muscle Dysmorphia is a form of BDD (Olivardia, Pope, & Hudson, 2000; Pope *et al*., 2005). Differing from BDD patients who are preoccupied with the ugliness of a particular body part, individuals suffering from Muscle Dysmorphia (hereafter MD) develop a pathological preoccupation with the body as a whole, specifically muscularity (Olivardia, Pope, & Hudson, 2000; Pope *et al*., 2005). Efforts made to accumulate muscle mass include eating copious amounts of food, overtraining and the use of PEDs and AAS.

MD patients believe that they are muscularly underdeveloped whilst, in reality, they are more muscular than the average person, if not hyper muscular (Pope *et al*., 2005). MD patients avoid public spaces such as pools and beaches in fear of their exposed bodies being criticised as being too small. If bodily exposure is unavoidable, these individuals may feel amplified distress (Pope *et al*., 2005).

Many MD patients neglect social and/or occupational activities and refrain from engaging in sexual relationships due to the embarrassment over their perceived appearance flaws and/or the need to train continuously, AAS often used to hasten improvements (Olivardia, Pope, & Hudson, 2000; Pope *et al*., 2005).

It must be noted that MD differs from enthusiastic weightlifting and sports practice (Pope *et al*., 2005). Many individuals invest large amounts of resources into their bodies. Improved bodies enhance sportsmen's opportunities for success. Few of these individuals suffer from social and/or occupational dysfunctionality and/or experience low levels of life satisfaction and poor quality of life (Pope *et al*., 2005). Oppositely, individuals with MD are completely engrossed in bodily improvement, Nieuwoudt (2014: 29) stating:

> Whereas ordinary weight lifters spend approximately 40 minutes per day thinking about not being muscular enough, men with MD spend approximately 325 minutes per day thinking about not being muscular enough, and planning on how to get bigger [and] Men with MD look at themselves in mirrors an average of 9.2 times per day.

This results in these individuals sometimes foregoing positive life opportunities.

## 2.6 Conclusion

This review has aimed to provide a backdrop for understanding adolescents use of AAS, masculinity and the body within contemporary society. Gaps in the existing literature have been identified, and the following chapter details the research questions, together with the methodology adopted, for this research. Although there has been some domestic study of AAS, in many respects this has only scratched the surface. The lack of well-informed domestic AAS literature has restricted the flow of accurate AAS information into society.

# Chapter 3. Methodology

## 3.1 Introduction

In this chapter I describe the research methods that I chose and used to answer my research questions into the use of AAS. I discuss the research design. This is followed by a description of the setting, participants and data collection methods. Lastly, student ethical considerations and approval are outlined.

## 3.2 Research Design

Research was undertaken to generate supporting evidence for the study's guiding questions, which were:

- What are AAS?
- What is the legal status of AAS?
- How widely are AAS used?
- What are the motivations for the use of AAS amongst men?

Information was acquired via a desktop analysis and primary data research.

The first part of the study (chapters titled 'Steroids and Pharmacy and 'Steroids and the Law in South Africa') reflects desktop research on AAS – their chemistry, regulation and associated laws and policies.

The second part of the study (chapters 'The Profile and Attitudes of Gym-Users' and 'Steroids, School and Sport. Constructions of masculinity and the Development of the Strong, Fit Body') reflects primary research using a mixed methods data collection approach. Surveys (quantitative) and interviews (qualitative) were conducted in Cape Town (hereafter CPT) and East London (hereafter EL).

## 3.3 Desktop Analysis

I began with a literature review, making used of the UCT library as well as material available online. These sources provide me with the necessary data for the first two chapters above mentioned.

I collected data from several sources including international and local published AAS literature and SA government legislature gazettes. The purpose of the analysis was twofold.

First, to gain pharmaceutical knowledge of AAS's mechanism of action. This helped to understand the effects of AAS on the body and what gives rise to the plethora of drugs available. For example, more AAS have been manufactured that have a higher muscle building (anabolic) capacity, but none have been able to dissociate testosterone's anabolic and androgenic effects.

Second, although I consulted numerous legal professionals and policemen regarding AAS administration, it became clear that examining various legal Acts and then cross-referencing them with other nations AAS laws is the most likely and accurate method of gaining a thorough understanding of AAS administration in SA (see 'Steroids and the Law in South Africa' chapter for in-depth discussion).

## 3.4 Setting

The CPT and EL gym communities served as the study's setting.

I was raised in EL and am thus thoroughly aware of the city's geography. The gyms visited are in close proximity to each other. Commuting between locations was quick and easy.

My selection of gyms in CPT was influenced by travel options. I chose the most convenient, economic and reliable travel methods available in the city. These included trains, city buses and taxis. Trains proved extremely useful and economic: an unlimited trip, R140 monthly ticked ensured the weekly reachability of each research site, all of which are significantly distant from each other.

### 3.4.1 Differences and Similarities

The two cities are quite different. CPT is the oldest city in SA, founded in 1652. Nearly 200 years younger, EL was established in 1836. The cities are situated in different provinces 1000 kilometres apart, EL and CPT respectively located in the Eastern Cape and the Western Cape.

The Eastern Cape and Western Cape are located on opposite ends of the state's wealth spectrum, the former the poorest and the latter the second wealthiest in SA. CPT is the second largest, wealthiest and well-developed city in SA. EL is small, but relatively well-developed.

The last national census reported the respective population sizes of CPT and EL as being 3,740,026 and 755,200 (Statistics South Africa, 2011). The majority of both cities populations

consist of Black (non-White) individuals. And, Afrikaans and isiXhosa and isiXhosa and English are the main languages respectively spoken in CPT and EL (Statistics South Africa, 2011).

Both cities have significant levels of economic stratification in their populations. While the middle class is becoming racially integrated, townships reflect apartheid geography with coloured and African populations often living separately. In both CPT and EL there are large isiXhosa speaking populations. Cultural affiliation affects many aspects of life and impacts issues of masculinity. It is expected of Xhosa males that they be circumcised. According to Mfecane (2016: 207):

> [Men's] manhood status among amaXhosa is grounded primarily in the physical body (penis). Not only does the penis serve as a site for the symbolic location of manhood status, it is a medium through which men can "validate" and "defend" their manhood status in times of need.

Over and above being circumcised, however, African men invest in the development of aesthetically pleasing, strong and fit bodies. This is due to these qualities being regarded as 'proper' masculine attributes through which masculinity is embodied and enacted in everyday life – the construction of aesthetic and physically able bodies augments men's experience and feelings of manhood (Connell, 2005; Mfecane, 2016; Bank & Qebeyi, 2017).

Sports culture is deeply embedded in both cities. For example, in most schools, co-educational and SSBBS, pupils are introduced to sports in primary school. And, where sports is part of the curriculum participation is obligatory. Sports most favoured included rugby, cricket and soccer. Boxing is a major sport in EL specifically amongst younger men from the townships.

Gyming is a well-established and supported activity in both cities. Both cities gym communities include AAS-using and non-using trainees, bodybuilders and athletes. Gyms attract young trainees, specifically high school males. As earlier mentioned, (see Literature Review), this may be the result of the increased physicality of sport requiring boys to have bigger, stronger and powerful bodies. Boys' enthusiasm to train has resulted in some schools in both cities building well equipped gyms managed by physical experts. This is an interesting topic for future research, but, due to space constraints, is not explored here.

## 3.5 Sample

The study's primary methods of data collection comprised of a survey and interviews. The sample included AAS using and non-using gym-goers, professional and natural bodybuilders

and sportsmen. All of the study's 150 participants formed part of the survey sample. They all completed the study's single questionnaire below discussed.

The interview sample later described consisted of only 30 respondents drawn from the survey sample.

## 3.6. Sampling Strategies

I employed non-probability 'purposeful sampling' as the study's means of participant selection (Patton, 2002). This allowed for the selection of information rich cases that produce "insight and in-depth understanding rather than empirical generalizations" (Patton, 2002: 230).

## 3.7 Participant Recruitment

Potential participants were recruited from eight (n=8) preselected gyms, four (n=4) in CPT and EL respectively. The inclusion criteria used in the recruitment of potential participants were: (a) volunteer, regular training adult males at least 18 years old who use weights (free weights and machines, (b) may or may not use AAS, (c) understand that training may interfere with their social life and/or work life; and (d) able to fully articulate their gym experiences.

### Snowball Sampling

Snowball sampling was utilised with the deliberate intention of recruiting potentially 'information-rich cases' via information provided by other participants (Patton, 2002). While employed in both cities, the strategy proved particularly useful in CPT: I was a relative stranger in the CPT gyms and some gym-goers questioning my presence and activities. I was able to deal with questions and suspicions through my constant presence in the visited gyms, a positive and friendly attitude the adoption of the city's gym habitus (training methods, gym clothes and civil attitude) resulted in gym-goers considering me to 'fit' into the city's gym community.

Andrews, Sudwell & Sparkes (2005: 882) identify the challenge of accessing gym communities:

> certainly, in general, the [gym] community [is] not open to outsiders. It [is] a matter of 'fitting in' rather than being unconditionally 'taken in'.

Reduced alienation led to the removal of trust barriers. This allowed for the development of healthy relationships with numerous trainees who then introduced me to other gym enthusiasts willing to participate in the study.

## 3.8 Interview Sample

The interview sample consisted of 30 (n=30) respondents drawn from the study's total 150 (n=150) participant sample. In total, 30 (n=30) interviews were conducted, 20 (n=20) and 10 (n=10) in CPT and EL respectively.

Interviews were aimed at procuring detailed information that the survey couldn't provide. Interviewing gym-goers from different cities widened the scope of opinions, perceptions and experiences reported. According to Starks & Trinidad (2007), individuals are able to generate a wide range of concepts. Consequently, a relatively small sample is capable of generating rich data sets. Thus, I deemed this small sample as fitting because I would be better able to manage and engage in it, thereby exploring and analysing it broadly and comprehensively.

## 3.9 Data Collection

Data was collected via two means, specifically a survey and individual interviews.

### 3.9.1 Quantitative – Survey

#### Purpose of the Survey

The primary purpose of the survey was to gather demographic and statistical data from a sample of CPT and EL gym-goers to frame the research, as well as insights into a range of AAS matters, such as sports doping vs recreational AAS use, that could inform the interview process.

#### Survey as a Research Instrument

Questionnaire development was based on issues highlighted in the literature and my personal experiences and understanding(s) of the body, AAS and the gym and sports (see Appendix 1). Questions based on such sources increased the credibility of data analysis and helped answer the study's research questions.

The survey comprised of 47 (n=47) questions divided into three dovetailed sections. The initial 13 (n=13) questions elicited participants' demographic information. 9 (n=9) open-ended questions focused on respondents' gym experiences and perceptions and interpretations of AAS, sports doping, AAS law and masculinity followed. The questions encouraged feedback regarding the phenomena under investigation.

A 25 question 5-point Likert scale with a neutral response option available for election came afterwards (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree). Further,

respondents were provided with an opportunity and encouraged to share any insights and/or explanations on any issues raised in the survey.

### Pilot Study

Before distribution, the questionnaire was piloted on a small group of personal gym friends, bodybuilders and academic peers. The questionnaire was reported as being quick and easy to negotiate, and that the questions were interesting and clear. Most, but not all, of my friends and the bodybuilders announced feeling little, if any, trepidation when answering questions specifically focused on AAS use and distribution as they did not invoke fears of potential legal ramifications. A general lack of anxiety thus allowed for the questionnaire to be filled out in an open and honest manner.

My academic peers did, however, note that I had failed to provide specific instructions regarding the answering of questions in section 2 (n=2) (General Perceptions and Understandings). They instructed me to tell participants what I want them to do (make an X and/or tick the box that applies), and whether additional comments should be made.

### Distribution of the Questionnaire

I physically distributed all of the questionnaires. I utilised a personally devised method of 'immediate completion and collection': respondents were asked to fill out the survey in its entirety directly after their workouts in one of the gym's quieter areas. For example, the lounge. I made sure to remind participants that study participation was voluntary and that, if they felt that I was being overbearing, they could leave. In total, I collected 150 (n=150) complete surveys.

## 3.9.2 Qualitative – Semi-structured Interviews

A total of 30 (n=30) individual in-depth, face-to-face semi-structured interviews were conducted throughout the course of this study, 20 (n=20) in CPT and 10 (n=10) in EL.

The purpose of the interviews was to engage participants in conversations that allowed and encouraged them to reflectively share their experiences of AAS, and their perceptions regarding the potential impact the drugs may have on SA masculinity. According to Patton (2002: 341), a conversation, or interview, allows researchers to 'enter into the other person's perspective" and attain contextually coherent and sound data. An interview guide was employed during the course of each interview (see Appendix 4). Serving as a basic 'checklist',

the guide aided in the systematic examination of the study's main issues of concern. Interviews were digitally recorded on my mobile phone. The length of the interviews varied from 50 to 70 minutes. Interviews were conducted at various times and locations nominated by interviewees as convenient and safe. All interviews were voluntary and conducted in a mutually respective manner.

By digitally recording the interviews, I was able to transcribe then at a later stage and then regularly reflect on the transcripts. During the course of the interviews, I also made handwritten notes in my interview journal.

I later transcribed and added these to their respective interview transcriptions. Frequent transcript reflection allowed me to determine AAS experiences common to all participants, as well as shared threads of AAS and masculinity thoughts and emotions.

I provided a brief synopsis of the study's research and its objects before interviews began. Assured that participants understood the nature of the study and that they could withdraw at any time, I presented them with a consent form (see Appendix 3). Official conversation only began after the signing of the consent form.

## 3.10 Data Analysis

### 3.10.1 Survey Data

The collected data was grouped and analysed through inferential and differential statistical methods. Data was captured into a computer-based Excel spreadsheet for analysis. The data was then statistically analysed using Excel. Means, standard deviations, frequencies and percentages were computed. For example, 1.39 is the mean value regarding the 'Do you think current Anabolic-Androgenic Steroid Regulatory Laws are Appropriate' question. The standard deviation value is 0.49.

### 3.10.2 Interview Data

I employed a thematic analysis approach in my study because it provided a flexible and useful research tool to acquire rich, detailed accounts of complex data (Braun & Clarke, 2006). Also, thematic analysis proved useful as a foundational method in qualitative analysis because it does not require detailed theoretical knowledge and/or excessive technological experience (Braun & Clarke, 2006).

### Stages of Thematic Analysis

I analysed my data following Braun & Clarke's (2006) six phases of thematic analysis 'guideline'.

The first phase involved the essential step of familiarising myself with the data. Transcripts and notes were reread several times to gain an enhanced understanding of how the data presented itself. Phrases, words and key concepts which were discovered in the data were noted during the read-throughs. For example, 1st team sports, domination, and looking good.

The second and third phases entailed generating initial codes and searching for themes. This involved the organisation of data into meaningful categories of information. For example, data body anxieties and participants primary school sports experiences.

The fourth phase entailed the refinement of the preliminary themes. In some instances, themes could abstract and unclear (Ryan & Bernard, 2003). Data was carefully re-read to determine if a coherent pattern of data existed. Some themes were not distinct enough and thus discarded. For example, delinquency: although often brought up, this theme did not fit the overall pattern of data which scrutinised the masculine body and AAS law. This phase was revisited several times until the data was adequately represented.

The fifth phase concentrated on extracting and clarifying the essence and substances of themes and not simply presenting and paraphrasing data extracts. Then, an appropriate name which served to give a sense of what the theme was and how it contributed to the overall discussion was ascribed unto each theme. For example, the theme that discussed boys' aspiration to play 1st team rugby was labelled 'the 1st Team Blazer'.

The final phase focused on the production of the analysis report. The findings were presented per theme, illustrating how they were connected and a selection of pertinent examples from the data were employed to illuminate the point.

## 3.11 Ethical Considerations and Approval

After obtaining ethical clearance from the Universality of Cape Town's law faculty's Research Ethics Committee on the 13 of December 2016 I was able to proceed with the research process (see Appendix 5). On meeting with gym-goers and introducing the aim of the research project to them, those interested were provided with the necessary participant information

sheet and consent form (see Appendices 2 and 3 respectively). Confidentiality and trust were two major aspects of this study. Respondents shared personal AAS stories and, in some instances, revealed their bodies so as to provide me with a 'genuine' view regarding the results of AAS use, good and bad. Also, some participants experienced anxiety discussing AAS due to the fear of potential legal ramifications. Therefore, the identities of all the participants were anonymised. In order to reinforce participant anonymity, pseudonyms were ascribed unto interviewees so as to better protect their identities.

# Chapter 4. Steroids and Pharmacy

## 4.1 Introduction

When your forces are dulled, your edge is blunted, your strength is exhausted, and your supplies are gone, then others will take advantage of your debility and rise up. Then even if you have wise advisors you cannot make things turn out well in the end.

Sun Tzu (Cleary, 2005: 22).

I begin this chapter with this quite provocative quote because it cast a sliver of light regarding some men's perceived 'legitimate' need of AAS. The body is not naturally able to produce the excessive quantities of energy and strength required to maintain a 'sharp' aesthetic physique and physical edge. Thus, AAS are employed because they guarantee results in overall physical enhancement(s). Steroids are complex, manufactured substances. In this chapter, I discuss how they are produced and what the differences between various forms of steroids are.

This chapter is divided into four main sections: in the first section, I outline testosterone, define and describe AAS, briefly explore the history of AAS and then discuss their application as therapeutic agents. This provides me with a foundational understanding of AAS (see Testosterone – AAS as Therapeutic Agents below). In the second section, I investigate AAS through a pharmaceutical lens. I study their pharmacological construction via an examination of their different AAS molecular designs, exploration of the AAS mechanism of action and analysis of their therapeutic index (see AAS Pharmacology – AAS Therapeutic Index below).

The third section focuses on the description of the various forms of AAS administration and dosing schedules, explains the three categories into which AAS fall and concludes by explaining which category of AAS is most popular in SA. Finally, in the fourth section, I examine the different physiological and psychiatric adverse side effects associated with AAS use (see AAS Adverse Side Effects Below).

## 4.2 Testosterone

Testosterone, the male sex hormone, is synthesised from cholesterol in the Leydig cells of men's testes and the adrenal cortex (in both sexes) (Hartgens & Kuipers, 2004; Kam & Yarrow, 2005; Kicman, 2008). Testosterone was first isolated, synthesized and characterized in Germany in the early 1930s. Over the next decade, synthetic derivatives quickly followed,

resulting in the creation of the family of hormones we refer to as AAS (Kam & Yarrow, 2005; Kanayama, Hudson & Pope, 2010).

Testosterone has equal anabolic (muscle building) and androgenic (masculinising) effects. Anabolic effects increase protein synthesis and stimulate a positive nitrogen balance in muscle, thus resulting in increases in muscle mass and enhanced strength and power (Calfee & Fadale, 2006; Kicman, 2008). Androgenic effects are responsible for the growth of the male reproductive system and the development of secondary sexual characteristics (Kam & Yarrow, 2005; Calfee & Fadale, 2006; Kicman, 2008). For example, the growth of the testes and external genitalia, deepening of the voice and facial hair growth. Moreover, testosterone regulates protein metabolism, sexual and cognitive functions and guards against skeletal muscle degradation (Kam & Yarrow, 2005; Maravelias *et al*., 2005).

### 4.2.1 AAS Defined and Described

AAS are synthetic derivatives of testosterone designed via the modification of the testosterone molecule, to prolong the biological activity of the parent molecule and its efficacy (Shahidi, 2001; Kuhn, 2002; Kam & Yarrow, 2005). The primary focus of AAS is the development, strengthening and protection of skeletal muscle (Hartgens & Kuipers, 2004; Kam & Yarrow, 2005; Duchaine, 2006).

AAS-induced increases in muscle mass and enhanced strength and power are achieved via the stimulation of more nitrogen retention in muscles and augmented protein synthesis (Shahidi, 2001; Kuhn, 2002; Kickman, 2008). This then leads to the promotion of muscle hypertrophy (Kuhn, 2002; Kickman, 2008) and the production of new muscle fibers, both type I and type II (Kam & Yarrow, 2005).

AAS enhance exercise tolerance and protect against muscle overload by increasing the rate of protein synthesis and guarding against protein breakdown (Kuhn, 2002; Maravelias *et al*., 2005). Consequently, training recovery time decreases while metabolism accelerates, thus decreasing body fat (Kam & Yarrow, 2005).

Throughout the past several decades, there has been a marked increase in the development of different types of AAS. This growth of variety was most noticeable during their 'development boom' (the 1950s-1980s) (Rashid, Ormerod & Day, 2007; Kicman, 2008). AAS

modifications are mostly made in an attempt to create the perfect or 'holy-grail' AAS, this being a drug only of anabolic effect(s), Shahidi (2001: 1356) stating that:

> The potential […] value of testosterone's anabolic activity in various catabolic conditions has led to synthesis of many [AAS] derivatives, with the goals of … producing … and developing [AAS] that are less androgenic and more anabolic.

A small cohort of AAS come close to resembling the perfect AAS. However, all attempts made in its creation have, so far, been unsuccessful. This is due to the inability to completely dissociate testosterone's anabolic and androgenic effects. As such, anabolic steroids are more appropriately recognised as 'Anabolic-Androgenic Steroids' (Shahidi, 2001; Kerr & Congeni, 2007; Rashid, Ormerod & Day, 2007).

### 4.2.2 History of AAS

In 1889, prominent physiologist and neurologist Charles Edouard Brown-Sequard injected himself with an extract that he had prepared from the testicles of dogs and guinea pigs (Yesalis & Bahrke, 2002; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018). He suggested having felt a significant boost in physical and mental health. But, it is commonly believed that Brown-Sequard's preparation probably lacked genuine biological activity – the boost of vitality experienced was the result of the placebo effect (Yesalis & Bahrke, 2002; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018).

AAS were originally designed as therapeutic agents and were popularly used throughout Europe and North America during the 1930s and 1940s (Yesalis & Bahrke, 2002; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018). The early 1950s marketed the emergence of AAS in the sports realm (Wade, 1972). Their use was first noted at the 1954 world weightlifting championships in Vienna when the Soviet team was found to be using AAS (Yesalis & Bahrke, 2002; Kam & Yarrow, 2005; Kanayama, Hudson & Pope, 2010).

By the 1960s, international sports bodies, primarily the International Olympic Committee had condemned doping in sports (Mottram, 1999; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018). However, AAS were only officially included in the International Olympic Committee's (hereafter IOC) list of banned substances in 1975 after the IOC developed a reliable AAS drug test in 1972 (Mottram, 1999).

The early 1980s marked the appearance of AAS in the recreational gym sphere. Athletes use of AAS incited bodybuilders and recreational gym-goers to experiment with AAS to enhance their physical strength and gain more muscle mass, thus improving their bodily image (see table 1 below) (Bird & Wagner, 1997; Yesalis & Bahrke, 2002; Kam & Yarrow, 2005; Kanayama, Hudson & Pope, 2010).

**Table 1: Desired Effects of AAS Use (Adapted from Maravelias et al., 2005: 169).**

| |
|---|
| Increase strength |
| Increase muscle mass |
| Gain a competitive edge |
| Enhance aesthetic appeal |
| Decrease recovery time |
| Promote healing of injuries |
| Prohibit the loss of muscle mass and strength |

AAS use in the recreational gym sphere was mainly popularized through the circulation of underground AAS guides that explain AAS, discuss positive and adverse effects and provide self-administration instructions. Guides also make suggestions on which drugs to use multiple AAS at the same time or 'stack' and proved dietary tips (Mottram, 1999; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018). Also, lax AAS regulations enabled users to easily obtain medical prescriptions allowing them to buy AAS. The use of AAS had exploded by the early 1980s. Also, the introduction of the internet in the 1990s made it possible to acquire AAS from foreign countries which further hindered the regulation of AAS (Mottram, 1999; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018). This phenomenon continues up to the present, with the international sale of AAS continuously expanding[4] (Mottram, 1999; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018).

[4] See Kanayama & Pope's 2018 '*History and epidemiology of anabolic androgens in athletes and non-athletes'* article for an excellent AAS historical account.

### 4.2.3 AAS as Therapeutic Agents

One must always be conscious of the fact that AAS were initially developed as therapeutic agents and remain classified as such in some countries, SA included.

By the early 1940s, testosterone and its derivatives' therapeutic applications were recognised and approved in the medical sphere, specifically by psychiatrists attempting to treat male 'involutional melancholia' (Yesalis & Bahrke, 2002; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018). Soon afterward, AAS became used as a treatment for various illnesses and conditions (Yesalis & Bahrke, 2002; Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018). For example, male hypogonadism, depression, and certain types of anaemia.

However, using AAS as therapeutic agents became a practice less employed during the 1960s and were never fully re-established in their therapeutic role (Kanayama, Hudson & Pope, 2010; Kanayama & Pope, 2018).

Currently, the therapeutic use of AAS is limited. AAS are mostly utilised in the treatment of male hypogonadism (Hartgens & Kuipers, 2004; Kerr & Congeni, 2007). In the last 10 years, research has suggested that small dose administration of AAS are useful in the treatment of HIV patients suffering from depression and fatigue induced by the wasting syndrome associated with HIV infection (Hartgens & Kuipers, 2004; Kerr & Congeni, 2007; Kanayama, Hudson & Pope, 2010).

According to Shahidi (2001), a recent study illustrated that the average weight of 30 patients with HIV-related wasting increased by 8.2 kg when receiving small doses of AAS for 20 weeks. Further, AAS studies are more cautions regarding AAS being used as malnutrition combatants (Kanayama, Hudson & Pope, 2010). According to Kerr & Congeni (2007: 773), AAS-induced muscle hypertrophy and strength gains increased the weight of "malnourished HIV-infected children as young as 4 years".

Interestingly, Shahidi (2001) suggests that administrating small doses of AAS could potentially aid patients suffering from damaged cardiac muscle. However, dosing schedules would have to be very strictly monitored.

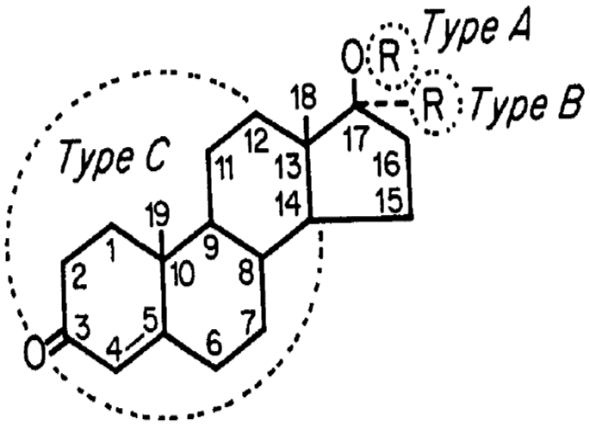
Recent attempts have been made to develop an adequate treatment for male infertility with AAS administration and there has been a surge of interest in the production of an AAS male contraceptive (Hartgens & Kuipers, 2004). Thus far, all efforts have failed.

Lastly, numerous studies have demonstrated that administering small amounts of AAS to patients directly after abdominal surgery and/or having suffered severe burn injuries may result in positive nitrogen balances. This would then promote the faster healing of tissue, ultimately decreasing recovery time (Shahidi, 2001; Hartgens & Kuipers, 2004; Kanayama, Hudson & Pope, 2010).

## 4.3 AAS Pharmacology

Like cholesterol, testosterone has a four-ring structure containing 19 carbon atoms (see figure 1 below) (Shahidi, 2001; Calfee & Fadale, 2006). AAS represent modifications of this molecule.

**Figure 1: Model Testosterone Structure (Kuhn, 2002: 413).**




17-α alkylated versions (see table 1) are created via the introduction of a methyl group (CH3) or an ethyl group (C2H5) at position C17α (Shahidi, 2001; Kicman, 2008). 17-α alkylated variations are relatively resistant to metabolism in the liver, thereby enabling them to survive first-pass metabolism and become orally active (Shahidi, 2001; Kam & Yarrow, 2005; Calfee & Fadale, 2006).

The 17-β hydroxyl group (see table 2 below) are parenterally (intramuscular injection) administrated preparations esterified with an acid moiety to prevent rapid absorption from the oily vehicle (Shahidi, 2001; Kicman, 2008). This prolongs the duration of their activity.

Hartgens & Kuipers stating that (2004: 516), "[AAS] soluble in oily vehicles used for injection may be present in the body for several months".

**Table 2: Internationally Popular AAS.**

| 17-α alkyl (Oral) | 17-β ester (Injectable) |
|---|---|
| Anadrol (oxymetholone) | Deca-durabolin (nandrolone decanoate) |
| Oxandrin (oxandrolone) | Durabolin (nandrolone phenpropionate) |
| Dianabol (methandrostenolone) | Depo-testosterone (testosterone cypionate) |
| Winstrol (stanozolol) | Equipoise (boldenone undecylenate) |

### 4.3.1 AAS Mechanism of Action

While heavily researched, the mechanism of action of AAS (see figure 2) is not yet completely understood (Hartgens & Kuipers, 2004; Kicman, 2008). Hartgens & Kuipers (2004) suggest that variations in the AAS molecules and different binding affinity to androgen receptors may explain why the mechanism of action of AAS differs between compounds. Several general mechanisms have been suggested as explanations of AAS action. These mechanisms are discussed below.

AAS are synthetic versions of testosterone. Thus, like testosterone, AAS actions represent the combination of several activities modulated by local enzymes, particularly 5α-reductase and aromatase (Shahidi; 2001; Kuhn, 2002; Kicman, 2008).

#### 5α-Reductase

AAS bind to androgen receptors at the cellular level. The 5α-reductase enzyme converts AAS to the more potent androgen, dihydrotestosterone (DHT) (see figure 2 below). This compound is more active because it binds to androgen receptors with greater affinity. The androgen is then 5-α-reduced in target tissue or organs, primarily male sex organs and the brain (Shahidi; 2001; Hartgens & Kuipers, 2004; Kicman, 2008). Following this, the androgen binds to a cytoplasmic receptor, forming a complex that binds to DNA and increases the production of mRNA. This ultimately stimulates protein synthesis (Shahidi; 2001; Kuhn, 2002; Hartgens & Kuipers, 2004).

### Aromatase

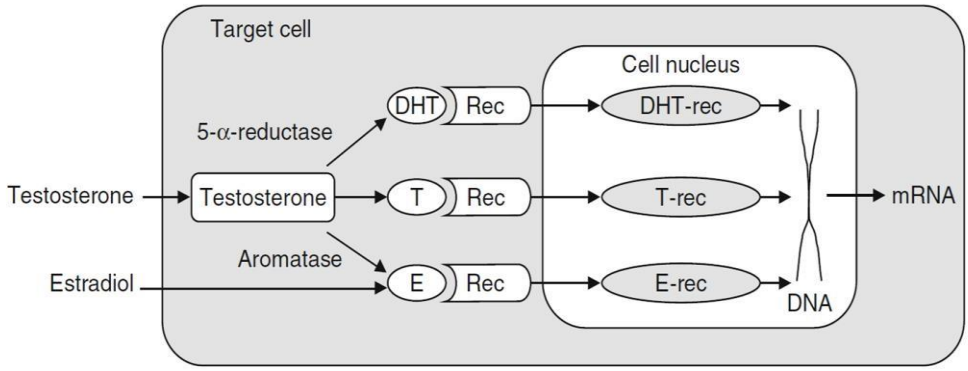
The aromatase enzyme located inside the cell converts AAS into oestrogens (see figure 2), primarily estradiol and estrone (Hartgens & Kuipers, 2004; Kicman, 2008). This occurs by female sex hormones binding to oestrogen receptors, resulting in the construction of oestrogen-cell receptor complexes. Hartgens & Kuipers (2004) suggest that the aromatisation process is generally activated by supra-physiological levels of androgens and AAS circulating in the androgen receptor system.

According to Kuhn (2002) and Kicman (2008), both the 5-α-reduction and aromatisation actions are highly undesirable in AAS because the former decreases the ratio of anabolic: androgenic activity while the latter promotes feminising side effects.

### Anti-Glucocorticoid Action

Glucocorticoids are increasingly released into serum lipids as a result of strenuous physical training, mental stress, psychiatric issues and surgery (Hartgens & Kuipers, 2004; Maravelias *et al*., 2005). Extra glucocorticoids in the serum lipids promote the breakdown of proteins, resulting in a catabolic state (the loss of muscle mass and decreased strength) (Kuhn, 2002; Hartgens & Kuipers, 2004; Kicman, 2008). These reductions ultimately result in a dwindled aesthetic physique. By binding, albeit at low affinity, to glucocorticoids receptors, excess exogenous AAS antagonistically inhibit the occurrence of the catabolic state (Kuhn, 2002; Hartgens & Kuipers, 2004; Kicman, 2008). Thus, AAS act as the guardians and promoters of muscle mass, strength and aesthetics.

**Figure 2: AAS Mechanism of Action (Hartgens & Kuipers, 2004: 544).**




DHT = dihydrotestosterone; E = estradiol; DHT-rec = dihydrotestosterone-receptor complex; E-rec = estradiolreceptor complex; Rec = receptor; T = testosterone; T-rec = testosterone-receptor complex.

### 4.3.2 AAS Therapeutic Index

The Therapeutic Index (see table 3 below) was developed in an attempt to measure and classify AAS androgenic and anabolic effects (Taylor, 2002; Kam & Yarrow, 2005). It illustrates estimates of a steroid's ability to maximise anabolic activates relative to androgenic effects.

Testosterone has equal anabolic and androgenic actions (Kam & Yarrow, 2005), hence its Therapeutic Index benchmark anabolic: androgenic ratio value of 1. However, most AAS are designed in an attempt to respectively maximise and limit testosterone's anabolic and androgenic effects (Taylor, 2002; Hartgens & Kuipers, 2004; Kam & Yarrow, 2005). Thus, most AAS will, firstly, have Therapeutic Index values greater than 1. Secondly, different chemical structures result in AAS developing unique anabolic: androgenic ratios (Taylor, 2002; Kam & Yarrow, 2005; Duchaine, 2006).

**Table 3: Therapeutic Index.**

| Anabolic-Androgenic Steroid | Anabolic /Androgenic ratio |
|---|---|
| Testosterone | 1 |
| Methandrostenolone | 2-5 |
| Oxymetholone | 9 |
| Oxandrolone | 10 |
| Nandrolone Deconate | 10 |
| Stanozolol | 30 |

Nandrolone-Decanoate (Deca-Durabolin) and Stanozolol (Winstrol) have anabolic: androgenic values of 10 and 30 respectively. However, all AAS are virilising if administered for long periods and at high dosages (Kam & Yarrow, 2005).

## 4.4 AAS Administration and Dosing Schedules

AAS may be administered orally, parentally (intramuscular injection), and/or transdermally (topical gel or patch).

The most used type of AAS are oral steroids because they are relatively cheap and easy to use. They require liver digestion, which comes with a danger of damage to that organ (Duchaine, 2006; Kimergård, 2014). For example, Anadrol is one of the most popular oral AAS "[many] users [commenting] that … they are very strong while on the drug" (Duchaine, 2006: 32). However, it is the second most liver toxic oral steroid – its potent functionality places a great deal of stress on the liver and kidneys.

Parental (intermuscular Injectable) AAS are much healthier than their oral counterparts because the liver is less active in the body's absorption of the drugs (Giraldi, 2009; Kicman, 2008). Therefore, potential liver toxicity is reduced (Hartgens & Kuipers, 2004; Giraldi, 2009).

To decrease the potential risk of penetrating veins and major arteries, the result of which possibly result in internal bleeding, AAS are mainly injected into the backside, hip and/or thigh. These areas are preferred due to a lack of nerves, veins and major arteries, thus results in safer and less painful injections or 'shots' (Duchaine, 2006).

Transdermal (topical gels and patches) AAS are mostly used daily in the treatment of side effects caused by other AAS (Hartgens & Kuipers, 2004; Duchaine, 2006). For example, Accutane is the most popular and potent topical gel used to control oily skin and acne.

Dosing schedules revolve around a programme of cycling, stacking, pyramiding and the use of ancillary drugs (Kam & Yarrow, 2005; Calfee & Fadale, 2006). Cycling referrers to the period when AAS are used, usually ranging between 4-12 weeks. This is followed by a period of AAS-free or 'clean' training generally ranging between a period of 8-12 weeks. Cycling is used to limit potential side effects and allow for the restoration of natural testosterone levels (Hartgens & Kuipers, 2004; Calfee & Fadale, 2006).

AAS users often 'stack' multiple AAS simultaneously during a cycle and at the same time and 'pyramid' the dosing schedule, the highest doses taken in the middle of cycles (Calfee & Fadale, 2006; McVeigh & Evans-Brown, 2009). In some cases, doses are 100-1000 times higher than therapeutic doses. To avoid withdrawal symptoms and guard against AAS tolerance, the doses are tapered off near the end of the cycle (Calfee & Fadale, 2006; McVeigh & EvansBrown, 2009).

Including a wide and diverse variety of auxiliary drugs into stacks is a popular practice amongst AAS users. However, these supplementary drugs may prove more toxic than AAS when used continuously and at high dosages (Kam & Yarrow, 2005; McVeigh & Evans-Brown, 2009).

### 4.4.1 Multipurpose and Function Specific AAS

Murad & Haynes (1980) and Brower (2002) propose that the variance in AAS use, not type[5], creates three categories wherein each AAS can be placed. The first two categories classify *specific-use* AAS; steroids used to either increase muscle mass and enhance strength or as therapeutic agents. For example, Trenbolone-Enanthate which is commonly known as Tren.

[5] There is a scope of AAS variety and choice, the study only mentions 32. These AAS have gained and maintained international popularity due to their accessibility, economic viability and rapid and visible effects (See Appendix 6).

The third and largest category classifies *multipurpose* or 'crossover' AAS. They are used to promote muscle mass accumulation and increase strength and as therapeutic agents. For example, Testosterone-Cypionate.

## 4.5 AAS Adverse Side Effects

AAS-induced physiological and psychiatric side effects have been the subject of decades of highly debated research. Now, it is generally accepted that AAS can potentially induce numerous adverse medical side effects (Maravelias *et al*., 2005; Hartgens & Kuipers, 2004; Kerr & Congeni, 2007).

However, one has to keep in mind that the results of experimental AAS studies depend on several factors, primarily sample sizes, different participant evaluation methods and the varying length and dose levels administered (Choi, Parrot & Cowan, 1990; Hartgens & Kuipers, 2004; Kerr & Congeni, 2007; Kanayama, Hudson & Pope, 2010).

Moreover, studies demonstrate that AAS users will not be deterred from using AAS because benefits are considered to outweigh adverse effects, Hartgens & Kuipers (2004: 534) stating "a substantial number of athletes and [recreational gym-goers] … accept the risk of (major) health damage".

### 4.5.1 Adverse Physiological Effects

#### *Hepatic*

AAS use can result in serious liver dysfunction and damage. But, Hartgens & Kuipers (2004) propose an investigation of the state of the liver before AAS use because AAS-induced liver disease is more likely to occur in a damaged liver.

Liver disorders include elevated levels of liver enzymes, peliosis hepatis (small blood filled cystic spaces distributed throughout the liver), hepatocellular hyperplasia (benign tumour of the liver) and hepatocellular carcinoma (liver cancer) (Kam & Yarrow, 2005; Kerr & Congeni, 2007; McVeigh & Evans-Brown, 2009). Hepatotoxicity is usually associated with 17-α alkylated AAS (oral AAS). For example, Oxandrolone (Anavar) and Stanozolol (Winstrol) (Maravelias *et al*., 2005; Kerr & Congeni, 2007).

### *Cardiovascular*

Reported AAS-induced cardiovascular effects include left ventricular hypertrophy, thrombosis, stroke, hypertension and sudden cardiac death (Maravelias *et al*., 2005; Kerr & Congeni, 2007; McVeigh & Evans-Brown, 2009).

But, Hartgens & Kuipers (2004: 536) suggest erring on the side of caution when interpreting death cases, stating:

> in case reports the most dramatic side effects are described and they do not prove a causal relationship between AAS and the disease condition or cardiac death.

Altered lipid profiles in AAS users are reflected by the simultaneous increase of Low-density lipoprotein (LDL) cholesterol and decrease of High-density lipoprotein (HDL) cholesterol. These alterations place users at increased risk for atherosclerotic heart disease (Kam & Yarrow, 2005; Maravelias *et al*., 2005; Kerr & Congeni, 2007).

### *The Reproductive System*

The administration of supra-physiologic doses of exogenous AAS can decrease both the endogenous production of testosterone and spermatogenesis, thus leading to testicular atrophy (Hartgens & Kuipers, 2004; Kerr & Congeni, 2007). Cessation of AAS use usually, but not always, reverses reproductive impairments within several weeks (Maravelias *et al*., 2005; Kerr & Congeni, 2007).

### *Musculoskeletal*

Musculoskeletal injuries are associated with altered collagen structure. Consequently, tendons become stiffer and less elastic (Kerr & Congeni, 2007; Horn, Gregory & Guskiewicz, 2009). Intense and frequent training may increase the risk of tendon rupture due to disproportionate growth of the muscle compared to the tendon (Maravelias *et al*., 2005; Horn, Gregory & Guskiewicz, 2009).

### *Dermatologic*

Gynecomastia (the growth of the glandular breast tissue in males), premature baldness, severe cases of acne and serious muscular abscesses are the most commonly observed adverse dermatologic findings (Kerr & Congeni, 2007; McVeigh & Evans-Brown, 2009).

### 4.5.2 Psychiatric Effects

The last two decades of research and multiple self-reported cases associate AAS use with numerous adverse psychiatric syndromes including, aggression and irritation, schizophrenia, (hypo)mania, paranoia, delirium, major depression and suicide (Maravelias *et al*., 2005; Kerr & Congeni, 2007; Kanayama, Hudson & Pope, 2010).

#### *Aggression*

AAS-induced aggression/hostility is a topic hotly debated. Several studies (see, Conacher & Workman, 1989; Choi, Parrot & Cowan, 1990; Pope & Katz, 1990; Pope *et al*., 1996; Tamir *et al*., 2004; Kanayama, Hudson & Pope, 2010) report AAS-induced episodes of violence. Conversely, numerous investigations (see, Bhasin *et al*., 1996; Yates *et al*., 1999; Pope, Kouri & Hudson, 2005) counter the above. It is currently not possible to provide a definite and conclusive answer regarding the question of a connection between AAS and aggression/hostility.

#### *Body Image*

AAS use may potentially invoke body dissatisfaction (Kerr & Congeni, 2007). This leads to feelings of low self-esteem and potential MD. Oppositely, some AAS users have been reported to develop narcissistic personalities or the 'Adonis Complex' (Pope, Phillips & Olivardia, 2000a; Kanayama, Hudson & Pope, 2010).

#### *Withdrawal and Dependence*

There is a consensus in current research that some AAS users experience withdrawal and dependence syndromes (Maravelias *et al*., 2005; Hartgens & Kuipers, 2004; Kerr & Congeni, 2007). Kerr & Congeni (2007) and Kanayama, Hudson & Pope (2010) suggest that AAS withdrawal symptoms are similar to those observed during alcohol and opioid withdrawal. These include anxiety, anorexia, chills, hot flashes, hypertension, insomnia, irritability, myalgia, nausea and vomiting (Maravelias *et al*., 2005; Kerr & Congeni, 2007). Also, AAS craving and major depression craving may occur with withdrawal. As such, potential AAS addiction cannot be overlooked.

## 4.6 Conclusion

Originally employed as designer therapeutic agents, AAS have evolved into designer training agents. Their powerful, guaranteed physique building effects makes them an irresistible temptation for a small group of males who are intent on rapidly improving their aesthetics and sports abilities.

However, although willing and keen, AAS use is mostly conducted in an ignorant fashion. The drugs' pharmaceutical properties, are hardly investigated. This then increases the possibilities of suffering negative side effects which cast further gloom on the socially villainised substances. Also, negative side effects may be incurred due to AAS users lack of accurate AAS knowledge.

# Chapter 5. Steroids and the Law in South Africa

## 5.1 Introduction

The [law's] greatest weapon is clarity, and its whetstone is succinctness.

United States Circuit Judge Elijah Barrett Prettyman (n.d.).

This chapter begins with this quote because it illustrates that, for the law to work systematically, the language of law should be communicated in a simple, unambiguous dialect.

There is a lack of clarity, at least amongst members of the public, about whether AAS are legal or not. There are several reasons for this. One is that the definition of AAS is itself complex and not always clear. Another is that although there is a general sense that AAS are illegal drugs, when they come to light in the media the ambiguity about their status remains. And this is because there are very few prosecutions.

There are few arrests, few cases that come to court and even fewer that result in convictions. And one of the reasons for this is that there are many different laws relating to AAS. Some of them overlap, but there is no clear area of jurisdiction between the various laws. When one adds this legal lack of clarity with the lack of resources in the South African Police Service and the Criminal Justice system and possibly with the lack of political will (because AAS use and/or dealing are not considered to be serious crimes) one can begin to understand why there still exists in the minds of the public a lack of clarity about the legal status of AAS. In this chapter, I focus on the various laws that relate to AAS and provide some anecdotal evidence that suggests that AAS cases receive low priority.

This chapter is divided into four main sections: in the first section, I define the (il)legal status of AAS in SA. Then, I discuss how some states, specifically the USA, govern AAS via exclusive legislature while SA employs a multi-law AAS regulatory system. Each law included in the AAS regulatory system is individually examined (see The Status of AAS in South Africa – The South African Institute for Drug-Free Sport Act 14 of 1997 below).

In the second section, I analyse AAS administrative malfunction in SA. A study of how this has contributed to the development and sustainment of a nationwide underground AAS black market follows (see South Africa's Disjointed Vehicle of AAS Administration – The AAS Black Market in SA below).

The third section investigates participants' awareness and understandings of AAS legislature. This is accomplished by reviewing respondents' outlooks and feelings regarding doping in sports and recreational AAS (ab)use. These explorations are guided by this study's survey results (see 'The Profile and Attitude of Gym Users' chapter below) (see Perceptions and Understandings of AAS Regulations below). Finally, in the fourth section, I analyse the policing of AAS and the enforcement of AAS regulations. This is illustrated by examining several doping scandals involving elite athletes and other reported cases (see Policing of AAS and Enforcement of AAS Regulations below).

## 5.2 The Status of AAS in South Africa

To enjoy state liberties and protection, SA society is required to obey and respect national law(s). However, judicial compliance is hindered and confused when laws are presented ambiguously. Puzzlement is exacerbated when definitions of given topics/ substances are non-specific and thin. For example, there is no distinction made in law between SS and AAS. The closest we get to a definition is the substances' different levels of control: SS regulations are lax. SS are over-the-counter pharmaceuticals that are available to consumers without a prescription. Oppositely, AAS are prescription drugs. They are stringently controlled due to their low to moderate potential for abuse and/or dependence. Therefore, it is possible that in the minds of users, it is difficult to distinguish in all instances between AAS and SS.

All of the several interwoven AAS administration laws below discussed condemn all AAS activities as illegal. For example, the sale, possession and/or recreational use of AAS. Astonishingly, none of these laws provide a clear and specific definition of AAS. AAS are, however, mentioned in the Medicines and Related Substances Act 101 of 1965. Although not defined, they are classified as Category A medicines which are:

> intended for use in humans and which are, without manipulation, ready for administration, including packaged preparations where only a vehicle is added to the effective medicine (Medicines and Related Substances Act 101 of 1965: pg. 37)

Also, one must always be conscious of fact that AAS were originally developed as therapeutic agents and remain recognised as such in several countries, SA included.

Section 22A of the Medicines and Related Substances Act 101 of 1965 (MRS 1965) classifies and regulates AAS as Schedule 5 pharmaceutical medicines (see 'The Medicines and Related Substances Act 101 of 1965' sub-section for an in-depth discussion). Only when acquired via a medical script provided by a licensed medical practitioner is AAS possession and use legal. In other words, in some contexts AAS use and possession is legal.

This shows how the relationship between AAS and SA law is overshadowed by a grey cloud of ambiguity because their status is not explicitly fixed: in some settings, AAS are clearly legal, and medically useful. For example, treatment of male hypogonadism. But they are equally illegal in some settings and for some purposes. For example, aesthetic enhancement.

AAS are not explicitly defined in any body of SA legislature, and their status swings back and forth (legal or illegal). Consequently, it may be proposed that AAS be defined as *quasi-legal* substances – AAS have some, but not all, the features of legality. To clarify, AAS use and possession is only legal when they are acquired via a medical script. All other AAS activities are illegal.

The complex and ambiguous definition of AAS has fostered a social sense of uncertainty regarding whether AAS are legal or not. Individuals might unwittingly engage in illegal AAS activities. Consequently, AAS and their regulation are wrapped in a grey blanket of uncertainty, misunderstanding and miscommunication.

## 5.3 Different Forms of AAS Administration

Globally, AAS are governed in many different manners, primarily via exclusive legislature and/or a system of intertwined laws (multi-law system). Examining how the USA can formulate and use exclusive AAS regulatory law illustrates why SA is forced to utilise the current system of administration and law towards AAS.

### 5.3.1 AAS Regulation in the USA

In the USA, AAS occurs via an exclusive body of legislature introduced in 1990 by the Anabolic Steroid Control Act of 1990. This Act was subsequently reinforced by the Anabolic Steroid

Control Act of 2004, itself strengthened by the Designer Anabolic Steroid Control Act of 2014. The formulation of exclusive AAS law was enabled due to the substances being specifically defined.

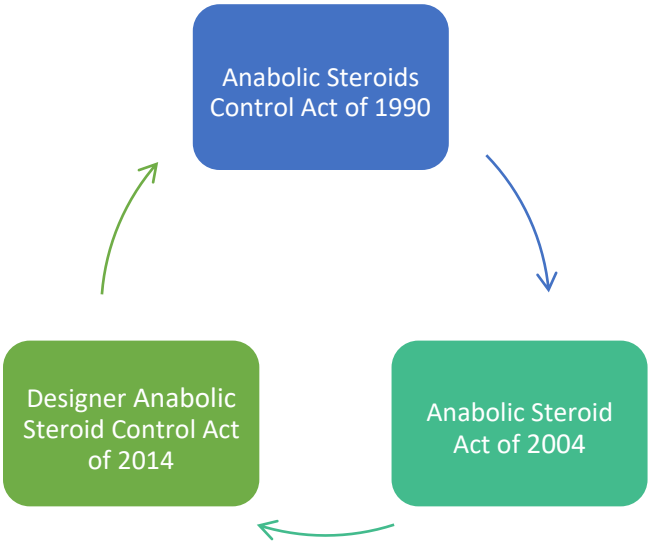
According to the AAS Act of 2004 (pg. 1661), AAS are:

> any drug or hormonal substance, chemically and pharmacologically related to testosterone (other than estrogens, progestins, corticosteroids, and dehydroepiandrosterone)

AAS law is enforced by the Drug Enforcement Agency (hereafter DEA), a federal agency that falls under the country's Department of Justice.

AAS federal offenses include the unlicensed "importation, exportation, manufacturing, distribution, or possession [of AAS] with intent to manufacture or distribute" (Designer Act of 2014: 2932). Penalties include a $500.000 fee per violation. ASS possession for personal use and/or sale is also a federal offence, each violation punishable by a $1000 fee (Designer AAS Act of 2014). The implementation and enforcement of exclusive AAS laws have enabled a methodical manner of AAS governance (see figure 3 below).

**Figure 3: Systematic AAS Regulation in the USA.**



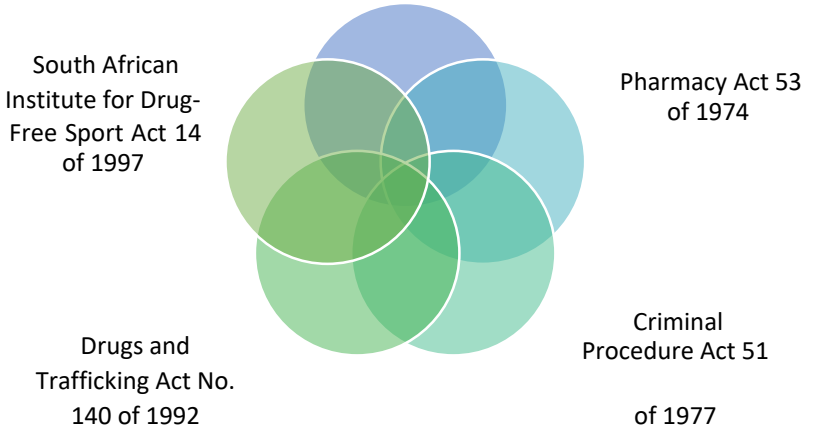

### 5.3.2 AAS Regulation in South Africa

Contrarily, AAS are not explicitly defined in SA. Their swings back and forth (legal or illegal), they are defined AAS as *quasi-legal.* As such, most members of the public are unsure whether

AAS are legal or not. Also, the legal status of AAS is engulfed in a grey cloud of confusion and complexity. These factors render the construction of exclusive regulatory AAS law impossible.

This has led to AAS administration being spread among a host of interwoven laws, specifically the Medicines and Related Substances Act 101 of 1965, Pharmacy Act 53 of 1974, Criminal Procedure Act 51 of 1977, Drugs and Trafficking Act 140 of 1992 and the South African Institute for Drug-Free Sport Act 14 of 1997 (see figure 4 below).

**Figure 4: AAS Administration in South Africa.**




The South African Narcotics Bureau, a special unit in the South African Police Service (hereafter SAPS) is specially charged with the enforcement of drug law. However, its small size and resource deficits has forced SAPS to include other units in the enforcement of drug law.

### *The Medicines and Related Substances Act 101 of 1965*

The Medicines and Related Substances Act 101 of 1965 (hereafter MRS 1965), is the foundation of the state's regulation of the medical sphere. For example, it determines the appointment of one or more Deputy Registrars, dispensing medicine manufacturing licenses and the development and/or disbandment of pharmaceutical policies.

Section 22A of the Act grants the MCC power to plot the regulation, registration and scheduling of and access to all pharmaceutical materials. Substances fall into one of nine schedules, 0-8 (MCC, 2014; Osman, 2014). Essentially, a medicine schedule is the number ascribed to a chemical substance based on its benefits and its risks. Mandated levels of control

and administration ascend and/or descend in correlation with a substance's schedule number – the lower the risk, the lower the number (MCC, 2014; Osman, 2014).

AAS are registered as Schedule 5 drugs. This is due to their potential for abuse or dependence. Regulations are strict to increase safety and enhance management (MCC, 2014: 10). The Act advocates heavy punishment of legislature violation(s). For example, a globally recognised, permanent criminal record, a fine not exceeding R100 000, close to 10 years of imprisonment and/or both fine and imprisonment.

### *The Pharmacy Act 53 of 1974*

The Pharmacy Act 53 of 1974 provides for the establishment of the South African Pharmacy Council (hereafter SAPC) and identifies its objects and general powers. The Act grants SAPC jurisdiction over the state's pharmaceutical sector and extends its control to the public sector. The SAPC is tasked with:

> [providing] … pharmacy education and training, requirements for registration, the practice of pharmacy, the ownership of pharmacies and the investigative and disciplinary powers of the council; and to provide for matters connected therewith (Pharmacy Act 53 of 1974: 1).

SAPC is obligated to investigate illegal and unethical pharmacy activities. For example, prescription fraud. It also has the responsibility of tutoring AAS users on correct AAS self-administration techniques. SAPC disciplinary power enables the punishment of pharmaceutical crime(s). Perpetrators face numerous penalties. For example, removal from the pharmacy register, suspension, and/or a fine (Pharmacy Act 53 of 1974).

### *The Criminal Procedure Act 51 of 1977*

The Criminal Procedure Act 51 of 1977 (hereafter CP 1977) "makes provision for procedures and related matters in criminal proceedings" (Criminal Procedure Act 51 of 1977: 2). For example, arrests and the prosecution of cases. In connection with AAS cases, this Act has yet to be completely utilised; few AAS cases are prosecuted, and of those that make it to court, few, if any, result in convictions (see below for in-depth discussion).

### *The Drugs and Trafficking Act No. 140 of 1992*

The Drugs and Trafficking Act No. 140 of 1992 (hereafter DDT 1992), makes provision for the prohibition of the manufacture, supply, use and possession and dealing in drugs. These substances are manufactured using scheduled substances (and the chemicals used to make

them). For example, crystal methamphetamine commonly known as tik and/or AAS. The Act also grants SAPS:

> powers of entry, search, seizure and detention in specified circumstances; for the recovery of the proceeds of drug trafficking; and for matters connected therewith (DDT 1992 Act: 3).

Most pharmaceutical crime(s) are prosecuted according to this Act. Culprits may incur severe penalties. These include a globally recognised, permanent criminal record, imprisonment not exceeding 25 years, a fine, the maximum R250 000 and/or both (Leggett, 2001).

However, as above-mentioned and for the same reasons, in connection with AAS cases, the Act has yet to be utilised to its full capacity (see below for in-depth discussion).

### *The South African Institute for Drug-Free Sport Act 14 of 1997*

The South African Institute for Drug-Free Sport Act 14 of 1997 (SAIDS 1997), provides for the establishment of the South African Institute for Drug-Free Sport (SAIDS). To promote ethical and fair play in sports, SIADS prohibits all doping practices (using prohibited substances and/or illegal performance). For example, performance-enhancing drugs, AAS included, and blood doping.

All national sports federations are required to incorporate, either directly or by reference, SAIDS' anti-doping rules and the World Anti-Doping Agency's *Code*[6] into their own particular set of anti-doping rules/regulations. For example, the South African Rugby Union and the South African Football Association. Although doping cases are internally handled by national sports federations' disciplinary committees or judiciaries, they all fall under SAIDS' executive power.

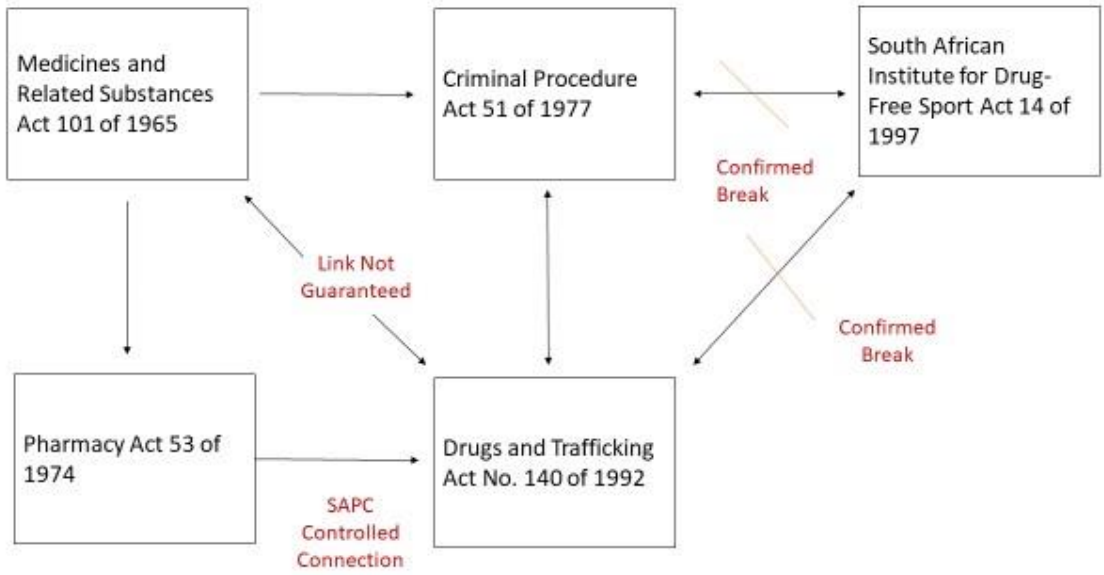
Having individually examined each of the AAS administrative laws allows me to investigate why, when combined, they fail to regulate AAS clearly and cohesively.

[6] SAIDS falls under the jurisdiction of the South African Confederation and Olympic Committee, a signatory to the World Andi-Doping Agency's (hereafter WADA) World Anti-Doping *Code*. The *Code* acts as: the fundamental and universal document upon which the World Anti-Doping Program in sport is based. The purpose of the *Code* is to advance the anti-doping effort through universal harmonization of core anti-doping elements (WADA Anti-Doping code, 2015:12).
SAIDS officially accepted the *Code* in 2005, thus formally recognising WADA's role as the ultimate anti-doping sports authority through the 2003 Copenhagen Declaration of Anti-Doping in Sport.

## 5.4 South Africa's Disjointed Vehicle of AAS Administration

When separately employed in their assigned fields, SA laws are clear and definitive. When intertwined in AAS administration, laws are immediately wrapped in a grey coat of confusion, miscommunication and conflicting administrative power or 'jurisdiction overlap' (Aagaard, 2011). This has resulted in an unintelligible manner of AAS administration (see figure 5 below).

**Figure 5: Disorderly AAS Regulation.**




Pharmacological crime(s) can be prosecuted according to the MRS 1965 Act. According to Leggett (2001, 2002) and Nel (2003), most, but not all, pharmaceutical offenses are prosecuted according to the DDT 1992 Act which works in tandem with the CP 1977 Act.

The absence of a structured pyramid of AAS administrative power between Acts could potentially result in a dispute of administrative precedence. For example, if a case was prosecuted according to the MRS 1965 Act instead of the DDT 1992 Act, the latter Act may claim jurisdictional precedence due to prosecutors being more practiced and apt in arguing cases according to its rhetoric (See figure 3).

Another AAS regulation mishap is illustrated by the restricted jurisdiction of SAPS in the pharmaceutical sector: according to several authors (see, for example, Todd, 1987; Lambert, Titlestad & Schwellnus, 1998; Fink *et al*., 2018 and McBride, Carson & Coward, 2018) the

pharmacy sector is a hot spot of illegal AAS activities such as prescription fraud and illegal sale of medicines.

The SAPC is, however, not compelled to report and/or involve SAPS in pharmacy investigations and disciplinary matters because of its wide jurisdictional power. SAPC jurisdictional power allows it to "institute, defend and proceed with any legal action in its own name" (Pharmacy Act, 1974: 8). If choosing to involve SAPS in cases, the SAPC "[determines] the manner in which decisions shall be taken" (Pharmacy Act, 1974: 7). Thus, SAPS jurisdiction in the pharmacy sector is limited and controlled. A decreased chance of being criminally convicted might reassure corrupt medical officials to continue committing illegal AAS activities (see figure 3).

The most significant lack of cohesion in AAS administration is illustrated by the effect of the SAIDS 1997 Act which dissociates sports law(s) from criminal and/ or civil state legislature (see figure 3). SIADS Anti-Doping Rules (2015: 3) stipulate that:

> These Anti-Doping Rules are rules … distinct in nature from criminal and civil laws, and are not intended to be subject to or limited by any national requirements and legal standards applicable to criminal or civil proceedings.

Detachment from criminal and/ or civil state legislature has resulted in SAIDS' monopolistic authority in the litigation of all sports-related AAS offences. SAIDS is the only state agency allowed to impose sanctions, "on persons guilty of taking drugs … in accordance with the penalties laid down in the constitutions of the respective sports federations" (SAIDS 1997: 12). For example, under the supervision of SAIDS, the South African Rugby Union (SARU) is deliberating on whether to suspend Aphiwe Dyantyi, the 2018 Breakthrough Player of the Year, after he failed a drugs test in 2019.

The lack of a structured pyramid of jurisdictional power and miscommunication between laws, some of which overlap, has allowed for greater activity in the AAS black market.

## 5.5 The AAS Black Market in SA

Throughout SA, a small troop of gym-goers and sportsmen has no issue with AAS. Most are aware that the recreational purchase of AAS is illegal. But they use steroids, illegally, out of a desire to gain body-enhancing benefits.

There is a nationwide AAS black market devoted to illegal procurement of and dealing in AAS. Black market AAS are readily available from and through numerous sources in SA.

For example, the internet, medical practitioners and under-the-counter sales in sports nutrition stores. According to Cameron (2000: 1), "The illegal steroids trade is flourishing in South Africa - to such an extent that a dealer is brazenly selling his wares to the world on the Internet". Providing some evidence for Cameron's claims, the majority (72%, n=108) of this study's participant sample reported the view that the use of sports supplements and AAS in SA has increased (see 'The Profile and Attitude of Gym Users' chapter below).

The recreational sale and/or purchase of AAS is illegal in SA. However, unauthorised AAS manufacturers and distributors have devised schemes that manipulate AAS law's ambiguity: in SA, all pharmaceutical substances are registered on the MCC list. They are registered according to their compound name, their *chemical composition*. For example, Methandrostenolone, a popular AAS which is commonly referred to as Dianabol.

Underground AAS laboratories may slightly alter Dianabol's chemical composition by removing and/or adding a chemical compound. The new product is named synonymously with the well-known synthetic AAS agent. For example, Dianabol-XYZ, a 'Designer AAS'.

Underground AAS manufacturers argue that Dianabol-XYZ cannot be considered illegitimate due to two reasons. First, Dianabol-XYZ has not been officially investigated, tested and verified as an AAS. Second, Dianabol-XYZ cannot be listed on the MCC until its chemical composition is discovered. Ergo, Dianabol-XYZ is technically not bound to SA pharmaceutical law.

At first glance, this argument appears is solid and convincing. But, it is fundamentally flawed due to three reasons.

First, a variety of banned salts and esters are utilised in the production of designer AAS thus rendering them illegal. Second, the SAPC prohibits the manufacture and/or sale of all chemical substances, registered or not, without its approval. Third and most important, the nationwide AAS black market is illegal. All activity conducted therein is automatically and indisputably illegal.

On the majority of global markets, including SA, illegal AAS trade occurs via numerous internet sites (Kanayama & Pope, 2012; Fink *et al*., 2018; McBride, Carson & Coward, 2018). This

method protects the identities of users but also permits a detailed description of each products' properties and allows price comparability and results in efficient product delivery (Fink *et al*., 2018; McBride, Carson & Coward, 2018).

Few preventative measures have been initiated to try to curb AAS activities on the internet. Underground manufactures and distributors' well-orchestrated manipulative scheme(s) are convincing and attractive and fervently defended by black market participants. Few individuals can navigate through SA's foggy labyrinth of AAS law. Also, as below discussed, AAS crimes are regarded as trivial and 'petty' – SAPS and the criminal justice system are aware of AAS crimes but choose to ignore them. Consequently, the underground AAS market in SA is not definitely black, but instead, unsurely grey.

## 5.6 Perceptions and Understandings of Steroids Regulations

As earlier mentioned (see 'Literature Review' chapter), sport is deeply rooted in SA. Sport is by its nature, competitive so it is unsurprising that 'fairness' is an important discussion point amongst sportspeople. This controversy that can surround such discussions is very well illustrated in the case of Caster Semenya, the African female South African middle distance runner whose naturally high testosterone levels have led her to being banned from running some distances without taking drugs to lower her testosterone levels. At the heart of this debate is whether she has an unfair advantage. The same kind of logic applies to questions of PEDs such as AAS.

In my survey, 65% (n=98) of respondents condemned doping in sports because they felt that it demeans all sports principles (fairness, ethics, tradition, rules and ethos (unwritten rules)). Respondents also said doping casts a dampening tone of grey criticism on society's efforts to constructed a morally united and attractive community.

79% (n=119) of respondents said that socially distributed SS and AAS information is neither accurate nor correct. They reported that inaccurate information is a direct result of the lack of specific SS and AAS definitions and a clear, unambiguous AAS legal status. Also, they reported that information is jumbled because it is circulated through different sources which translates it differently.

61% (n=92) of the study's respondents believed that the current AAS law is appropriate. But their perceptions were sports orientated. They were well aware of sports doping regulations and insisted that dopers should be banned from sports. No mention was made of recreational AAS law. Oppositely, 39% (n=59) of respondents disagreed with current AAS legislation, their perceptions recreationally concerned. They claimed that their bodies are autonomous entities and that people should therefore be allowed to consume anything they please.

Responses to the survey provide a range of options – there is a lack of uniformity in responses. This lack of uniformity suggests a wide range of opinions. In turn, this suggests that the lack of clarity about what is legal and illegal impacts on how respondents perceive AAS. Because they don't actually know what is legal and illegal (due to the law's ambiguity) they are at liberty to pick up twigs to make ill (or well) informed interpretations of the law and popular discourse.

This is very bad for the regulation of AAS. When there is a lack of clarity, confusion (and grey areas) allows criminality to flourish. Criminality is abetted by confusion.

## 5.7 Policing AAS and Enforcement of AAS Regulations

The policing of AAS and the enforcement efforts of the criminal justice system (hereafter CJS) is both indifferent and lax in SA. To fully appreciate the state's negligent attitude toward AAS regulation, it is necessary to begin with a brief examination of the way drugs were policed during apartheid. A short analysis of drug trafficking in contemporary SA is also necessary.

### 5.7.1 Policing of Drugs During Apartheid

According to Shaw & Shearing (1998) and Peltzer *et al*. (2010), during apartheid, the South African police force's main focus was the maintenance of the network of physical spaces that separated Africans from Whites. The police also acted to ensure that white capitalists had access to cheap African labour (Wolpe, 1972; Shaw & Shearing, 1998).

Although a signatory to international drug enforcement treaties, the police force paid little attention to their enforcement – policing and enforcement of drug law enjoyed low priority during apartheid (Leggett, 2001; Peltzer *et al*., 2010).

### 5.7.2 Drug Trafficking in Contemporary SA

South Africa's geographical location, porous borders and expanding international trade links with Asia, Latin America, Western Europe and North America have made it an attractive drug transit country (Nel, 2003; Peltzer *et al*., 2010).

The installation of a democratically elected government in 1994 ended SA's socio-economic and political isolation. The relaxation of strict apartheid border patrols (sea, air and land) and increased participation in global economics further enhanced drug trafficking and abuse (Nel, 2003; Peltzer *et al*., 2010). This led to augmented levels of violent and organised crime, Shaw & Shearing (1998: 5) stating that:

> From 1990 to 1996, most categories of crime have increased dramatically. Official statistics indicate that, during this period, serious assaults increased 86 percent, rape by 148 per cent, burglary by 48 per cent and theft of motor vehicles by 42 per cent.

Continuing, the authors suggest that, since 1994, the conviction rate for SAPS has consistently declined across all sorts of crime, Leggett (2003: 11) stating that, between 1997 and 1998, "only six out of every 100 violent crimes recorded by the South African Police Service result in a conviction".

In an attempt to curb drug trafficking and abuse and violent and organised crime, SAPS concentrated on tracking and disabling wholesale drug distributors and trafficking syndicates. As stated by Peltzer *et al*. (2010: 5), "Most drug enforcement initiatives in the South African context focus on tackling drug trafficking syndicates and conducting major drug busts and [successful] prosecutions".

For example, in July 2019, SAPS seized a large number of drugs and manufacturing equipment valued at nearly R250 million at an underground drug lab in rural Harding, KwaZulu-Natal (Chothia, 2019). In January 2020, SAPS discovered and seized cocaine estimated at R720m in a ship docked in Port Elizabeth's Ngqura Port, one of SA's busiest ports (Chothia, 2019).

### 5.7.3 AAS Administration Dissatisfactory but Inconsequential

How does the approach taken by the SAPS towards drug production and distribution impact AAS? The short answer is that the commitment of SAPS resources to combatting the drug trade has little benefit for the regulation of AAS. Drug raids seldom target or net the producers

and traders of AAS. As already explained, this is partly accounted for by the existence of a grey area of uncertainty about what is legal and illegal. In this approach, making, dealing in and taking steroids become categorised as a petty crime and is treated as such (Lue-Dugmore & Karth 2005). Few resources are devoted to policing steroids.

According to Peltzer *et al*. (2010: 5), "Very little police time is dedicated to curbing [petty] drug exchanges between sellers and buyers of [AAS] in public places". Continuing, the authors (2010: 5) report that, "police patrols … hardly give any attention to [petty] … transactions between [AAS] dealers and buyers … when the police do give attention, most street [AAS] dealers and buyers almost always manage to evade arrest".

As a result of this, the nationwide underground AAS black market has expanded and more AAS cases are being reported. While there are grey areas, for clarity we need to acknowledge that there are also areas of clarity. Buying AAS without a medical prescription for medical conditions is illegal. Similarly, making, distributing, selling and/or using AAS is illegal. By far the greatest area of AAS activity – usage and sale – actually falls into a grey area where users and sellers are not sure whether what they are doing is legal or illegal**.**

Even so, few arrests are made. Only a minority of AAS cases are prosecuted, few cases make it to court and even fewer result in conviction, Leggett (2003: 11) commenting on the drug trade more generally and where certain traded and used drugs are clearly illegal (for example, tik) states:

> Three quarters of [drug] crimes reported did not make it to court, and of those that did, nearly as many were withdrawn by the prosecution as went to trial. Of those that did go to trial, nearly as many defendants were acquitted as convicted.

This is due to what Leggett (2003) refers to as the 'sieve effect': weak cases are filtered out at various stages of the investigation and prosecution – judicial opinion on the seriousness of crimes dictates whether cases are to be prosecuted (Leggett, 2001).

To focus on the successful prosecution of major drug trafficking syndicates and wholesale distributors, the CJS does not generally prosecute petty crime cases, AAS cases included. For example, in 2015, two teenage boys were arrested at Jansen High School in Boksburg, on

Johannesburg's East Rand (Sports 24, 2015). While charged for AAS possession, they were not criminally prosecuted. Instead, their case was handled by their school governing body.

Also, SAPS and CJS can dissociate themselves from certain cases, primarily sports cases. This is due to SAIDS' monopolistic jurisdiction in the prosecution of sports cases and the imposing of sanctions on sports law offenders. Some examples of how sports law is used in AAS cases include: in 2010, while still a U-19 player, former Springbok flyhalf Johan Goosen served a three-month ban. In 2020, an independent tribunal banned former Springbok hooker Mahlatse 'Chiliboy' Ralepelle from world rugby for eight years. The banning was a result of a failed drug test in 2019. This was his third failed drug test in 10 years.

## 5.8 Conclusion

In my survey respondents gave widely differing views about the legal status of AAS and its regulation. This itself indicates a lack of clarity because gym users should be amongst the best informed about the status of steroids.

The lack of clarity regarding the status, use and sale of AAS is not good for South Africa's legal system. The absence of a clear definition of AAS means that this class of drug is covered by a grey cloud of ambiguity and complexity that creates uncertainty. The way that AAS are treated in terms of the law depends on the settings when and reasons why they were used. This has resulted in their *quasi-legal* definition. In turn, this results in possible offences falling between the stools of different laws and enforcement agencies.

The plethora of AAS laws has generated a disorganized multi-law AAS regulatory system. The system's malfunction has led to the expansion of the AAS black market. The law impacts processes of masculinity construction in that it provides parameters of legal activity and permits and prohibits certain displays of masculinity. Insofar as the law allows by its lack of clarity the use of AAS, it thus is a factor that permits hyper forms of masculinity that focus on powerful bodies. In this sense, it can be viewed as supporting hegemonic masculinity in South Africa.

# Chapter 6. The Profile and Attitudes of Gym Users

## 6.1 Introduction

This chapter provides a profile of gym-users in Cape Town and East London. The findings are drawn from a survey conducted among 150 gym-users in these cities. The intention of the survey was to complement the interviews and ethnographic observations discussed elsewhere in this thesis to give a 'bigger picture' view of gym-users. The methodology chapter includes a section on this research instrument. In this chapter, I present and analyse the responses received. The chapter is divided as follows:

- Demographic description of the sample (by race, age, earnings, education).
- Participants' general perceptions and understandings of the gym.
- Views about the relationship of the gym to muscles and masculinity (mostly in the Likert scale material).

The chapter shows that the most prolific gym-goers were young, highly educated and un or underemployed. However, low-income levels did not significantly deter frequent gym usage because reasonably affordable gym costs permitted sustained gym usage. The survey also asked questions about steroids and supplements. This aspect of the survey will be discussed in the following chapter, 'Steroids in the gym – Use, Ignorance and Evasion'.

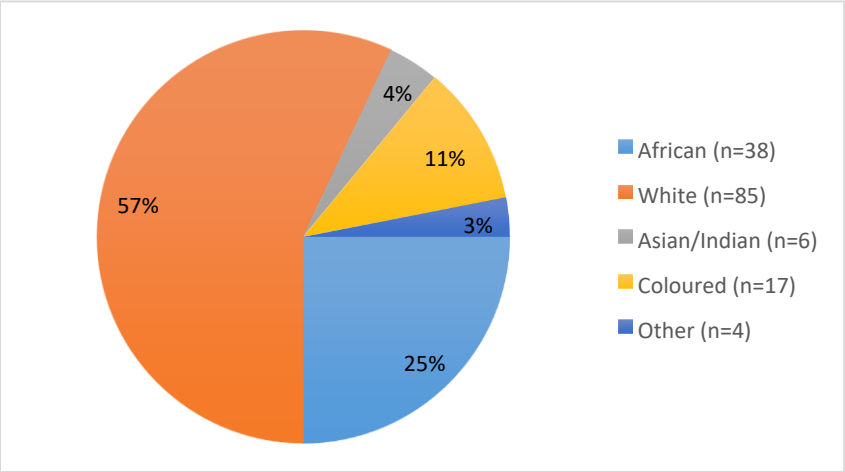
## 6.2 Demographics

As earlier mentioned (see 'Methodology' chapter), participant demographic characteristics were gathered to generate a comprehensive demographic description of the study's participant sample.

### 6.2.1 Race

More than half (57%, n=85) of respondents were White. The second-largest participant group was African, 25% (n=38). The three other race categories, Asian/Indian, Coloured and Other, collectively made up 18% (n=27) of the participant base (See Figure 6 below).

**Figure 6: Race.**



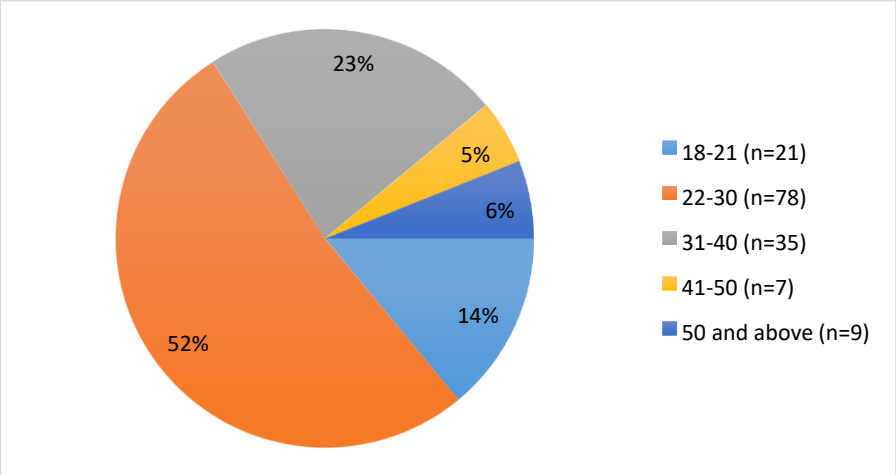

The study's participant sample was White and African dominated, 82% (n=123). These potentially skewed findings were the result of several factors. For example, tertiary institutions are generally located in predominantly White middle- and upper-class suburbs. The study's participant base was dominated by tertiary educated White and African individuals (see 'Education Level' below). To increase clientèle, gyms are positioned near tertiary institutions. This explains why the study's participant sample was dominated by these race groups.

The participant sample included a small number of Asian/Indian and Coloured gym-goers. This was particularly interesting considering CPT's population is predominantly Coloured. It is not easy to explain this trend but particular groups of men develop a gym culture and others do not. The interesting question would be why so few Coloured men used the gyms that I used? Amongst possible reasons were that they were using gyms but just not the ones that I was using. Or, they were doing other sports and found little attraction in gyms. These questions cannot be answered here but would be usefully investigated in another study.

### 6.2.2 Age

Just over half (52%, n=78) of the participants were between the ages of 22-30-years. 23% (n=35) of respondents ages ranged from 31-40-years-old. 14% (n=21) of participants fell into the 18-21-years age bracket. 6% (n=9) of respondents were above 50-years-old. The minimum number (5%, n=7) of participants fell into the 41-50-years age bracket (see figure 7 below).

**Figure 7: Age.**




The greater portion (75%, n=113) of participants were between the ages of 22 to 40-year-old. This corresponds with Rhoades's (2005) suggestion that most gym-goers' ages range between 18 to 44-years-old. This is an issue of masculinity: younger and middle-aged men invest more in their bodies, the success of which enhances their masculinity which may result in greater sexual activity (Mullen & Whaley, 2010). Also, training provides males with feelings of power and control, thereby strengthening their masculine identities. Older men's masculinities are well developed and propped up by society's most valued entities – children, property, work and monetary savings. Consequently, sculpting pristine bodies is no longer an issue.

**Table 4: Age Across Races.**

| Age | 18-21 | 22-30 | 31-40 | 41-50 | 50 and above |
|---|---|---|---|---|---|
| African | 3% (n=5) | 13% (n=20) | 9% (n=13) | 0% (n=0) | 0% (n=0) |
| White | 8% (n= 12) | 30% (n=45) | 12% (n=18) | 3% (n=4) | 4% (n=6) |
| Asian/Indian | 3% (n=4) | 1% (n=1) | 0% (n=0) | 0% (n=0) | 1% (n=1) |
| Coloured | 1% (n=2) | 5% (n=8) | 2% (n=3) | 2% (n=3) | 1% (n=1) |
| Other | 0% (n=0) | 1% (n=2) | 1% (n=1) | 0% (n=0) | 1% (n=1) |
| **Total** | **15% (n=23)** | **50% (n=76)[7]** | **24% (n=35)** | **5% (n=7)** | **6% (n=9)[8]** |

Interestingly, there were no African participants over the age of 40 (see Table 4 above). At a glance, this might indicate that Africans opt not to train after 40. However, a more likely

[7] Percentage modified to represent number of participants.
[8] Percentage modified to represent the number of participants.

explanation is that African men did not have access to gyms when they were young, which would have been in the apartheid period though this also may reflect the racially skewed availability of facilities. It may also reflect different measures of masculinity where the cultural ideal for some black men is not to be fit and strong but rather to be dignified, head-of-the household and somebody to be respected (Morrell, 1998).

Racial segregation under colonialism and apartheid resulted in Blacks[9] having limited access to quality sports facilities, mostly located in White areas (Odendaal, 1995; Chappell, 2005; Bank & Qebeyi, 2017). Consequently, Black training centres were overcrowded and under resourced in terms of sports facilities. This is illustrated in East London where in Duncan Village Rubusana Park was the "only large outdoor sports and meeting place" (Bank & Qebeyi, 2017: 122).

The apartheid era deprived the entire nation's Black populace of basic sports infrastructure and general sports amenities, subsequently undermining the development of sporting potential amongst Black sports people (Chappell, 2005; Labuschagne, 2016).

### 6.2.3 Education Level

The largest bracket (74%, n=111) of respondents claimed to be enrolled in and/or having graduated from university. In second place, 9% (n=15) of participants listed Technical College as their highest education level. 8% (n=11) and 7% (n=10) of respondents respectively reported that their education levels fell into the High School and Other categories. A minuscule number of participants (2%, n=3) education peaked at the Trading/Vocational Trading level (see table 5 below).

[9] In this context, 'Blacks' refers to all people of colour, (Africans, Asian/Indian and Coloured). In the Apartheid era the 'Other' racial category did not exist.

**Table 5: Education Level.**

| Education Level | High School | Trading/Vocational Training | Technical College | University | Other |
|---|---|---|---|---|---|
| African | 1% (n=2) | 1% (n=2) | 2% (n=3) | 19% (n=28) | 2% (n=3) |
| White | 5% (n=8) | 1% (n=2) | 5% (n=7) | 41% (n=62) | 5% (n=7) |
| Asian/Indian | 0% (n=0) | 0% (n=0) | 0% (n=0) | 4% (n=6) | 0% (n=0) |
| Coloured | 1% (n=1) | 0% (n=0) | 1% (n=2) | 9% (n=14) | 0% (n=0) |
| Other | 1% (n=1) | 0% (n=0) | 1% (n=2) | 1% (n=1) | 0% (n=0) |
| **Total** | **8% (n=11)** | **2% (n=3)** | **9% (n=15)** | **74% (n=111)** | **7% (n=10)** |

Most (74%, n=111) participants reported being university educated. 41% (n69) and 19% (n=28) of these respondents were respectively white and African.

Southall (2004) notes this as a reflection of apartheid's bias towards the enhancement and maintenance of White socio-economic power. Particularly interesting, all Asian/Indian (4%, n=6) participants claimed to be university educated. This is explained by these races having studied in historically better primary and high Asian/Indian schools, Wangenge-Ouma (2012: 840) stating:

> white and [Asian/Indian] schools still outperform [African] and coloured schools in examinations, a reflection of the country's unfortunate past. Although historically [African] and previously disadvantaged schools make up 80 % of the country's secondary schools, these schools produce only 20 % of students who qualify for university.

Southall (2004) suggests that all non-White races suffered from segregation and oppression, but they were differently oppressed. This is illustrated by:

> the development of an Indian merchant class in Natal, which was strides ahead of an African trading petty-bourgeoisie, which was subject to much more crippling restrictions (Southall, 2004: 552).

Thus, more White and Asian/Indian households have the required resources to fund access to tertiary education.

According to Mullen & Whaley (2010: 31), "education and socioeconomic levels … [have] a strong positive correlation with exercise". This is due to an appreciation of the consequential

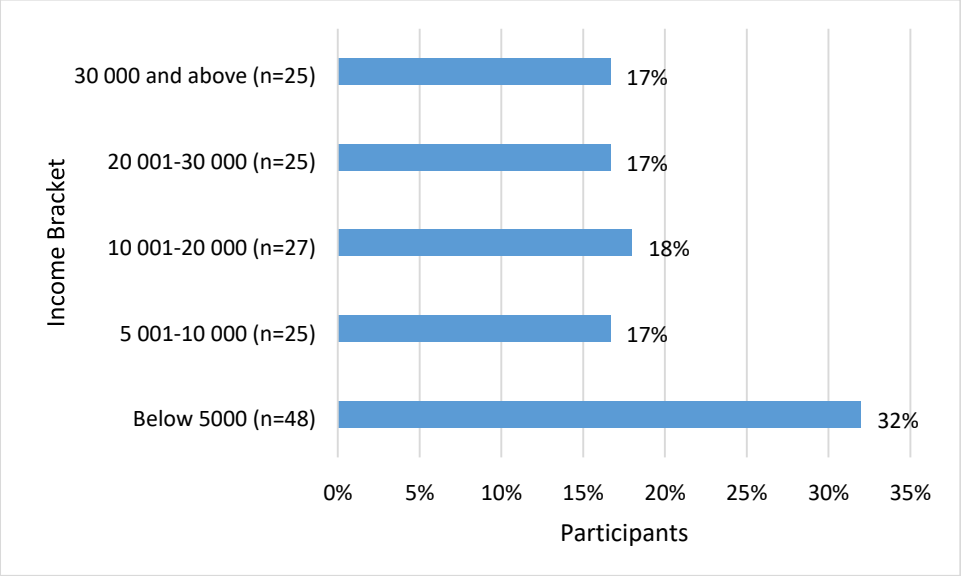
value of bodily investment, Crossley (2006: 24) stating, "[educated] middle-class [persons], 'invest' in the body in expectation of profits in both employment and relationship markets".

Lastly, gym locations influence the clientèle attracted. Most of the gyms I visited were near tertiary institutions. This explains why my findings are heavily skewed towards middle class, tertiary-educated individuals.

### 6.2.4 Income Level

One third of respondents (32%, n=48) earned less than R5000. 18% (n=27) of participants earned between R10 001-R20000. All other income level categories – R5000-R10000, R20001R30000 and above R30000 – each included 17% (n=25) of participants (see figure 8 below).

**Figure 8: Monthly Income.**




74% (n=111) of the study's sample have and/or are currently pursuing higher education. Visagie & Posel (2013) suggest that most, but not all, students are not economically active. This explains why almost half (49%, n=74) of the study's sample earns less than R10 000 per month.

Although I did not ask about the origins of income, respondents in this category were likely receiving loans or being supported by family members. Many students also seek part-time or casual employment to supplement loans and family-support.

The cost(s) of training requires a flexible income. Thus, it seemed odd that the largest group of respondents (32%, n=48) mostly made up of university students, could train on a less than R5000 monthly income. However, reasonable gym fees, low travelling costs coupled with discerning food and supplements purchases reduced stress on participant's finances (see 'The Costs of Training' below for an in-depth discussion).

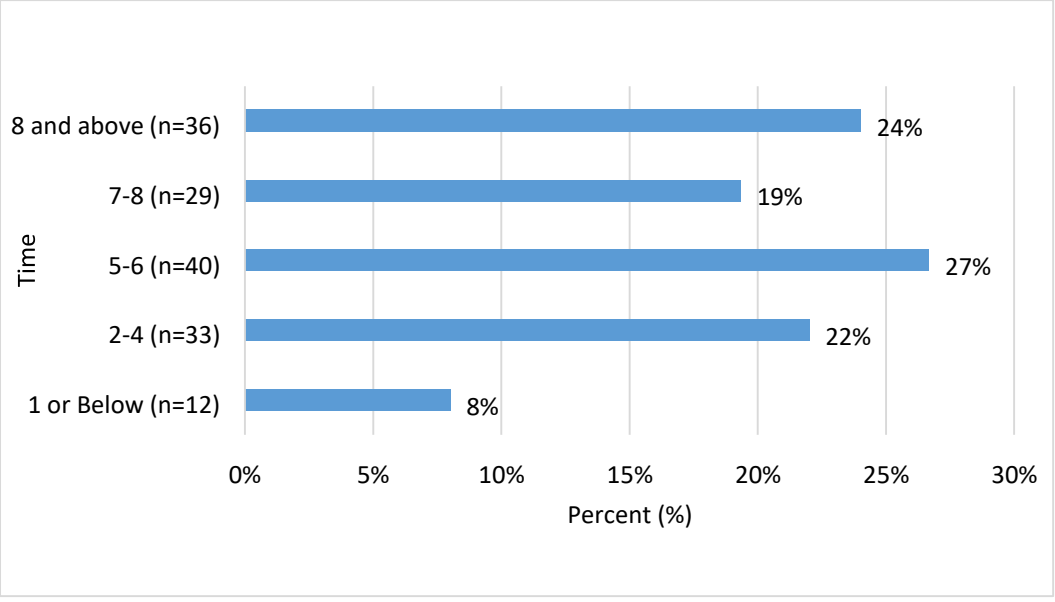
## 6.3 Time Investments

In the following section, I asked four questions focused on the amount of time respondents invested in their bodies. For example, the amount of years training (gym attendance) and the frequency of weekly gym visits. I hoped to get an indication of how much effort participants made in bettering their bodies. Bodily time investment also indicated the intensity of the relationship between the bodies and livelihood.

### 6.3.1 Years Spent Training

The largest share (27%, n=40) of respondents have trained for 5-6-years. Following, 24 % (n=36) of participants have worked out for 8 or above years. The 2-4-year training bracket included 22% (n=33) of respondents. 19% (n=29) of participants' training investment(s) fell into the 7-8 years category. A small number 8% (n=12), of respondents have exercised for less than a year (see figure 9 below).

**Figure 9: Years Spent Training.**



Most (70%, n=105) participants had trained for a minimum of 5 years. As earlier mentioned, (see 'Introductory' chapter), the largest portion of fitness consumers is the higher educated, middle class. These individuals are most likely to attain 'white-collar' work which benefits from the presentation of aesthetically pleasing and healthy individuals. Increased investment in bodily betterment and maintenance is essential (Smith Maguire, 2001, 2002).

As earlier outlined (see 'Introduction' chapter), sports are an integral aspect of SA culture. Competitiveness, especially in rugby, has amplified (Ryska, 2003; Gilbertson, 2016). Continually increasing pressures on adolescent athletes to perform at abnormally high levels have motivated many to join gyms. According to van Aswegen (2013: 37), a group of high school rugby players reported to be able to:

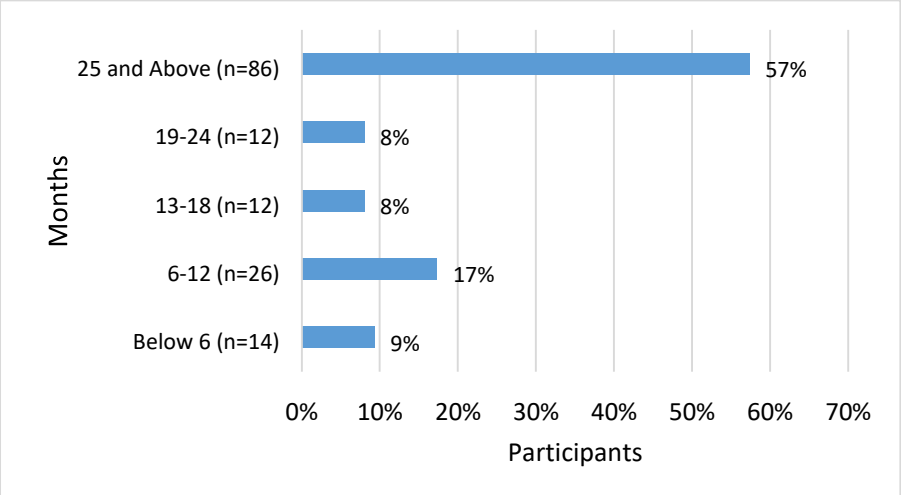
> bench-press more than 100kg and 22% of them said they could bicep-curl more than 50kg. [Their] great strength [is] almost equal to that of a matured adult male. They also reported that muscle bulk was one of the premium ways to survive the heavy demands of playing contact rugby.

This may explain why 24% (n=36) of participants have trained for 8 and/or more years; an increased number of adolescent athletes begin gyming from a young age. 30% (n=55) of respondents have trained for less than 5 years.

### 6.3.2 Current Gym Membership.

The bulk (57%, n= 86) of participants had been gym members for longer than 24 months. 17% (N=26) of respondents' memberships ranged from 6 to 12 months. 8% (n=12) of participants fell into the 13-18 months category with 9% (n=14) falling into the less than six months membership bracket. 8% (n=12) of respondents' gym membership ranged between 19 to 24 months (see Figure 10 below).

**Figure 10: Gym Current Membership.**



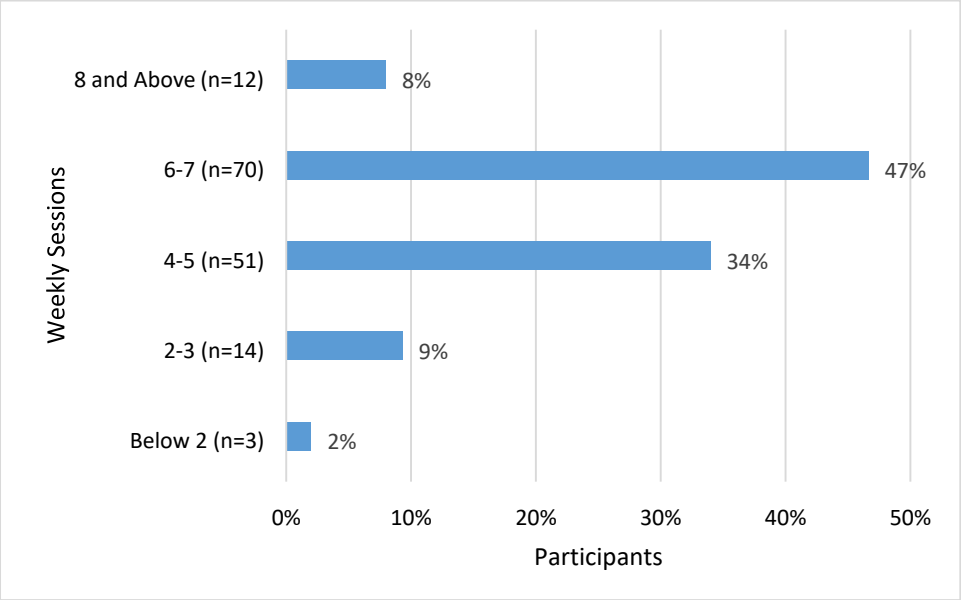

57% (n=85) of participants had been gym members for more than 24 months. Enlarged and sustained gym subscription indicates more individuals, particularly members of the middle class, are investing in their bodies. According to Crossley (2006: 23), this is because the fitness lifestyle "constituting a significant form of [modern middle class] association and social membership".

Andreasson & Johansson (2014, 2016) suggest the gym to be a socio-cultural space that provides members with a brief escape from daily pressures by concentrating only on the construction of their version of an ideal body. To enjoy gym benefits, membership levels have increased and current members remain committed to the gym.

### 6.3.3 Weekly Gym Sessions

Nearly half (47%, n=70) of the respondents made 6 to 7 weekly visits to the gym. In second place, 34% (n=51) of participants used the gym 4-5 times a week. Only 8% (n=12) went to the gym 8 and/or times a week. 9% (n=14) of respondents reported attending the gym 2-3 times a week with the barest number of participants (2%, n=3) making less than 2 weekly visits (see Figure 11 below).

**Figure 11: Weekly Training Sessions.**




55% (n=82) of the study's participant sample made more than 5 weekly trips to the gym. This was a significant find considering time restraints: students face continuous, difficult, and time-consuming academic projects and exams. Professionally employed members are required to complete tasks in a competent and timely manner. However, gyms are generally located close to tertiary institutions and work offices.

This provides gym-goers with quick access and greater training opportunities. This may explain why more than half of the study's participants were able to make more than 5 weekly gym visits.

In the 'Introduction' chapter, I discussed how contemporary society perceives aesthetically appealing and strong bodies as symbols of power and authority. A good body, the construction of which requires intense pressure under time, shows that you are a directed, dedicated and hard worker. These attributes improve one's economic and relationship opportunities.

45% (n=68) of respondents went to gym 5 and/or fewer times a week. This may be the result of participants' involvement in other physical activities. For example, road running and/or

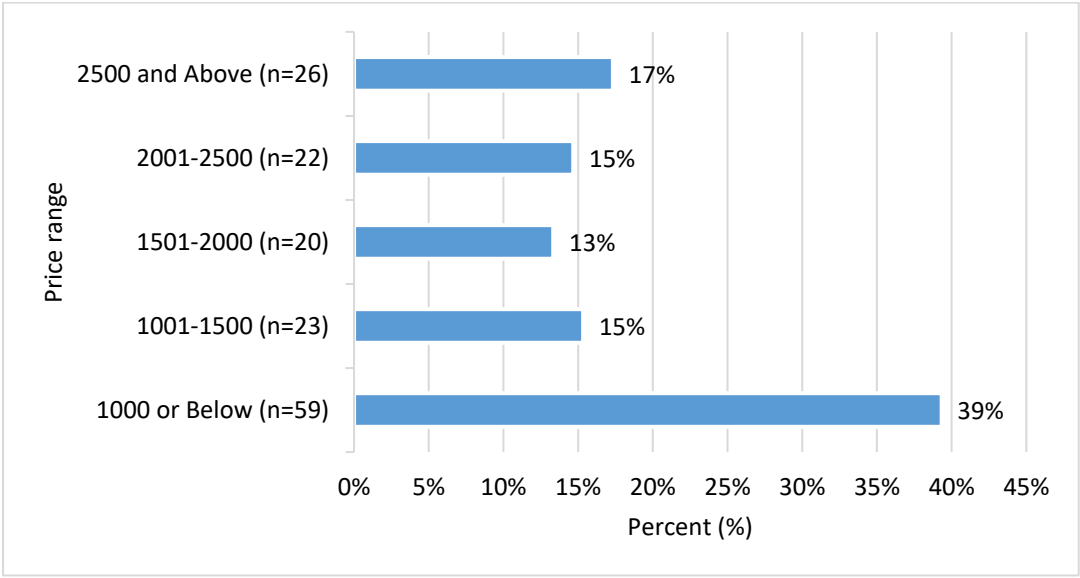
touch rugby. Ultimately, participants select how many visits work for them – there is no global training order.

Weekly gym visits were determined by respondents' current fitness levels, training schedules, and goals and motives.

### 6.3.4 Average Length of Training Sessions

Most (57%, n=85) respondents trained anywhere between 70-95 minutes per session. Following, 29% (n=43) of participant's gym sessions fell into the 40 to the 65-minute bracket. 9% (n=14) of respondents spent 100-125 minutes exercising while 4% (n=6) dedicated 130 and/or more minutes to training. A minuscule number (1%, n=2) of respondents' workout sessions lasted no more than 35 minutes (see Figure 12 below).

**Figure 12: Length of Training Sessions.**




In total, 70% (n=105) of respondents' training sessions exceeded 70 minutes. This may indicate prolonged gym sessions. Training contentment must, however, be taken into consideration: gym-goers train until satisfied, no matter how long. 30% (n=45) of participants reported reaching training satisfaction in less than 65 minutes. But, as earlier mentioned (see 'Weekly Gym Sessions'), the number of factors affecting training makes it impossible to provide a world-wide training time – guidelines, not rules, determine the length of training sessions.

## 6.4 The Cost of Training

The cost of gym varies from quite low rates (only monthly subscriptions) to excessive rates (for very serious gym-goers). For example, Zone Fitness, a national gym franchise, members pay a R299 monthly full access membership fee (de Villers, 2019). Members are allowed to use all gym facilities (spinning bikes, treadmills and weights (free weights and machines)).

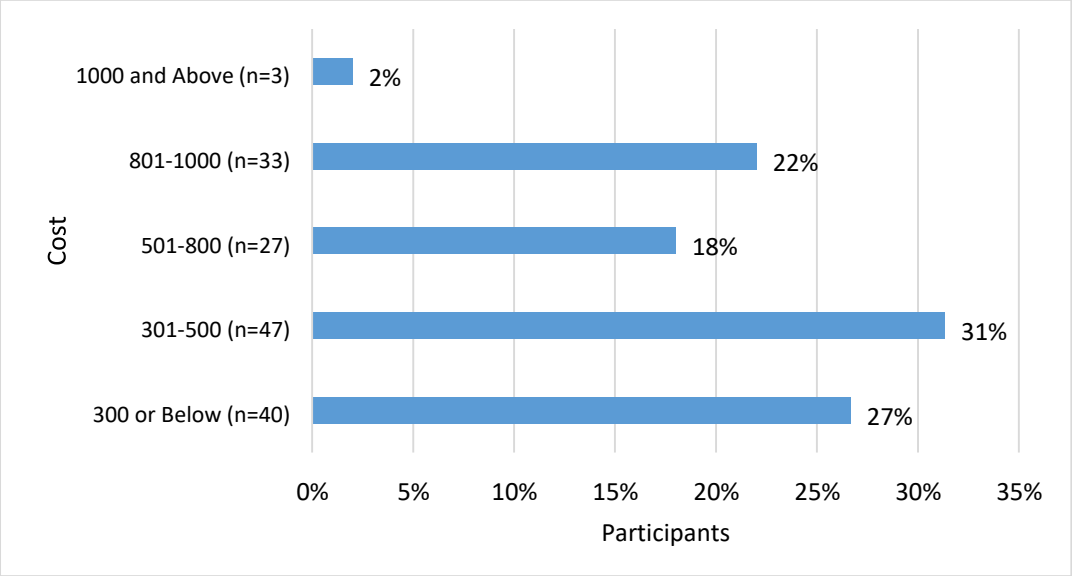
Virgin Active is the largest gym franchise in SA. Full access membership contracts fees range from R300-R2490 per month (Virgin Active, 2020). A small but visible cohort (22%, n=33) of participants' membership subscriptions almost and/or did reach R1000. These figures are a consequence of training being an intense priority and experiencing the elevated wellness sensation upgraded gyms provide. For example, swimming pools, technologically advanced equipment, calisthenics (bodyweight exercises) classes, saunas and steam rooms (Virgin Active, 2020).

Some gym-goers are not interested in acquiring large sums of muscle, do not use training substances (SS and/or AAS), or hire personal trainers. Contrarily, gym is highly prioritised by some trainees. They are willing to invest more financial capital in their bodies to construct their versions of the bodily ideal. However, all gym-goers are subject to certain expenses, primarily membership fees and travel costs. As such, I was interested to see how much financial capital respondents would spend on gym usage as it would indicate different styles and intensities of use. In the following sub-section, I analyse responses to five questions.

### 6.4.1 Gym Fees

The largest group (31%, n=47) of respondents paid gym fees ranging from R301-R500. 27% (n=40) of participants' gym fees were less than R300. 22% (n=33) of participants paid monthly gym fees ranging between R801 to R1000. In third place, 18% (n=27) of respondents spent between R501-R800 on gym fees. Only 2% (n=3) of participants' monthly gym fees exceeded R1000 (see figure 13 below).

**Figure 13: Gym Fees.**



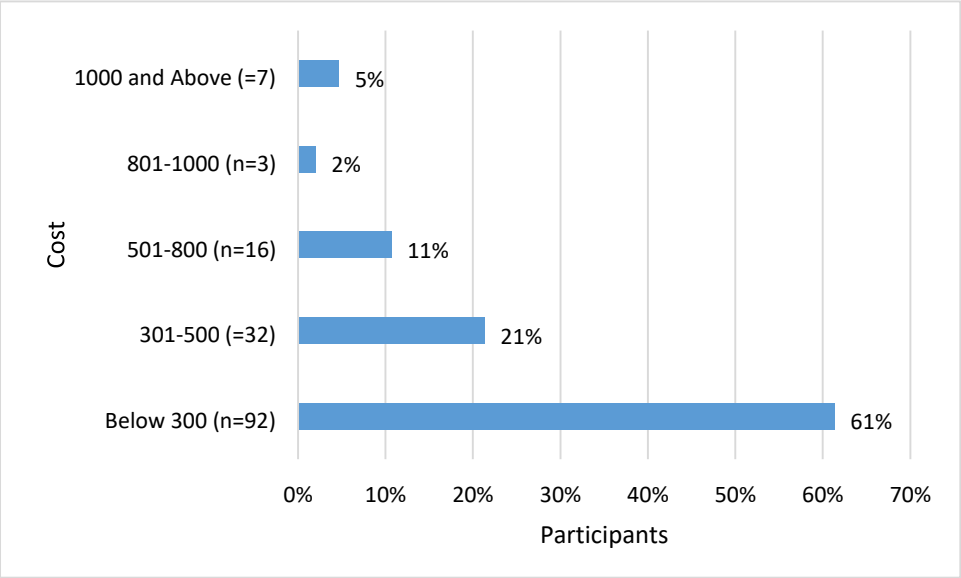

Approximately 58% (n=87) of respondents' gym fees did not exceed R500. This indicates that gym fees are reasonably affordable for young people, specifically students without great financial resources. Consequently, besides stringent monthly income, participants can manage gym membership fees due to their cost-effective nature. Participants opting for higher-priced gym contracts did so to enjoy a wider range of gym amenities.

### 6.4.2 Travelling Costs

Largely, 61% (n=92) of participants' gym travelling costs were less than R300. Following, 21% (n=32) of respondents travelling costs spent anything between R301-R500 to visit the gym. In third place, 11% (n=16) of participants' travelling costs ranged between R501 to R800. 5% (n=7) respondents paid more than R1000 on travelling costs. A minuscule number (2%, n=3) of respondents fell into the R801-R1000 travelling bracket (see figure 14 below).

The greatest number (82%, n=124) of participants, most of whom are students and young workmen, incur gym travelling costs of less than R500. Earlier (see 'Weekly gym Visits'), I reported that gyms are usually situated near tertiary institutions and offices. Consequently, gym-goers are not required to travel large distances. For example, UCT's Jammie bus shuttle service is free and available to all UCT students and staff. Numerous Jammie bus stops are near gyms and shopping complexes. Trains are also a cheap and practical travelling option. A monthly, unlimited travelling ticket costs R134 (Metrorail, 2020).

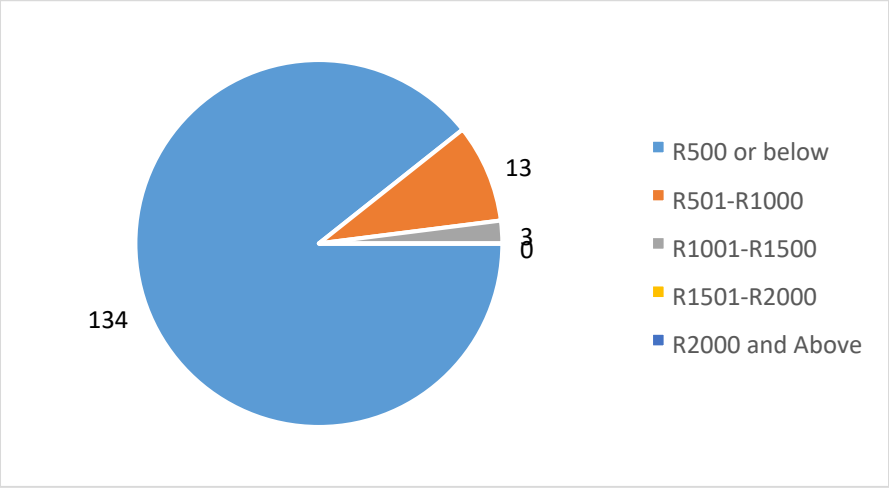
**Figure 14: Travelling Costs.**




### 6.4.3 Equipment Costs

Overwhelmingly, 89% (n=134) of respondents spent less than R500 on equipment. 9% (n=13) of participants' equipment costs fell into the R501-R1000 equipment bracket. Only 2% (n=3) of respondents spent more than R1000-R1500 on equipment. No participants made purchases exceeding R1500 (see figure 15 below).

**Figure 15: Equipment Costs.**



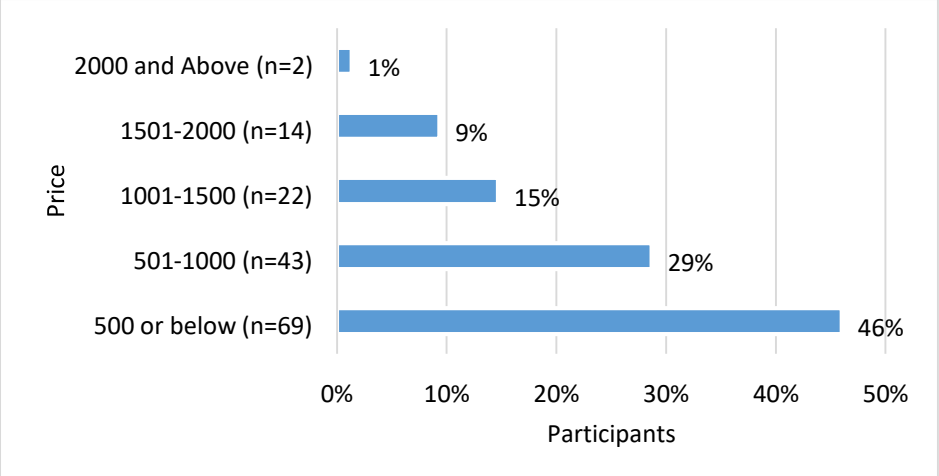

Regular gym participation does not require investment in expensive gym machines because the gyms themselves provide this equipment. Low equipment purchases were also the result of SA's moderate pricing of basic gym equipment.

For example, Headstart Fitness Gym Gloves for R99.90 at Sportsmans Warehouse (Sportsmans Warehouse, 2019) and Fitness Freakz Lifting Straps & Chalk Refill Combo for R235 at takealot.com (takealot.com, 2019).

### 6.4.4 Sports Supplements (SS)

The biggest faction of respondents (46%, n=69) spent less than R500 or less on (SS). In second place, 29% (n=43) of participants bought between R501-R1000 worth of SS per month. Approximately 15% (n=22) of respondents' recurrent SS bills ranged between R1001-R1500. 9% (n=14) of participants paid anything between R1501-R2000 on SS per month. Only 1% (n=2) of participants respectively bought SS to the value of R1501-R2000 or more (see figure 16 below).

**Figure 16: Sports Supplements Monthly Costs.**




The largest quota of participants' (75%, n=112) monthly SS bills peaked at R1000, showing conservative SS purchases. Prolonged SS use is financially challenging, especially for un and/or underemployed gym-goers. As such, 46% (n=96) of participants could not continually sacrifice more than R500 on SS. For example, 1kg of Nutritech's, SA's most popular domestic SS brand, *Whey Protein Isolate* costs R429 (takealot.com, 2019).

Judging from my personal experiences, if used sparingly, 1.5kg of protein should, but rarely does, last two weeks. The amount potentially spent on a month's supply of protein (R429 X 2=R858) alone illustrates why most participants' SS expenses top at R1000.

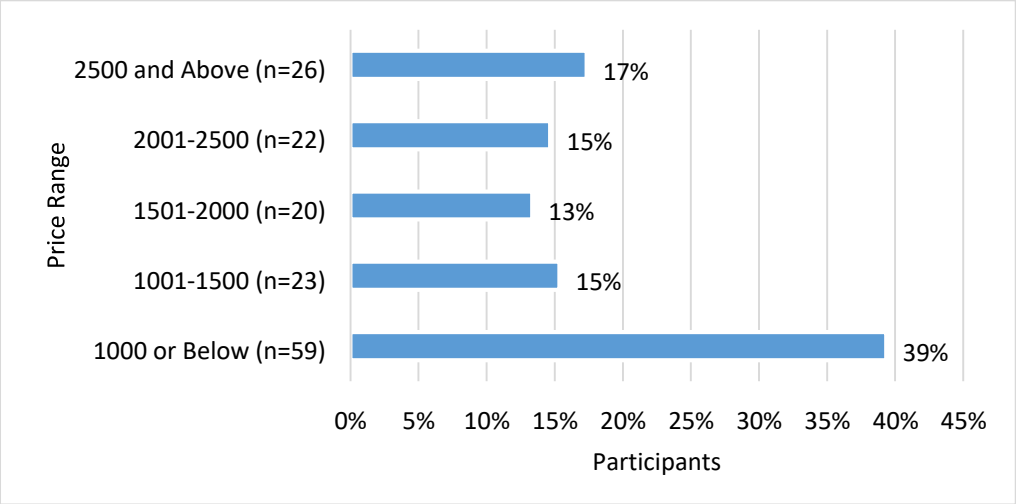
Oppositely, 25% (n=38) of respondents' monthly SS purchases exceeded more than R1000. This was surprising considering that 32% (n=48) of participants earned less than R5000 per month. Increased SS purchases may be explained by more young males' willingness to use SS which may accelerate achieving their fitness and/bodily goals (Hoffman *et al*., 2008). Reasonable gym fees and generally low travel costs may also enable augmented SS purchases.

Lastly, it must be kept in mind that many gym-goers are not interested in constructing society's perfect body; lean, toned, slightly muscular and athletically capable. Rather, their focuses are directed towards the development of their own (possibly less muscular) versions of the ideal body thus eliminating SS use.

### 6.4.5 Gym/fitness Foodstuffs

The greater majority (39%, n=59) of participants made food purchases for R1000 and/or less per month. 15% (n=22) of participants fell into the R2001 to R2500 food bracket. 17% (n=26) of respondents' food costs surmounted R2500. Every month, 13% (n=20) of participants spent anything between R1500-2000 on food. Monthly food bills ranging between R1001-1500 accounted for 15% (n=23) of participants (see figure 17 below).

**Figure 17: Gym/Fitness Food Monthly Costs**.




Most (69%, n=102) respondents spent no more than R2000 on fitness foods. For example, salmon, blueberries, whole wheat bread, and olive oil (Temple, *et al*., 2011). According to Temple *et al*., (2011), healthier energy foods typically cost between 30% - 110% more than a typical South African diet. Most young people and students are compelled to make smaller

purchases. Also, not all gym-goers prioritise training to the extent that fitness foods are a necessity. Although beneficial, they are not a fundamental aspect of training.

## 6.5 General Perceptions and Understandings

The second section of the survey comprises 9 questions focused on participants' perceptions and interpretations of AAS and doping in sports, AAS law and masculinity issues. These questions asked participants to respond to a series of statements as a way of indicating their attitudes towards AAS. Amongst the statements used in the survey were ones that tested their knowledge of the (il)legal status of AAS in SA and feelings regarding doping in sports (see Appendix 1).

81% (n=122) of participants said SS and AAS use was increasing. This view may reflect a perception that athletes, specifically rugby players, have enlarged body size, strength and power and improved capabilities. Participants often referred to the size of high school 1st team rugby players, claiming that the boys are much bigger than when they were in school. I return to this theme in the following Chapter.

The greater portion (65%, n=98) of respondents condemned doping in sports, claiming that doping is unethical. Participants said doping agents provide unfair advantage(s) which undermine traditional sports principles of honesty and fairness. Some participants went further, defining sports dopers as liars of little character. Lastly, respondents were significantly worried about the ominous shadow doping would cast on SA's globally esteemed sports sphere.

Most (79%, n=119) respondents opposed the notion that socially distributed SS and AAS information is accurate and correct. This stems from a lack of information conformity; information being shared in a 'broken telephone' manner. For example, differences in information provided by fellow gym-goers, media and pharmacists. This is extremely troublesome due to the array of health complications AAS users, especially inexperienced and under informed users, might incur.

The majority (69%, n=104) of participants claimed that SS and AAS users were ill and/or untutored regarding substance administration. This was due to the lack of cohesive information and not personally researching substances and how to correctly use them (see 'Steroids and Pharmacy' chapter for full discussion).

61% (n=92) of respondents perceived current AAS law as appropriate. This perception is perplexing considering participants limited knowledge and understanding of dysfunctional laws governing drugs they know little about. The primary reason for this opinion could be suggested as being the result of participants immediately associating AAS law with sports: sportsmen, mainly rugby players, found guilty of doping are banned from the given sport for limited time period, hence participants' approval of AAS law. For example, Chiliboy Ralepelle's first doping scandal resulted in a two-year ban.

However, respondents are unaware that sports law and criminal/and or state legislation are detached entities. They mistakenly assume that AAS law is effectively enforced in civil society as it is in the sports sphere. This is, however, not the case because AAS crime is categorised as a petty crime, thus little resources are invested in policing the drugs.

The 39% (n=59) of respondents who disagreed with current AAS legislation claimed their bodies are autonomous entities, and that people should therefore be allowed to consume anything they please. As above, this opinion is odd considering participants slender understanding of AAS legislature.

A possible answer for the above opinion could be that these respondents are not concerned with the content of AAS law. Rather, they have an issue with all law(s) that prohibit them from consuming that which they please.

The study's entire participant sample (100%, n=150) was split, 50/50, regarding whether they believed the use of AAS in the recreational gym sphere was legitimate and justified or whether it is not.

Participants who endorsed AAS use as legitimate and justified argued that AAS were necessary tools required to reach their bodily goals which led to feelings of self-fulfilment. Respondents also indicated society does not understand AAS; AAS are mistakenly associated with narcotics such as cocaine and/or tik. Lastly, participants said gyming is not a sport. As such, sports doctrine has no jurisdictional power in the recreational gym sphere.

Oppositely, respondents who objected to the claims that AAS use is legitimate and justified based their argument on three factors.

Firstly, the notion of AAS legitimacy was disparaged because AAS do not provide natural and thus 'real' training satisfaction and self-fulfilment. Respondents suggested AAS use illustrated a lack of masculinity and dedication required to 'authentically' develop the body.

Secondly, participants claimed that using AAS was illegitimate and unjustified because the substances are illegal. These respondents inferred that AAS have a negative impact on society. For example, the expansion of the illegal underground drug trade. Thirdly, AAS use was condemned as illegitimate and unjustified due to the negative side effects users may incur. For example, 'road rage' and cardiovascular issues (See 'Steroid and the Law in South Africa' chapter for full discussion).

The largest (69%, n=104) bracket of participants said the demand for aesthetically appealing bodies had increased. According to Bridges (2009: 89):

> individual tastes and aesthetic dispositions (worldviews) are uniquely shaped through interaction with socializing agents (class position, family, social interactions, etc.). These interactions work to reproduce socially situated interactional norms, roles and expectations, along with the status hierarchies and inequality in social life.

Participants believe that aesthetic and healthy bodies were required to make a good social impression and comfortably 'fit into' society.

## 6.6 Likert Scale

The third and final section of the questionnaire included a Likert scale comprising 25 statements. For example, 'I feel unfulfilled if I do not exercise' and 'I think about exercise more than I think about anything else'.

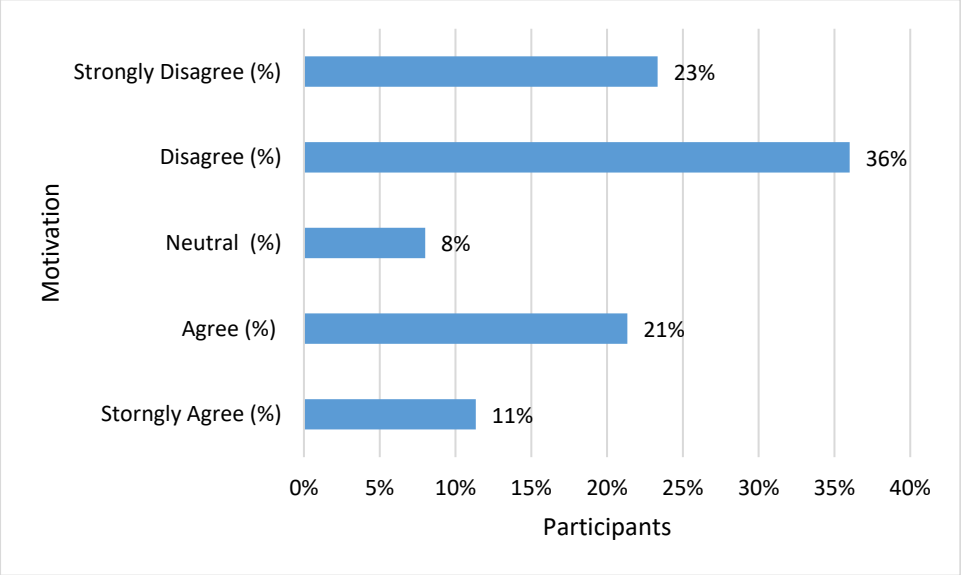
All of the measures use a five-point Likert scale varying from 1 = strongly disagree to 5 = strongly agree. Respondents could also be neutral = 3. The Likert scale invited participants to provide feedback on whether they agreed or disagreed with a range of statements related to an array of issues discussed in the following chapter, 'Steroids in the gym – Use, Ignorance and Evasion'. For example, gym use, masculinity, AAS and the body.

### 6.6.1 Fitness Lifestyle

The majority of the scale's statements revolved around AAS. A limited number of statements below discussed were dedicated to the fitness lifestyle to expand my understanding of the topic.

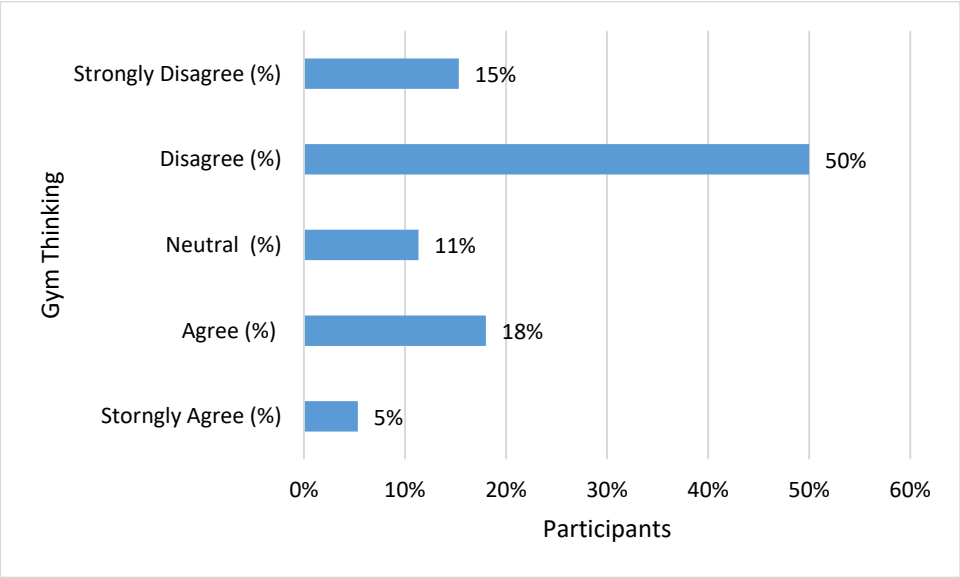
One of the statements sought to establish the importance of friends and family in influencing fitness lifestyle, especially if these people embraced a fitness lifestyle. The bulk (60%, n=90) of respondents denied that training was the result of social and family pressures; bodily improvement is a prioritised sovereign and autonomous task (see figure 18 below).

**Figure 18: Exercise is Friends and/or Family Motivated.**



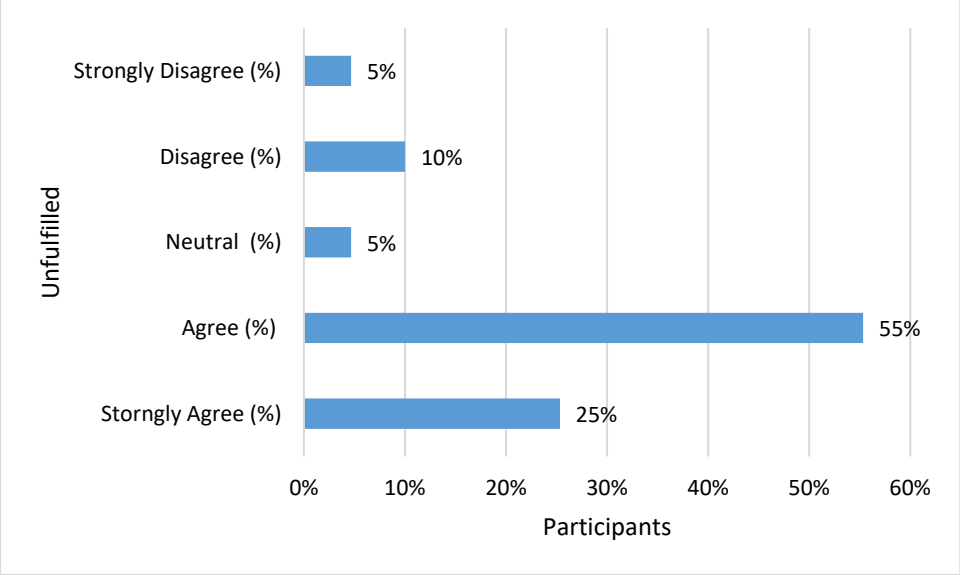

Regarding the amount of time spent thinking about gyming, most (65%, n=98) respondents reported that thoughts about gyming were not a top priority (see figure 19 below).

**Figure 19: Time Spent Thinking about Gyming.**



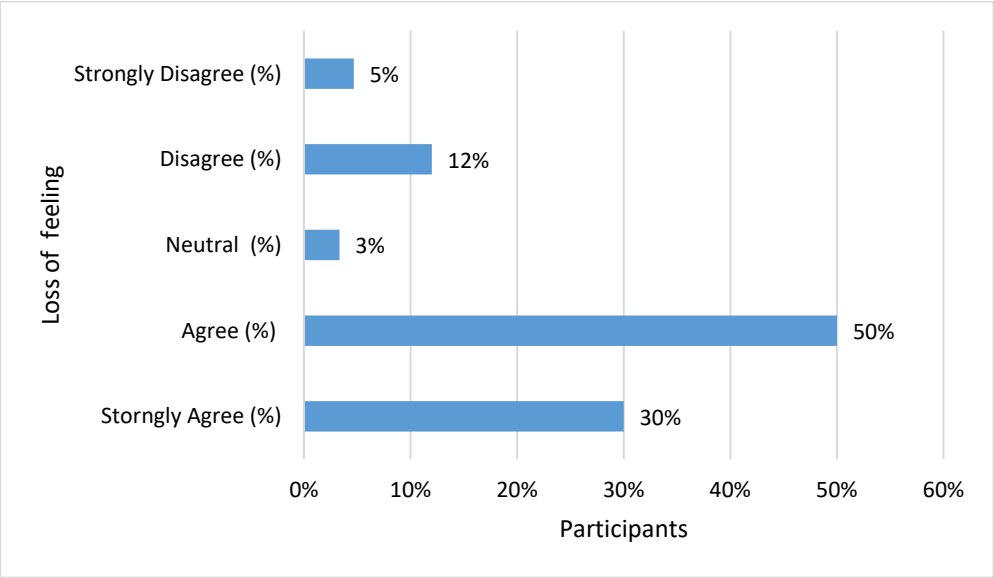

Respondents were asked if they would feel unfulfilled if they were to stop training. 81% (n=121) of participants said that they would (see figure 20 below).

**Figure 20: Unfulfilled if not Training.**



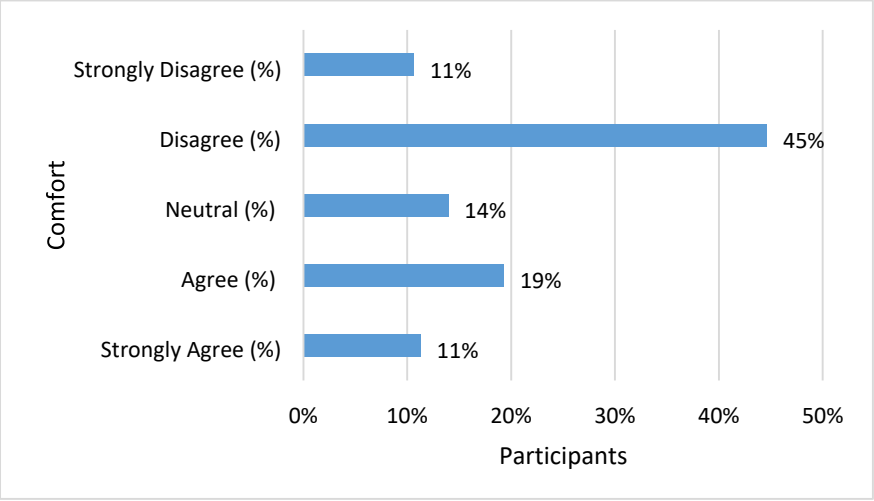

*Training is an integral element of participants' lives. If not training, their health levels would decrease. According to Monaghan (2001), besides pain and illness, health describes the representational and sensual pleasures that gym-goers derive from their vibrant physicality. gyming also provided participants with the pleasure of homosocial company and feelings of power. The lack of these entities may leave men (and women) feeling unfulfilled and frustrated. In response to the statement inquiring whether they would feel like they had lost a part of themselves if there were to stop exercising, 80% (n=120) of participants reported that they would. In the context of the study, 'lost parts' refers to identity forfeiture and decreased masculinity (See figure 21 below).*

**Figure 21: A Loss of Oneself.**




Respondents were also asked if they preferred spending more time in the gym than any other location(s). Just over half, 56% (n=84) said no (See figure 22 below).

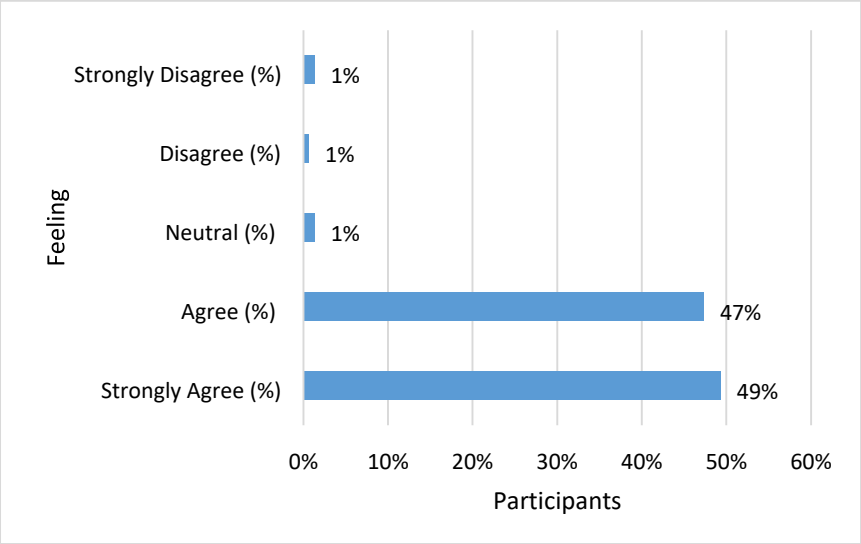
**Figure 22: More Comfortable in the Gym.**




Nevertheless, answers reflect that the gym is a location that enables a brief escape from real world stress and worries. It is a place of bonding and familiarity. After training sessions, participants return to their families and/or work.

Has contemporary society's demand for the display of aesthetically pleasing bodies increased? Virtually all respondents (97%, n=145) replied that it has notably increased (see figure 23 below).

**Figure 23: Increased Aesthetic Desire.**




As earlier mentioned (see 'Introduction' chapter), contemporary consumer culture is fixated with body health and appearance. The expansion of the middle class, the majority of individuals highly educated, has led to the expansion of the white collar work sphere (Smith Maguire, 2001, 2002; Crossley, 2006; Andreasson & Johansson, 2014, 2016).

White collar work requires that individuals appear as friendly, aesthetically pleasing and healthy. As such, individuals make larger investments in their bodies in expectation of profits in both employment and relationship markets (Smith Maguire, 2001, 2002, Crossley, 2006). Further, work success such as promotion and/ or winning prizes increases both social and masculine capital. This strengthens men's identities which subsequently augments their masculinities.

**Table 6: Fitness Lifestyle.**

| Column1 | Column2 | Column3 |
|---|---|---|
| | Yes | No |
| 1. Exercise is important to me because my friends and/or family members also exercise. | | 66% n=99) |
| 2. I think about exercise more than I think about anything else. | | 65% (n=98) |
| 3. I feel unfulfilled if I do not exercise. | 81% (n=121) | |
| 4. If I stopped exercising I would feel like I lost a part of myself. | 80% (n=120) | |
| 5. I am more comfortable in my gym/club than in any other location. | | 55% (n=83) |
| 6. The demand for a physically appealing body has increased. | 97% (n=145) | |

## 6.7 Conclusion

In this chapter we've revealed via a survey of 150 male gym-goers, for the first time, the choices that men make in the gym. This has included showing that there is a range of intensity ways amongst the men in the ways that they use the gym. Some train many hours a week, others less so. Some spend large amounts of money, others less. Many align their gym habits with their diet. Some take steroids. These patterns are raced and reflect important generational and class differences amongst gym goers. Young men, often students, for example, can't afford some of the more expensive options that gym-going invites. The data reveals that some men seem to be obsessed with strong, fit bodies, this is not the case for all although they are united by a conception of masculinity that validates fitness and bodily health. Amongst those that are heavy gym-users, there are some who use steroids to assuredly and speedily realise training objectives – to gain the benefits that AAS offer. For these men, the drugs are endorsed as legitimate and their use justified. In the next chapter we explore links between sport-participation, gym use and steroids to provide qualitative detail and to get a better sense of the factors that inform choices around gym-going and steroid use.

# Chapter 7. Steroids, Schools and Sport. Constructions of Masculinity and the Development of the Strong, Fit Body

## 7.1 Introduction

In this chapter, we use biographical interview material to trace the story of gyming, bodies and AAS use back to their school days and experiences of growing up. This journey takes us back into the school years with their fevered obsession with competitive sport. Together with the focus on school sport goes the attention on the competent, powerful, competitive male body.

Sport participation, especially in single sex boys boarding schools (SSBBS), and particularly during high school, is a preoccupation of pupils. Historically it has been a primary indicator of masculinity, Connell (2008: 140-141) stating that:

> sports that involve a certain level of physical confrontation and (legal) violence are seen as tests of manhood – football codes, boxing and ice hockey being the most visible ... These sports often become implicated in the definition of hegemonic masculinities in schools and the subordination of other masculinities.

Competition is fierce thus resulting in success being considered to be a symbol of personal achievement which ultimately enhances claims for successful masculinity and creates greater social capital (Gilbert & Gilbert, 1998; Messner, 2007). It is in the process of seeking a superior physique, and thus advantage over others, that boys allocate more of their leisure time to gyming. And, it is also in this process that the use of AAS becomes, at least for some, a temptation and maybe a habit (Martin & Govender, 2011, 2013).

This chapter is divided into three main sections: in the first section, I examine participants' recollections of their school years. I focus on why the increasing physical demands of sports promotes boys' interest in their bodies and motivates gyming. Continuing, I investigate why performance pressures, in some cases, result in AAS use (see Real Boys Play Sport below).

In the second section, I scrutinise respondents' perceptions regarding the legitimacy of AAS use, professionally and/or recreationally. This is followed by an exploration of the scope of participants' AAS knowledge, specifically their grasp of AAS administration law (see Males Must Be Strong – Real Men Don't Cheat below).

Finally, in the third section, I investigate how the gym, an integral part of respondents' lives, has influenced their thoughts on South African manhood (see Gym Masculinity – South African Manhood below).

To provide a contextualisation of the analysis to follow, several short participant biographies are presented below. To ensure anonymity, pseudonyms were ascribed unto participants. As earlier illustrated (see 'The Profile and Attitudes of Gym Users' chapter), informants reflected the diversity of the gym-going population.

## 7.2 The Participants

### Archie

Archie, a 28-year-old EL accountant, is a long-time friend and gym buddy. He is the only child in an upper-middle-class African family. He attended school at Selborne College where he excelled in academics and music (he is a pianist). Archie began gyming in high school with a bunch of rowing teammates. Despite possible negative repercussions, such as sports suspension, he used AAS to enhance his athletic ability which led to him securing a position in the 1st team rowing squad. In university, Archie began competitive bodybuilding which perpetuated his use of AAS. While no longer competitively bodybuilding, Archie occasionally uses AAS to boost his training efforts.

### Terra

Terra, the younger of two brothers in a low-income, African working-class family, is a 36years-old professional fitness instructor. He is also a highly recognised Eastern Cape amateur bodybuilder and close friend. He experienced a complicated and difficult childhood due to the absence of fatherly financial and emotional support. Terra's childhood difficulties were mostly blinded by the joy and comfort gained via sports participation. He notes physical activities as having underpinned his life since he can remember. Team sports, specifically football, inspired his initial sports interest.

> Oh yes, for sure. I always had the most fun playing soccer after school with the guys. The principal said we must play soccer and box, but not fight and get in trouble (laughs).

Terra is a fitness instructor and bodybuilder and his body often appears in the media, including body-building magazines. His body is constantly advertised in an attempt to retain and attract prospective customers. Terra's body is a major contributor to his income. It is not surprising

that Terra spends an exorbitant amount of time in the gym, maintaining and bettering an already aesthetically pleasing, mechanically efficient body – Terra's body is the focal point around which his life revolves. While acknowledging this, Terra stresses the point that his body is not the only aspect of his masculine identity, stating:

> My family and community recognise me as a man because I have gone through traditional initiation. In [Xhosa] culture you are not a man if you have not been initiated. Now that I working, I can provide for my mother and I have made my family and myself proud by showing that I can stand on my own. This has earned me respect as a real man.

As stated by Ogunbanjo & Knapp van Bogaert (2005: 51), "Communalism has been and is still (partially) the structure of the traditional African society and its socio-economic life". Rural men's individual rights are given a secondary status due to priority being given to communal duties and their status is assessed by the well-being of the community. It must, however, be taken into account that notions of communalism or *Ubuntu* are limited; they cannot be applied to all African men all the time because few live solely in rural, communal settings. All the African interviewees in this study operated within urban, middle-class multi-cultural settings that inculcate individualism and autonomy. Consequently, these men's masculine norms and outlooks differed from those of circumcised Xhosa men living in rural Transkei governed that is by traditional ideologies, Terra stating:

> I appreciate and am proud of my tradition and culture but come on man, I'm not going to do all that stuff [in town]. I play by my own rules, like lifting and using steroids, they are a part of me and no one is going to tell me I can't use them.

The gym community stresses autonomy, specifically regarding AAS use – bodily improvement is a sovereign and autonomous task conducted during one's leisure time.

### Bradley

Bradley is a 30-year-old retired professional hockey player and business owner. He is the last born of three children in an EL working-class Coloured family. Bradley was enrolled at Selborne College with his older brother Leroy where they both shone in hockey. According to Bradley, athletic prowess is a family trait, and that his brother is his role model:

> Leroy is a real geezer (man). The guy is almost 40 but is doing those crazy IornMan[10] things. He was the most popular guy in the 'hood because he [beat] everyone at street-cricket and was [good] at giving guys shebobos (kicking a soccer ball through an opponent's legs) … my dad got him a scholarship to Selborne for hockey … Him being selected to play for SA made me the family so proud. He made me want to play hockey like him and make the family proud.

Outrivalling his peers, Bradley made it into the 1st team when he was 16 and was later selected to play in the national U-18 team. Bradley says:

> I made 1sts in standard eight. Now that was a hell of a boost. Guys in the higher standards wanted to be friends and younger boys kept bugging me for playing tips (smiles).

He began gyming with SS during university after being selected to represent SA in the men's senior team. He realised that he had to train to increase his strength, power and speed.

This led to him enhancing his striking ability which resulted in him scoring more goals and thus cementing his place in the team. According to Bradley:

> The guys at school used to lift weights, but I thought more muscle would slow me down. Back then I didn't realise that you could lift weights without getting too big. Now I know that there are some pretty intense free weight and cable resistance exercises that get the muscles stronger without getting too big.

Once having retired from national hockey, he went on to play club hockey in England for several years. Following this, he returned to SA and took over the management of his brother's sports company for which I had been working.

### Gareth

Gareth is a 35-year-old, Western Cape economist. He is the youngest of three brothers in a White, upper-class family. Gareth attended school at Paarl Boys High School which is nationally recognised as a sports powerhouse – the rugby 1st team is consistently ranked as one of the top 10 in SA.

His outstanding athletic prowess – he earned school and provincial colours for rugby – earned him respect and admiration from Paarl's highly sports enthusiastic society. Gareth began gyming during high school to gain a spot in the 1st team rugby squad. Despite wanting to

[10] An Ironman Triathlon is one of a series of long-distance triathlon races organized by the World Triathlon Corporation, consisting of a 3.86 km swim, a 180.23 km bicycle ride and a marathon 42,18 km run, raced in that order. It is widely considered one of the most difficult one-day sporting events in the world.

rapidly gain more weight and strength, Gareth chose not to use training aids. He made a point to avoid AAS, stating that “steroids are for cheaters. I mean, what’s the point of playing a game if you’re going to cheat? Just don’t play”.

To maintain his body’s notable condition, Gareth performs heavyweight/high volume training. His gym sessions are organised, timed and documented in a training journal. Gareth claims using a journal is highly useful, stating:

> I can correctly keep track of where my training is and where it should be. Like, when I’m bulking and I feel strong, but my body doesn’t look thicker. I can look back at my journal and see what’s up. Then, I can make the necessary adjustments to get things on track.

### Curtis

Curtis is a 27-year-old engineer who works in CPT. He has three siblings, two older brothers and a younger sister, in an upper-middle-class Coloured family.

He attended school at the South African College High School, locally referred to as SACS, the oldest school in SA. While not a sports enthusiast, Curtis played tennis at school because sports participation was compulsory. He started weight lifting with his brothers when he was 14 to gain physical stature, which would lead to an increase in his masculine identity.

According to Curtis:

> It’s no joke at SACS. Tradition makes it clear, you’re either in or you’re out. You’ve got to play rugby; most boys feel that it makes them feel and look more manly. I was a skinny nerd, a pushover. My brothers let me get bullied to toughen me up, but they never let things go too far. I got tired of being teased and so I decided to train with my brothers at home. I wanted to get big so that everybody would stop looking and treating me like a sissy.

Although he was pleased with the initial results of his intense and dedicated training efforts, Curtis was not completely satisfied with his body. His desire to rapidly gain more muscle weight prompted his use of AAS. According to Curtis:

> I could see that guys were beginning to admire my body. I wanted to get bigger. I kept on training hard, using heavier weights, but nothing happened. I got angry and moody. One of my friends told me to try steroids. So, I got some D-bol from a local dealer. Man! That stuff made a hell of a difference (smiles).

Curtis says that his obsession with his body had a negative impact on his school and work relationships. When he realised how unbalanced his life was, he sought to regain balance to be happier. According to Curtis:

> I'm much happier now. I've accepted that I can't have it all. I still put loads of effort into my body, but I make sure not to place my body before everything else. I concentrate on what I'm doing and who I'm with.

### Matthew

From CPT, Matthew is a 30-year-old SS store owner and real estate investor. He is the youngest of two sons in a middle-class White family. His father's continual business travels led to family ties being strongest between him, his brother and grandfather, Matthew stating "Besides my bro, my grandpa was the main male influence that made a difference in my life". According to Matthew, it was mostly his grandfather's physically demanding, active lifestyle that motivated his physical interests:

> He worked hard and trained hard uh… ja, he's just a good all-around guy. He woke up at 5 o'clock to go to work, came back when it was dark, but he was a happy-go-lucky case. It was nice to see a hardworking male with a good build on him, especially for someone his age. His life was mostly active. He used to lumberjack, fishing, a truck driver. He liked to be more physical. He enjoyed the task, like when fishing, he wanted to feel the fish on the rod, feel the fish fighting with him. The fighting was more like let's see how good he actually was compared to how good he thought he was.

Matthew and his brother were educated at Wynberg Boys High school. He began gyming to improve his already impressive track and field performances, and to increase his chances of playing 1st team rugby which Matthew cites as being "the greatest thing you can achieve in school".

When he failed to make it into the 1st team, Matthew shifted his focus almost entirely to gyming. This resulted in him developing a magnificent physique. Matthew enjoyed the sense of power that he gained from the admiration of his peers, as well as the sense of superiority he felt over those not who did not train.

Now, Matthew is a devoted recreational gym-goer equipped with practiced bodybuilding skills and intricate gym knowledge. According to Matthew:

> I don't want to injure myself. So, I spend a lot of time developing my form. I can lift heavy, but I prefer to use lighter weight because it allows me to do intense sets performed over a short period. Intense

> training is my favourite. You know, exposing the muscles to more concentrated time under tension increases [muscle] fibre damage so that they repair stronger, making them (muscles) bigger and thick.

Also, Matthew has discovered a sense of brotherhood by training with professional bodybuilders, whom Matthew defines as the "kings of the [weights] floor".

### Mark

Mark, the eldest of two brothers, is a 34-year-old CPT information technology specialist. Most of his male relatives on both sides of his family attended Rondebosch Boys High School or Bishops Diocesan College locally referred to as Bishops. Mark and his brother were enrolled in Bishops due to his father's wish to continue the family's affiliation with the school.

According to Mark, sport is embedded in his family. His parents assumed that both he and his brother, Adam, would eagerly participate in sport. However, this was not the case, Mark stating:

> Adam and I weren't keen on playing or watching sports. Like, we didn't care like the guys about touch [rugby] or soccer during break. They thought sport was everything … we (Adam and Mark) played and went to the derby's and did all the shouting and stuff, but we'd have rather chilled at home if school rules didn't say we had to go and support. I preferred playing chess and learning card tricks while Adam was into [reading] comics and [practicing] on his electric guitar.

Mark's lack of interest in sport resulted in him not dedicating any of his leisure time to practicing or training. A lack of physical activity resulted in Mark experiencing physical pains and mental fatigue during university. This motivated his decision to start gyming. According to Mark:

> In [university], me and the guys (friends) lived in Long St (Cape Town's club centre) partying, getting drunk and eating loads of junk food. I started getting fat and my clothes began to feel tight and uncomfortable. It became difficult to walk around campus, and I started losing focus when working. My doctor advised that I lose weight. So, I started training. In the beginning, all I did was cardio, but when I felt things getting better, I decided to give HIIT (High Intensity Interval Training) and light weights a shot. I quickly got very fit and big. And, when my friends and folks said I was looking good it made me feel good.

Mark admitted that being told he looked good helped improve his impression of his body image and self-confidence. Also, being explicitly told that he is sexually attractive enhanced his belief in his sexual identity:

> I was not exactly shy or scared of girls, but I knew that they weren't into chubby nerds like me. It feels great to be out with your mates and have a pretty girl come up to you, stroke your arm and tell you that she thinks that you look good. That's when you know you're on top (the alpha male).

Mark remains committed to training because it keeps him energised. Also, training helps him remember what he can achieve. Via the application of the Three D's principle (dedication, determination and discipline), Mark transformed his body from being flabby to one well-built and inspiring. Also, he says that applying the Three D's principle to his life has led to him reaping a significant reward.

Thus, although not a member of SA's sports society, Mark says that training adds value to his life and helps strengthen his already strong image of himself as a successful, masculine individual – the gym acts as the conduit through which Mark's strong current of masculinity flows.

## 7.3 Themes

Some unique and interrelated themes evolved from the interviews with research participants. I present these themes using the evolving story format that was utilised during the interviews. It is worth mentioning that my ability to generate rapport with respondents, which led interviewees to share rich information, was facilitated by my age (early 30s), expansive sports knowledge gained through years of participation and my physical appearance (well built). Respondents related to me as a 'member' or 'insider'.

I begin this section by exploring participants' school memories and sports' consistently increasing physical demands which led to an increased interest in their bodies. This compelled them to begin training which, in some cases, resulted in AAS use.

### 7.3.1 Real Boys Play Sport

Sport was the one particular activity that all respondents considered to be a sign of masculinity. A fundamental aspect of the ongoing formation of young boys' identity is the negotiation and renegotiation of their masculinities (Gilbert & Gilbert, 1998; Connell, 2002). According to Swain (2006), schools are recognised as one of the principal sites where this process occurs, Gilbert & Gilbert (1998: 114) stating:

> The school as an institution, with its historically reproduced rules, routines, expectations, relationships and rewards, and its deployment of artefacts, resources and space, actively shapes what happens within it, for all inhabitants.

Boys' masculinity is shaped by their participation in various activities, mainly organised sport, which they are introduced to during primary school. Their passion for and participation in sports increases in unity with their progress throughout school.

> Gareth: I played a bit of cricket and tennis in primary school, but that was just to mess around with my friends at break time. We tried to run each other out and see who could make the best catches.
>
> Matthew: My brother and I went to Wynberg (primary and high school). We had to play sports; it was compulsory. We didn't mind because we loved playing sports.

All the participants participated in sport. While some respondents claimed not to have enjoyed and/or been interested in sport, the participants unanimously perceived it as a key dimension of their school lives (Gilbert & Gilbert, 1998; Connell, 2002). The superior position that sport holds in SA school culture reflects how it may act as a means of perpetuating hegemonic standards of masculinity, (Gilbert & Gilbert, 1998: 60) stating "In many respects, men's sport is the archetype of institutionalised masculinity, and the images of men which dominate its ideology are the quintessential manifestation of the masculinist ethos".

In many schools, particularly for boys in SSBBS, there is a tension between investing in academics and participating in sports. An interest in sport is common among young boys – it offers, excitement, friendship, bodily expression and is often seen as a chance to get out of the 'boring' classroom. The balance between classwork and sport is affected by the school's own curriculum and, in the case of many SA SSBBS', sport has often been heavily emphasised. This illustrates how school culture can promote the assumption that certain activities are masculine and others are feminine.

> Matthew: I played loads of sports from sub-A (grade 1) to Matric (grade 12). I played rugby, cricket and athletics all the time. It was lekker and the competition was great. Doing P.T was also cool because it made us fit and strong. I trained hard to defend myself on the rugby field because I wanted to do well. It taught me how to chill and work with others, but at the same time, showed that working with them can make you weak so you must always watch yourself.
>
> Gareth: Hockey and rugby were the sports I concentrated on. I was one of the biggest and fastest boys at school, so I played in the rugby and hockey A-teams. Hockey was really fun because rivals couldn't

> believe that a boy like me (big) was so fast and could handle the ball well. It was great fun being out there (on the field) with the guys (friends and teammates

These extracts highlight sports' importance in the construction of masculinity. They show that playing and/or liking sports, and doing well is an important, 'common sense' and natural component of being a boy. These narratives, therefore, construct sport as being a fundamental aspect of male life (Gilbert & Gilbert, 1998; Wellard, 2002).

### *The 1st Team Rugby Blazer*

In SA school culture, rugby's masculine status reigns supreme, Martin & Govender (2011: 222) stating that "The imperious culture of rugby makes it the quintessential social practice upon which hegemonic masculinity can be displayed". As posited by Martin & Govender (2011), the small group of boys most accomplished in rugby develop a powerful 'jock' identity, thereby attaining a hegemonic status that elicits and demands respect from other boys.

Most boys gallantly endeavour to play 1st team rugby, and thus being able to assert their identities as the 'real' boys; they exemplify the school's ideal image of masculinity. Boys who make it into the 1st team are awarded the coveted 1st team rugby blazer.

> Gareth: I played 1sts for two years. Even if you are playing in the lower teams, it's a huge privilege to play Paarl Boys rugby. Everybody knows that we are one of the country's best rugby schools, so making it into the 1st team is no joke. I was so happy and relieved when I got my blazer because playing 1sts is a family tradition.

This statement highlights how athletically proficient boys are the most popular; they occupy and dominate the highest ranks of the status hierarchy (Gilbert & Gilbert, 1998). Agreeing, Pascoe (2003) further suggests that boys' popularity is ultimately determined by their dexterity in those sports determined to be most masculine by their schools and local societies gender regime. For example, boys who play 3rd team rugby are considered to be manlier than boys who play 1st team badminton. This is because badminton is viewed as an inferior or feminine sport. However, these masculinities are not the only ones celebrated. For example, cricketers' mannerisms, gentlemanly and polite, are also celebrated as respectable and necessary elements of a 'real' man's masculine itinerary (Grundlingh, Odendaal & Spies, 1995; Wellard, 2002).

### 7.3.2 Males Must Be Strong

Another theme that emerged in the interviews was that males need to be strong. The term 'strong' may have multiple meanings. Strength may be assumed to relate to physical, mental and/or emotional strength. All the respondents alluded to the pressure that they are expected to be strong, to self-sufficiently and resolutely manage all difficulties. This is most evident in high school, the participants unanimously agreeing that strength, mainly physical, is required to be viewed as a real boy.

> Bradley: Sometimes we (hockey players) would watch the rugby guys practice. You could see that they were mad, they treated rugby like a job! Everybody wants to work, so if you get the 1st team jersey, you are going to have to work damn hard to keep it. The coaches would tell them to break each other, claiming that it would help them get hard. Sometimes, guys would plough (tackle and/or bounce hard) each other into the ground. The coaches would give props (respect) to the guy who made the big hits and tell the boys who got hit (tackled and/or bounced) to stop playing like pussies and man up.

> Curtis: Getting bullied is really painful. Sometimes I'd come home from school and want to cry. My mother would try and comfort me, but my dad would tell me to start acting like a man and do something to fix the situation.

The above extracts indicate the construction of masculinity that is in line with hegemonic masculinity. They reflect a stereotypical and naturalised belief that males should be self-reliant, strong and brave, Martin & Govender (2013: 23) stating "Displays of strength, potency, and vigour by the male body in labour, sex, and sport are essential in cultivating personal and social embodiments of traditional masculinities".

#### *From the Field to the Gym*

Sports is intricately knitted in many boys' masculine identities. A sense of being is achieved via the testing of their sporting abilities against others and the pursuit of personal goals (Gilbert & Gilbert, 1998; Wellard, 2002; Hickey, 2008). They can display their skills, the intensity and excellence of which resulting in increased sociocultural capital. To achieve this, boys dedicate most of their leisure time to bodily construction and honing the specific skills that their sports require.

> Terra: I put a shit load of effort into getting better in various positions for the team and myself. I'm not a show-off, but I wanted everybody to see all my hard work and my skills by winning the most

> matches. I challenged myself to be the man of the match because winning the title proved to me and everybody else that I was the best and the more I won it, the better I was becoming.

Boys and men enter the gym sphere and use weights (free weights and machines) and other fitness equipment to develop their bodies. To accelerate bodily development, boys often use SS and, in some instances, AAS and PEDs, (Martin & Govender, 2011, 2013).

> Curtis: I started training with my brothers so that I could get bigger and stop being bullied. A bigger body really helped. Guys stopped bullying me and they began to look at me and treat me differently, with respect. I could see that they liked the way my muscles showed. That made me feel great, made me feel manlier. So, I started using supplements and then got onto steroids because I wanted to get even bigger.

The above quotation highlights how, when driven by the powerful desire to achieve their versions of the ideal physique and thus accentuate their masculinity, some males willingly place their bodies under an immense of strain and include AAS into their health regimes.

## 7.4 Real Men Don't Cheat

A theme that became clear during the interviews was that most, but not all, participants disavowed AAS use in sport.

Sporting success is the ultimate symbol of personal achievement (Messner, 1990; Drummond, 1995, Hickey, 2008).

> Bradley: I made 1$^{st}$s early in standard eight (grade 10). My dad was always telling his mates about how I was so young but already playing 1$^{st}$ team. I made the SA u18 team in matric (grade 12) and went on to play in the men's national team.

Ascending the sports pyramid is driven by the allure of respect and adulation, as well as financial incentives; boys dream of one day becoming professional athletes (Messner, 1990; Hickey, 2008). However, athletic professionalism is a status that is seldom achieved. This is largely due to two reasons.

Firstly, the sports realm is incredibly stratified (Messner, 1990). The sports pyramid narrows rapidly as one ascends from high school to university, to national and, finally, international levels. The odds of making it to the last two tiers of completion are slim. Adolescent and university athletes (AUA) are often informed that they lack the size, skills and/or speed required to successfully compete at the highest levels (Messner, 1990).

Secondly, exhaustive training schedules require that the body be pushed to its maximum physical capacity which often results in permanent injuries (Messner, 1990; Drummond, 1995). Also, emotional, sexual and academic pressures may act as training distractions, thus further reducing the chance of achieving professionalism.

While competition amongst athletes is fierce there are boundaries that should not be crossed. When athletes use AAS to gain an advantage over others and thus increase their odds of successfully achieving athletic professionalism, many consider this to be a form of cheating. Athletes who dope are viewed as unethical cowards who lack the courage to endure, but most importantly, 'really' overcome the various stresses associated with achieving athletic professionalism.

> TMM: So, what do you think about the use of steroids in sports?
>
> Gareth: It's not right, it's cheating. Guys have to work hard to make it into the 1st team. Those that don't use steroids are able to look at themselves proudly for having been able to handle all the pressure. Guys who use steroids are fraudsters, they aren't real men. They know they'll never make it without cheating. They take the realness out of the game (angry face).
>
> Matthew: Look, I don't mind steroids in the gym, but I think they provide an unfair advantage in sport. Sports isn't just about you, it's about the team and others. I mean, look at guys who cheat in rugby.
>
> They make other teams suspect that the whole team is on the juice, so when we win, everybody says we only won because we use steroids (shakes his head).
>
> Mark: I am not really interested in sports, but I think I prefer it if guys don't use steroids when playing. My friends and family get very and upset, and everybody just ends up in a bad mood.

These extracts match my survey results which indicated that 65% (n=98) of respondents condemned doping in sports because they felt that it demeans all sports principles and covers the nation's sports society in a sooty cloud of grey moral corruption. They also insinuate that masculinity is legitimate only when a 'genuine' effort is made.

### *It's Not Really Cheating in the Gym*

As earlier shown (see 'The Profile and Attitudes of Gym Users' chapter), participants' feelings regarding whether they believed the use of AAS in the recreational gym sphere is legitimate and justified or whether it is not where evenly split 50/50.

Participants who endorsed AAS use as legitimate and justified argued that gyming is not a sport. Therefore, sports dogma holds no sway in the recreational gym sphere. Gyms have rules which outline members' behavioural requirements and inform them of forbidden activities, specifically the use and/or trade of AAS, on club premises. However, the wide array of factors affecting training makes it impossible for gyms to provide and enforce a universal training order. The exercises performed and the quantity of resources, time and money, invested in bodily construction are determined by respondents' goals and motives – training is an integral aspect of gym-goers lives.

> Terra: I'm a professional bodybuilder and personal trainer. My body is my life. If I feel that my body isn't where it should be, my life goes into disarray, I feel depressed and incomplete. To avoid this, I take steroids to get bigger and develop great aesthetics. All of us (bodybuilders) are on the juice. You can't compete if you're not. You will be too small and won't look as good as the others. If you want any chance of winning, you have to use steroids. It makes things fair. I've been on 'roids for ages and am still good (healthy). I only use this one guy (dealer) because I know his stuff is good quality. I know that it's illegal to use AAS, but I feel that I have the right to because without them I can't be myself.

> Archie: I have no issue with AAS. Hell, I took them in school and still use them when I feel that my body isn't responding, you know when you hit a training plateau. The juice helps bump me over. Guys who use steroids don't cause trouble like tik junkies, so it's fine if they take them.

These extracts above show that, for a small group of gym-goers, AAS are necessary tools required to reach their bodily goals which leads to feelings of self-fulfilment. The quotes also suggest that, by accepting responsibility for their actions and denouncing all negative qualities associated with AAS, AAS may be justified (Monaghan, 2002). Furthermore, the extracts highlight how traditional masculine role norms such as risk-taking and defying authority are integral features of hegemonic masculinity (Martin & Govender, 2013).

> Curtis: People don't get it. They think that steroids are drugs like tik and weed. They think steroids get you high and make you want to do crazy things. You don't take steroids are then sit around doing nothing like with weed.

> Archie: I think most people are confused. When they hear about steroids they start thinking about heavy drugs like pot (cannabis) and cocaine. Those drugs get you high, you know? To chill. You use steroids for a purpose, to get big and strong.

The belief is widespread that the lack of accurate and unbiased information distributed throughout society has resulted in AAS being mistakenly associated with narcotics, which results in AAS being classified as an illegal drug. Some AAS users argue that members of the public fail to understand that AAS and narcotics are not synonymous.

As earlier shown (see 'The Profile and Attitudes of Gym Users' chapter), participants' feelings regarding whether they believed the use of AAS in the recreational gym sphere is legitimate and justified or whether it is not were evenly split 50/50.

The participants' sentiments concur with my survey results which showed that 79% (n=119) of the study's overall participant base agreed that socially distributed SS and AAS information is neither accurate nor correct. This is the result of two factors, firstly, the lack of an explicit, factually correct AAS pharmaceutical definition socially circulated in a coherent and unbiased manner. Secondly, the absence of an undebatable AAS legal status. AAS law is neither well understood nor clear, clouded with complexity and ambiguity. This became more apparent when pressed on their understanding of AAS law: most participants had some inclination that recreational AAS use may be illegal. But they admitted that they were not well versed in AAS law.

> TMM: Are you familiar with South Africa's system of anabolic steroid administration laws? Mark: I know that when you want to use steroids, you're supposed to go see a doctor first. But, I can't tell you about steroid laws or how the police keep track of things. I mean, that stuff is never in the news.
>
> Terra: You are supposed to go to a doctor to get a script so that you can get them from a pharmacy. Ja, you not supposed to just buy steroids, they are illegal just like all drugs. If you get caught [engaged in AAS activates] you can get arrested. But no one cares. I've been selling steroids for years because I'm not worried that the police will do anything. I mean, seriously dude, cops aren't going to waste time on steroid cases. Like, Christ! Loads of cops train with me and some buy [steroids] from me (laughs).
>
> Archie: Ja, well… sort of. Look, I don't know the exact details but we all know that you're supposed to follow the medical road regarding all steroid activities, if you don't you could get charged with drug dealing. Even so, I know that steroid laws don't work. It's so easy to get steroids from local dealers and off the internet. Guys aren't scared of going to jail for because they know the cops won't do anything.

The above extracts highlight that knowledge about AAS is unclear because it is circulated through different sources which complicates the formation of a clear and concise understanding of the drugs, more so their irregular regulation. Also, uncoordinated AAS

administration is taken advantage of by legally informed AAS using participants; knowing that few, if any, AAS cases reach court, they have little to fear regarding legal repercussions.

The participants' sentiments concur with my survey results which showed that 79% (n=119) of the study's overall participant base agreed that socially distributed SS and AAS information is neither accurate nor correct. This is the result of the dark grey cloud of complexity and ambiguity overshadowing AAS law. This became more apparent when pressed on their understanding of AAS law: most participants had some inclination that recreational AAS use may be illegal. But they admitted that they were not well versed in AAS law.

> TMM: Are you familiar with South Africa's system of anabolic steroid administration laws?
>
> Mark: I know that when you want to use steroids, you're supposed to go see a doctor first. But, I can't tell you about steroid laws or how the police keep track of things. I mean, that stuff is never in the news.
>
> Gareth: I'm not too clued up on the technicalities, but ja, I know they are illegal. Guys are always being exposed and then banned from rugby for using steroids.
>
> Curtis: Yeah, they are illegal. I've known since I started taking them in school. That made using them even more fun, you know, maybe getting caught (smiles). I've looked into the law, but I don't get it. One thing says this, another says that. I gave up trying to figure out what's going on (shrugs).

The above extracts highlight that knowledge about AAS is unclear because it is circulated through different sources which translate it differently.

However, as indicated by my survey findings, 50% (n=75) of gym-goers rejected the notion that AAS use may be legitimate and justifiable. The most resounding reason for this belief was that they are 'fools' gold': bodily development gains are made by taking shortcuts. Bodily improvements are not the result of effort, have not been obtained naturally, so are considered unreal, and thus illegitimate. Also, AAS supposedly do not provide users with genuine training satisfaction and self-fulfilment.

> Mark: I was round and chubby, but I never considered using drugs. There's no need. I knew that I could fix my body the right way. I think that if I had used steroids I would have felt like the results were fake. It feels great knowing that I made so much progress naturally (smiles).

> Bradley: When you do something, do it properly. It's the same with training. When you use steroids and other drugs, you might get sick or something. It's safer to avoid them and put in real, hard work.

Participants also reported that AAS use should be condemned and restricted and, if possible, quashed because of negative social and personal ramifications. For example, the widespread media claims that steroids cause violence or 'roid-rage and negative health side effects (See 'Steroid and the Law in South Africa' chapter for full discussion).

## 7.5 Gym Masculinity – Thoughts On South African Manhood

Another dominant theme that emerged in the interviews was that men need to look good. Participants unanimously agreed that the desire for better aesthetics had increased. This view corresponded with my survey findings which showed that 69%, (n=104) of the study's participants perceived the demand for aesthetically appealing bodies to have increased.

Masculinity as embodied in the male body is measured in muscle. Powerful bodies are a mark of masculinity, and revered. A fit, muscular body has always played an influential role in determining society's view of a man's masculinity (Morrell, 2001).

As earlier discussed (see 'Literature Review and Theory' chapter), since antiquity people have sought to realize the ideal physique. This has its logical expression in the current body constructivism lifestyle which has evolved into the popularly adopted contemporary fitness lifestyle.

Never before have men been so concerned with how they look, making greater investments in their bodies. This infatuation is the result of two main reasons. First, the inflated advertisement of the social ideal, mesomorphic male body. Consistent exposure to the social ideal body has resulted in more men developing body image concerns. This has generated an increased drive for muscularity.

Second, there is a tightening relationship between the body and livelihood. Success in the white collar work sphere, the employment domain for the majority of gym-goers, requires, an aesthetically pleasing and healthy physique. Attractive and muscular men are considered more masculine. A superior masculine status improves men's chances of engaging in more sexual activities, an underlying aspect of hegemonic masculinity.

The gym, a commercial institution, offers members an array of exercise opportunities to develop socially and personally applauded aesthetic physiques. Also, bodily appearance has often been construed as a reflection of one's inner self. So, a better exterior construction equates to a more confident, masculine identity.

> Archie: I have to look good in order to make potential clients feel comfortable when working with my firm. People relate looking sharp with how you do your work. If I was fat and unhealthy, clients might believe that their books might look the same, and that would be disastrous.
>
> Mark: I studied software engineering. I quickly got a job working for a mate's IT company. After a few years, I decided to open my own company. At first, things weren't going so well. People didn't seem to take me seriously during meetings or invite me to make presentations. Things began to change when I began to look good. More people began to ask if I would come and analyse their systems, and guys began to listen to me when I spoke. Looking better, more presentable is what got the company going.
>
> Matthew: After we met at a social event, the owner of a supplement company offered me a managerial position in one of his shops. The owner said that he was sure that my body would act well as a profit-generating marketing tool (laughs). Not to brag but ja, the store did very well. More people began to visit the shop, buy supps and ask for advice.

These extracts highlight how the desire or rather need to look good has drastically increased. They also suggest that gyming supports definitions of masculinity predicated on bodily appearance. Further, the quotes allude to the notion that looking good is a competition, the winners able to claim a hegemonic status.

## 7.6 Conclusion

It is consistently shown throughout the themes that boys and men are under pressure to conform to hegemonic constructions of masculinity, especially popular constructions of masculinity in the school context. Schools play a critical role in supporting and perpetuating hegemonic constructions of masculinity within contemporary SA society. For example, although academia is emphasized, it remains overshadowed by institutionalised sports traditions.

Interviews highlighted the fact that males feel that they have to look a certain way. They strive to construct bodies that embody the hegemonic ideal of masculinity evidenced in the muscular and athletically capable body. To achieve their goals, males push themselves to their

limits, a small group of which succumb to the use of AAS. This use of AAS is argued as being legitimate and justified due to the drugs acting as a means to an end rather than an end in itself. Interviews also drew attention to respondents' unfamiliarity and understanding of AAS law the cause of which being the drugs' complex and unclear legal status and their dishevelled manner of administration – AAS administration is swathed by a foggy cloud of false impression and confusion the consequence of which individuals unintentionally engaging in illegal AAS activities and/or engage in AAS black market activities with limited fear of legal ramifications.

# Chapter 8. Conclusion

## 8.1 Introduction

As I near the end of this study, I return to the beginning and consider how this interesting and challenging journey unfolded. I begin by revisiting the research questions which framed the study.

The primary purpose of this study is to gain a deeper understanding of AAS in SA. Also, the study aims to investigate differing perspectives regarding AAS's impact on contemporary SA masculine attitudes. Furthermore, the study strives to develop a clear understanding regarding the boundary between the legal and legitimate as opposed to the illegal/illegitimate use of AAS.

## 8.2 Revisiting the Research Questions

My own motivations and curiosity about AAS were formed long before I began this research project. My exposure to AAS in high school and my experiences of using the drugs while working as a fitness instructor provoked a deep curiosity within me regarding how the substances affect other gym-goers.

I began this research journey by asking the primary research question:

- Why and how do men use AAS in the context of gym culture.

In order to answer the primary question, I also explored the following four research questions which are examined through an in-depth desktop analysis of global and South African AAS literature, a quantitative survey and qualitative interviews:

1. What are AAS?
2. What is the legal status of AAS?
3. How widely are AAS used?
4. What are the motivations for the use of AAS amongst men?

## 8.3 Articulation of the Argument

This study has emphasised that, although recognised and used as therapeutic aids, AAS are mainly employed as powerful, result-guaranteeing bodily construction tools that accelerate muscle acquisition.

Males who possess muscular, physically able bodies are perceived as being more attractive, healthier, happier and potentially more economically and sexually successful than men whose bodies are socially regarded as lacking. Males whose bodies are socially revered approach hegemonic masculine status. Acquiring greater masculine status drives some men to use AAS.

My survey results and interview data highlighted that AAS are advertised as and thus perceived as unnecessary and unhealthy substances. When reported by media, only the negative aspects of AAS are mentioned. And, to further confuse society, AAS and narcotics are incorrectly framed as being synonymous. SA's condemnation of AAS is also the result of the nation's passionate sports culture which sternly shuns doping.

However, a small social segment of gym-goers and sportsmen, keen to gain the benefits AAS offer, perceive AAS to be acceptable and legitimate. The greater portion (82%; n=123) of the study's participant sample consisted of higher educated, middle and upper class, White and African men in their late 20s – early 30s who had been training for more a minimum of 5 years. Most were born into and raised in tight-knit families which promoted sports participation, illustrated by the high level of participants having attended nationally acclaimed sporting SSBBS. It was within this group of respondents, primarily those focused on aesthetic design, that all involved in AAS activities were located.

The study has shown that AAS are administered in a dishevelled manner. AAS law in SA is wrapped in a dark cloud of complexity, AAS administration is misinformed and uncoordinated. This is due to AAS' lack of a clear legal status. The lack of an explicit status has resulted in the drugs enjoying a *quas*i-*legal* status. But this status has contributed to misunderstanding and confusion and has allowed for the construction of a thriving nationwide underground AAS black market. Legal vagueness has provided individuals involved in activities, positive or not, with numerous legal channels via which to manipulate AAS administrative policies.

The review of masculinity literature showed that in Western societies, SA included, muscularity and fine sportsmanship have historically been and continue to be associated with masculinity. Numerous elite sportsmen, primarily rugby players, have used AAS to better their athletic performances. To avoid detection, the drugs are administered in an informed, proportional manner. To play at the professional level, sportsmen are required to learn the codes relating to anti-doping for their respective sports. When sportsmen and women are

found to be using AAS (doping) they are immediately condemned as cheating and illegitimate. What generally follows is a formal enquiry which often culminates in a long period of being banned from sports participation.

Most AAS use occurs in the commercial, recreational gym sphere. Like elite sportsmen, recreational gym-goers use AAS to enhance their aesthetics and sports abilities. However, unlike their counterparts, most recreational gym-goers use AAS in an uninformed manner and their knowledge regarding AAS (il)legality is unclear and vague. Also, AAS use is not considered as cheating because gyming is not a sport but a *lifestyle*.

Thus, I argue that, to successfully and hastily realise their training objectives and thus gain a feeling of self-fulfilment which evolves into augmented masculinity, a small cohort of gymgoers has included AAS into their health regimes. Also, the drugs provide a means to an end and are not an end in itself; improved aesthetics and sporting prowess enhances feelings of self-fulfilment and masculinity.

## 8.4 Contributions to Research

This study has contributed to the neglected sphere of AAS research. It has contributed a greater understanding of contemporary society's obsession with ideal body, the main reasons being because of the body and livelihood connection, and the augmented belief that muscularity increases masculinity.

The findings have highlighted that sports play an eminent role in the construction of most boys' masculinities. Hegemonic status is bestowed upon those must athletically proficient. In an effort to improve their sports performances, some are tempted to use AAS.

The research contributes to SA AAS studies. AAS research in SA predominantly focuses on the use of the drugs as doping agents and/or as adolescents display of delinquent behaviour. This study has provided an insightful, contemporary investigation of AAS as a whole, the drugs' history, pharmaceutical properties and administration law.

## 8.5 Limitations of the Study

The study had limits in terms of generalisability. The findings cannot be generalised as representative of all SA gym-goers' views and perceptions and experiences. My sample for the survey and for the interviews were located in two cities, CPT and EL. My selection of the

sample was limited in terms of who I could access (in the case of the survey) and who I knew (in the case of the interviews). The time spent in the field was balanced within the constraints of a tight schedule and limited balance. The interpretation of the data was subjective and viewed through my insider perspective. To minimise this, interview transcripts were often reread and data findings re-examined in the analysis stage of the research. Even so, this does not definitively ensure the objectively of the analysis and organisation of the results. Therefore, the discussion is acknowledged as offering only one of many possible sets of interpretations.

Another limitation may have been my lack of interviewing skills inhibiting me from being able to spontaneously formulate well-worded probing questions that may have generated richer data. The use of open-ended questions may also have prompted participants into providing ambiguous or vague answers. Finally, although questions were asked in the same way, the participants may not all have interpreted the questions in the same way.

## 8.6 Future Research and Final Thoughts

Literature is mostly critical of users and usage of AAS for sporting and bodily aesthetic purposes. This was highlighted by the reviewed literature and validated by data analysis results. During the progression of the study, it became apparent that there are many possible areas of further research. Drawing on the study's findings, limitations and contributions, I make the following research suggestions.

### 8.6.1 Conducting the Study at Different Settings

In an attempt to further validate this study's findings, it would be interesting to see if similar findings would result if the same study, same methodology and sampling techniques, were employed elsewhere.

### 8.6.2 Conduct the Studies at a National Level

Conducting national AAS surveys will enable findings to be generalised as representative of all SA gym-goers' views and perceptions and experiences. Enhanced domestic AAS information provided to schools, primarily SSBBS, and gyms, will provide AAS using and nonusing gym-goers' with descriptive and accurate pharmaceutical and, hopefully, legal AAS information.

### 8.6.3 Themes Compiled into a Questionnaire

Survey questionnaires could hopefully be expanded and developed using themes generated from this study. I think the historical origins of attitudes towards body and masculinity will be particularly useful in shedding light on the ongoing attraction and use of AAS.

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# Appendices

## Appendix 1 'Masters of their Universe: Masculinity, Muscularity and Steroid Use in a Gym Setting. A South African Case Study'

All information is collected anonymously and is confidential. You are in no way obligated to answer any of the questions or provide any identifying information on this form (names, address, etc). This information will be used solely for the above-stated research project. All information will be safely destroyed upon completion of the project unless retained for reasons with your permission.

**Section 1. Demographics, Time Investments and Gym Costs**

Please tick the box that applies.

1.1

| AGE | | | | |
|---|---|---|---|---|
| 18 – 21 | 22 – 29 | 30 – 39 | 40 – 49 | 50 and ABOVE |
| | | | | |

1.2

| RACE (Racial denominations applied as in keeping with new South African ethnicity statutes after the dismantling of those previously employed during the racial segregation of Apartheid). | | | | |
|---|---|---|---|---|
| AFRICAN | WHITE | ASIAN/INDIAN | COLOURED | OTHER |
| | | | | |

1.3

| EDUCATION LEVEL | | | | |
|---|---|---|---|---|
| HIGH SCHOOL | TRADE/VOCATIONAL TRAINING | TECHNICAL COLLEGE | UNIVERSITY | OTHER |
| | | | | |

1.4

| INCOME LEVEL (BEFORE DEDUCTIONS/PER MONTH) | | | | |
|---|---|---|---|---|
| BELOW R5000 | R5001 – 10 000 | R10 001 – R20 000 | R20 001 – R30 000 | ABOVE R30 000 |

1.5

| NUMBER OF YEARS REGULARLY TRAINING | | | | |
|---|---|---|---|---|
| 1 or Below | 2 – 4 | 5 – 6 | 7 – 8 | 9 – 10 |
| | | | | |

1.6

| LENGTH OF CURRENT GYM MEMBERSHIP (MONTHS) | | | | |
|---|---|---|---|---|
| BELOW 6 | 6 – 12 | 13 – 18 | 19 – 24 | 25 and ABOVE |
| | | | | |

1.7

| WEEKLY GYM VISITS | | | | |
|---|---|---|---|---|
| 1 | 2 – 3 | 4 – 5 | 6 – 7 | 8 and ABOVE |
| | | | | |

1.8

| LENGTH OF TRAINING SESSIONS | | | | |
|---|---|---|---|---|
| 35 or BELOW | 40 – 65 | 70 – 95 | 100 – 125 | 130 and ABOVE |
| | | | | |

1.9

| MONTHLY GYM MEMBERSHIP FEES | | | | |
|---|---|---|---|---|
| R300 or BELOW | R301 – R500 | R501 – R800 | R801 – 1000 | 1000 and ABOVE |
| | | | | |

1.10

| MONTHLY GYM TRAVELLING COST | | | | |
|---|---|---|---|---|
| R300 or BELOW | R301 – R500 | R501 – R800 | R801 – R1000 | R1000 and ABOVE |
| | | | | |

1.11

| MONTHLY COST OF GYM/FITNESS RELATED EQUIPMENT |
|---|
| |

| R500 or BELOW | R501 – R1000 | R1001 – R1500 | R1501 – R2000 | R2000 and ABOVE |
|---|---|---|---|---|
| | | | | |

1.12

| MONTHLY COST OF GYM SUPPLEMENTS | | | | |
|---|---|---|---|---|
| R500 or BELOW | R501 – R1000 | R1001 – R1500 | R1501 – R2000 | R2000 and ABOVE |
| | | | | |

1.13

| MONTHLY COST OF GYM/FITNESS FOODSTUFFS | | | | |
|---|---|---|---|---|
| R1000 or BELOW | R1001 – R1500 | R1501 – R2000 | R2001 – R2500 | R2500 and ABOVE |
| | | | | |

**Section 2. General Perceptions and Understandings**

Please read each question carefully and tick the box that is true for you. Also write in answers where indicated.

2.1 Do you subscribe to and/or regularly read any men's magazines or those which target a male readership?

☐ Yes (1) ☐ No (2)

If yes, please list them:_____.

2.2 Do you play any sport(s) at the club, professional or international level?

☐ Yes (1) ☐ No (2)

If yes, please list those played, the frequency per week/month and the level at which it/they are played: _____

_____.

2.3 Do you think adolescent and university athletes use of sports supplements and/or anabolic-androgenic steroids is increasing?

☐ Yes (1) ☐ No (2)

If yes, why? _____

_____.

2.4 Do you think the use of prohibited substances (doping) in sports is acceptable? ☐ Yes (1) ☐ No (2)

If yes, please state why: _____

_____.

2.5 Do you think that society is well and correctly informed regarding sports supplements and anabolic-androgenic steroids?

☐ Yes (1) ☐ No (2)

Briefly elaborate on your answer please: _____

_____.

2.6 Do you think sports supplements and anabolic-androgenic steroids users are well and correctly informed regarding administration techniques?

☐ Yes (1) ☐ No (2)

Briefly elaborate on your answer please: _____

_____

_____.

2.7 Do you think current anabolic-androgenic steroid regulatory law(s) is appropriate? ☐ Yes (1) ☐ No (2)

If no, briefly elaborate please: _____

_____.

2.8 Do you think use of anabolic-androgenic steroid in the recreational gym-sphere can be considered legitimate and justified?

☐ Yes (1) ☐ No (2)

Briefly elaborate on your answer please: _____

_____.

2.9 Do you think modern society and men themselves place greater stress on presenting aesthetically pleasing, muscular bodies?

☐ yes (1) ☐ (2)

If yes, briefly elaborate please: _____

_____.

**3. Likert Scale:**

**3.1 Personal Opinion**

Please rate the degree to which you agree or disagree with the following statements.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4= Disagree 5= Strongly Agree (Mark number with an X).

| Statement | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 1. Exercise is important to me because my friends and/or family members also exercise. | 1 | 2 | 3 | 4 | 5 |
| 2. I think about exercise more than I think about anything else. | 1 | 2 | 3 | 4 | 5 |
| 3. I feel unfulfilled if I do not exercise. | 1 | 2 | 3 | 4 | 5 |
| 4. If I stopped exercising I would feel like I lost a part of myself. | 1 | 2 | 3 | 4 | 5 |
| 5. I am more comfortable in my gym/club than any other location. | 1 | 2 | 3 | 4 | 5 |
| 6. I am well acquainted with my fellow gym/club members. | 1 | 2 | 3 | 4 | 5 |
| 7. My gym/club sells gym supplements, which I consider a benefit. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 8. Gym/club members and staff talk openly about the trade and (ab)use of gym supplements. | 1 | 2 | 3 | 4 | 5 |
| 9. Gym supplements are (ab)used in an uninformed manner, on the advice of others, with no research conducted. | 1 | 2 | 3 | 4 | 5 |
| 10. The (ab)use of gym supplements has increased and continues to. | 1 | 2 | 3 | 4 | 5 |
| 11. I do not consider the (ab)use of gym supplements to be socially problematic, nor do I condemn it. | 1 | 2 | 3 | 4 | 5 |
| 12. Steroids are traded at my gym/club. | 1 | 2 | 3 | 4 | 5 |
| 13. I am acquainted with those who indulge in the steroid trade. | 1 | 2 | 3 | 4 | 5 |
| 14. Gym/club members and staff talk openly about steroid trade and (ab)use. | 1 | 2 | 3 | 4 | 5 |
| 15. The (ab)use of steroids has increased and continues to. | 1 | 2 | 3 | 4 | 5 |
| 16. Steroids are (ab)used in an uninformed manner, on the advice of others with no research conducted. | 1 | 2 | 3 | 4 | 5 |
| 17. I am aware of steroids' (il)legal status in the country. | 1 | 2 | 3 | 4 | 5 |
| 18. I do not consider the trade or (ab)use of steroids to be problematic, nor do I condemn it. | 1 | 2 | 4 | 4 | 5 |
| 19. steroids should be made legal, taxable substances. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 20. I consider unlicensed, private steroid trade and (ab)use to be fair. | 1 | 2 | 3 | 4 | 5 |
| 21. I consider my body as being an autonomous entity. | 1 | 2 | 3 | 4 | 5 |
| 22. The demand for a physically appealing body has increased. | 1 | 2 | 3 | 4 | 5 |
| 23. I consider masculinity and muscularity as being independent entities. | 1 | 2 | 3 | 4 | 5 |
| 24. Masculinity is under threat. | 1 | 2 | 3 | 4 | 5 |
| 25. Masculinity is in need of rejuvenation and/or change. | 1 | 2 | 3 | 4 | 5 |

**4. Further Research Section:** If interested in potentially being interviewed regarding your experiences, understandings and perceptions of anabolic-androgenic steroids for a few minutes, and how, in any way, they have affected your life, please provide your contact details below:

Name: _____

Email: _____

Cellular phone number: _____

Thank you for your time and participation. If you have any further enquiries, please do not hesitate to contact the researcher below.

Tamsanqa Munyaradzi Mashasha
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University of Cape Town
Western Cape
Email: mshtam003@myuct.ac.za
Tel: +27 82 701 4482

***Alternatively, you may contact the Law Faculty Research Ethics Committee Administrator, Mrs Lamize Viljoen, at 021 650 3080 or at lamize.viljoen@uct.ac.za***

**Appendix 2 Survey Information Sheet**

**UNIVERSITY OF CAPE TOWN**


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**'Masters of their Universe: Masculinity, Muscularity and Steroid Use in a Gym Setting. A South African Case Thesis'**

**Survey Information Sheet**

Hello, my name is **Tamsanqa Mashasha**. I am a passionate gym-goer and I am conducting research towards a doctoral degree at the University of Cape Town's (UCT) Centre of Criminology.

I am researching anabolic-androgenic steroids, specifically what people know about the substances, the market within which they are traded, and what is the general feeling regarding their (ab)use. I am interested in learning more about your experiences, understandings and perceptions of anabolic-androgenic steroids and how, in any way, they have affected your life.

This survey has been distributed to you as well as other gym-goers/bodybuilders in Cape Town and East London, who are a) visibly muscular, and b) train in a dedicated, informed manner. Its purpose is to provide an overview of gym-goers/bodybuilders in Cape Town and East London (e.g. numbers, demographics, experience and opinions).

Your completion and return of the questionnaire implies consent. Your participation is entirely voluntary i.e. should you choose to participate; you will not receive a payment. The anonymity

of your identity is a priority of this thesis and will not be revealed at any point i.e. you will not have to disclose your name on the survey form. Please understand that you are under no obligation to complete this survey – should you not wish to complete this survey, there will be no negative repercussion of any sort.

Your individual response will be combined with other responses to produce the survey findings. Completed questionnaires will be stored in a locked cabinet and destroyed upon completion of this thesis.

The results of this survey will hopefully be published through a variety of avenues such as academic literature, mainstream journals and relevant sport or information sites. They will also be used as a pre-selective tool for more in-depth research which involves interviewing bodybuilders about their experiences and life stories.

This survey should take approximately 15 minutes to complete. Your participation involves filling in the appropriate boxes in the attached questionnaire, then returning your response to me, the researcher, located in the weights section of the gym.

Please note that your completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question.

*If you have **concerns about your rights as a research participant in this thesis**, please do not hesitate to contact the researcher below:*

Tamsanqa Munyaradzi Mashasha

Centre of Criminology

University of Cape Town

Western Cape

Email: mshtam003@myuct.ac.za

Tel: +27 82 701 4482

***Alternatively, you may contact the Law Faculty Research Ethics Committee Administrator, Mrs Lamize Viljoen, at 021 650 3080 or at lamize.viljoen@uct.ac.za***

## Appendix 3 Consent Form

I hereby grant permission to Tamsanqa Munyaradzi Mashasha, a doctoral student from the University of Cape Town's (UCT) Centre of Criminology, to use the information that I have provided for research purposes.

I have been informed of the purpose of the research and I understand that:

- ✠ My participation is voluntary and I am under no obligation to participate in this study;
- ✠ I understand that I have the right to withdraw from the research at any stage without fear of any negative repercussions;
- ✠ The anonymity of my identity is a priority of this study and will not be revealed at any point;
- ✠ The contents of my information is purely for the research purpose of this study and will not be used for any other purpose;
- ✠ The researcher will ask for my permission to record the interview, in order to aid accurate data analysis.
- ✠ The recordings will be destroyed once transcribed and the transcriptions will be destroyed on completion of the project. Both will be held in constant confidence and only be accessible by the researcher and his supervisors;
- ✠ I will not receive a payment for participating;
- ✠ I will be treated with respect and my privacy and dignity will be protected in that any and all information I provide will a) not be used to identity or incriminate me, b) be treated anonymously and confidentially, c) stored in a secure location, and d) destroyed upon completion of the project;
- ✠ The interview should take no more than 45 – 60 minutes of my time.

I have read and understood the information sheet and the statements above.

Signed at _____ on this _____ day of

_____201

_____

Researcher

_____

Participant signature

*If you have concerns about your rights as a research participant in this study, please do not hesitate to contact the researcher below:*

Tamsanqa Munyaradzi Mashasha

Centre of Criminology

University of Cape Town

Western Cape

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## Appendix 4 Interview Guide

1. Briefly – how would you describe yourself? What things and who are important in your life?
2. Briefly – can you describe your life story, specifically your ethnicity, class, family (parents and siblings) and current occupation?
3. Briefly – describe your school history, focusing on your high school sports experiences.
4. Were some boys more popular at school? What makes them popular? And, were you popular?
5. Did sports relations and activities have a notable influence on your identity?
6. How, why and when did you started lifting weights?
7. What was it like? Describe the experience.
8. Have you used and/or are you currently using training aids, such as sports supplements and steroids? Do you have any issue with the training aids, specifically steroids?
9. Has gyming influenced your goals, social and private life, body image and lifestyle values and attitudes at all?
10. What parts of training do you find:
    - most satisfying and rewarding?
    - Beneficial to other areas of your life?
11. What parts of training do you find:
    - Least satisfying and important?
    - Detrimental to other areas of your life?
12. Is gyming healthy? In your opinion, are there any risks involved in training? If so, have you witnessed and/or experienced any?
13. What motivates you to continue to train to the extent that you do? Are there any individuals who support your efforts?
14. Do you feel that your bodily appearance and masculinity are connected? If so, how and why?

## Appendix 5 Ethics Approval

**Faculty of Law**

**Research Ethics Committee**

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**Date: 13 December 2016**

**Mr Tamsanqa Mashasha** ***c/o Public Law Department*** Centre of Criminology
Level 6, Kramer Law Building UCT

Email:
mshtam003@myuct.ac.za
Mobile: 082 701 4482

Dear Mr Mashasha

**Re: Clearance Process for L0036/2016: *'Another one boet': Masculinity and the evolution of the illicit Anabolic- Androgenic trade in the contemporary South African fitness industry***

Thank you for your revised application submitted. The Faculty's Research Ethics Committee very much appreciates the considerable effort put into the documentation.

This study has been carefully considered and all ethical issues have been adequately addressed.

Ethics clearance is hereby granted as of 12 December 2016 and is subject to renewal for another 12 months.

Please note that any material changes to the proposal will need to be cleared as an amendment.

With best wishes,

*pp*
**Associate Professor Julie Berg REC: CHAIRPERSON**

*cc: Dr Simon Howell, Public Law Dept, Law Faculty*

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## Appendix 6 32 Most Common Steroids

Some AAS are strictly used for performance purposes, those used primarily in a therapeutic sense, and of course, those that crossover into both fields; the latter represents the majority. In total, there are 32 common types of AAS; they are the AAS that can be used by anyone who supplements with such hormones for any reason.

**List 1: 32 Popular AAS - compound name, popular trade name where applies and method of administration.**

| **Compound** | **Popular Trade Name** | **Administration Form** |
|---|---|---|
| Oxymetholone | Anadrol | Oral |
| Nandrolone-Hexyloxyphenylpropionate) | Anadur | Injectable |
| Oxandrolone | Anavar | Oral |
| Testosterone | AndroDerm | Transdermal |
| Testosterone | AndroGel | Transdermal |
| Testosterone-Undecanoate | Andriol | Oral |

| | | |
|---|---|---|
| Nandrolone-Decanoate | Deca-Durabolin | Injectable |

| | | |
|---|---|---|
| Methandrostenolone | Dianabol | Oral |
| Nandrolone-Undecanoate | Dynabolan | Injectable |
| Nandrolone-Cypionate | Dynabol | Injectable |
| Boldenone-Undecylenate | Equipoise | Injectable |
| Trenbolone-Acetate | Fina | Injectable |
| Fluoxymesteron | Halotestin | Oral |
| Drostanolone-Enanthate | Masteron | Injectable |

| | | |
|---|---|---|
| Drostanolone-Propionate | Masteron | Injectable |
| Testosterone-Undecanoate | Nebido | Injectable |
| Nandrolone-Phenylpropionate | NPP or Durabolon | Injectable |

| | | |
|---|---|---|
| Testosterone-Propionate-Phenylpropionate-Isocaproate-Caproate | Omnadren | Injectable |
| Trenbolone-Hexahydrobenzylcarbonate | Parabolan | Injectable |
| Methenolone-Acetate | Primobolan | Oral |
| Methenolone-Enanthate | Primobolan Depot | Injectable |
| Mesterolone | Proviron | Oral |

| | | |
|---|---|---|
| Testosterone-Propionate-Phenylpropionate-Isocaproate-Decanoate | Sustanon-250 | Injectable |
| Testosterone | Testopel | Subcutaneous Implant |
| Testosterone-Cypionate | N/A | Injectable |
| Testosterone-Enanthate | N/A | Injectable |
| Testosterone-Propionate | N/A | Injectable |
| | | |
| Testosterone-Suspension | N/A | Injectable |
| Trenbolone-Enanthate | N/A | Injectable |
| 4chlorodehydromethyltestosterone | Turinabol | Oral |

| | | |
|---|---|---|
| Stanozolol | Winstrol | Oral |
| Stanozolol | Winstrol Depot | Injectable |

**List 2: 32 Popular AAS – commonly associated name, purpose of use (therapeutic and/ performance).**

| **Steroid** | **Therapeutic** | **Performance** |
|---|---|---|
| Anadrol | Commonly used to fight Anemia or muscle wasting Diseases | Used to promote Mass & Strength – can be used to promote fullness in cutting phases |
| Anadur | Not used for therapeutic purposes | Rarely used – used to promote off-season mass – strong healing and |
| | | rejuvenating properties – excellent for recovery |

| | | |
|---|---|---|
| Anavar | Used to promote weight gain or fight muscle wasting diseases – sometimes used to treat Osteoporosis | Used to promote conditioning in Cutting Cycles – moderate strength increaser – enhanced recovery – enhanced metabolic rate – used by men and women safely |
| AndroDerm | Used to treat Low Testosterone or as part of an Andropause treatment plan | Not used for performance purposes – will not provide a significant performance level boost of testosterone due to poor absorption |
| AndroGel | Used to treat Low Testosterone or as part of an Andropause treatment plan | Not used for performance purposes – will not provide a significant performance level boost of testosterone due to poor absorption |
| Andriol | Used to treat Low Testosterone or as part of an Andropause treatment plan | Not used for performance purposes – highly inefficient for performance – absorption issues and strong hepatotoxicity |
| Deca-Durabolin | Commonly used to treat Renal Insufficiency and Anemia – sometimes used to | Commonly used to promote mass or Tissue Growth – tremendous recovery |

| | | |
|---|---|---|
| | treat severe muscle wasting diseases | promotion and rejuvenation – strongly promotes joint relief |
| Dianabol | Not used for therapeutic purposes | Used to promote Mass, Strength and Muscular Endurance |
| Dynabolan | Not used for therapeutic purposes | Rarely used – used to promote off-season mass – strong healing and rejuvenating properties – excellent for recovery |
| Dynabol | Not used for therapeutic purposes | Rarely used – used to promote off-season mass – strong healing and rejuvenating properties – excellent for recovery |
| Equipoise | Not used for therapeutic purposes | Used to promote Strength, Recovery and to promote enhanced Conditioning – great for recovery and muscular endurance – can be used to promote mass when other mass agents accompany |

| | | |
|---|---|---|
| Fina | Not used for therapeutic purposes | Truly versatile – can promote Mass, Strength and tremendous cutting or |
| | | Conditioning effects – promotes recovery and rejuvenation at a high rate – extreme metabolic enhancer – can be used for all purposes |
| Halotestin | Rarely used – can be used to treat delayed puberty – sometimes used to fight specific forms of Breast Cancer – sometimes prescribed to treat severe androgen deficiencies | Primarily used to promote Strength – Will increase Strength more dramatically and rapidly than any steroid – can be used for conditioning aspects when extremely lean |
| Masteron | Not used for therapeutic purposes | Used almost solely for conditioning purposes such as hardness, dryness and overall definition – strong anti-aromatase like effect |
| Masteron | Not used for therapeutic purposes | Used almost solely for conditioning purposes such as hardness, dryness and overall definition – strong anti-aromatase like effect |

| | | |
|---|---|---|
| Nebido | Used to treat Low Testosterone or as part of an Andropause treatment plan | Not used for performance purposes – too slow for performance purposes |
| NPP or Durabolon | Commonly used to treat Renal Insufficiency and Anemia – sometimes used to treat severe muscle wasting diseases | Commonly used to promote mass or Tissue Growth – tremendous recovery promotion and rejuvenation – strongly promotes joint relief |
| Omnadren | Not used for therapeutic purposes | Highly versatile – can promote Mass, Strength, Conditioning – Preserve tissue, promote recovery and rejuvenation – tremendous metabolic enhancer |
| Parabolan | Not used for therapeutic purposes | Mass, Strength and tremendous cutting or Conditioning effects – promotes recovery and rejuvenation at a high rate – extreme metabolic enhancer – can be used for all purposes |

| | | |
|---|---|---|
| Primobolan | Not used for therapeutic purposes | Used to promote conditioning and recovery – rarely used due to oral form lacking the normal C17-aa nature that accompanies most oral steroids |
| Primobolan Depot | Not used for therapeutic purposes | Excellent for Conditioning, preservation, recovery and rejuvenation – can promote |

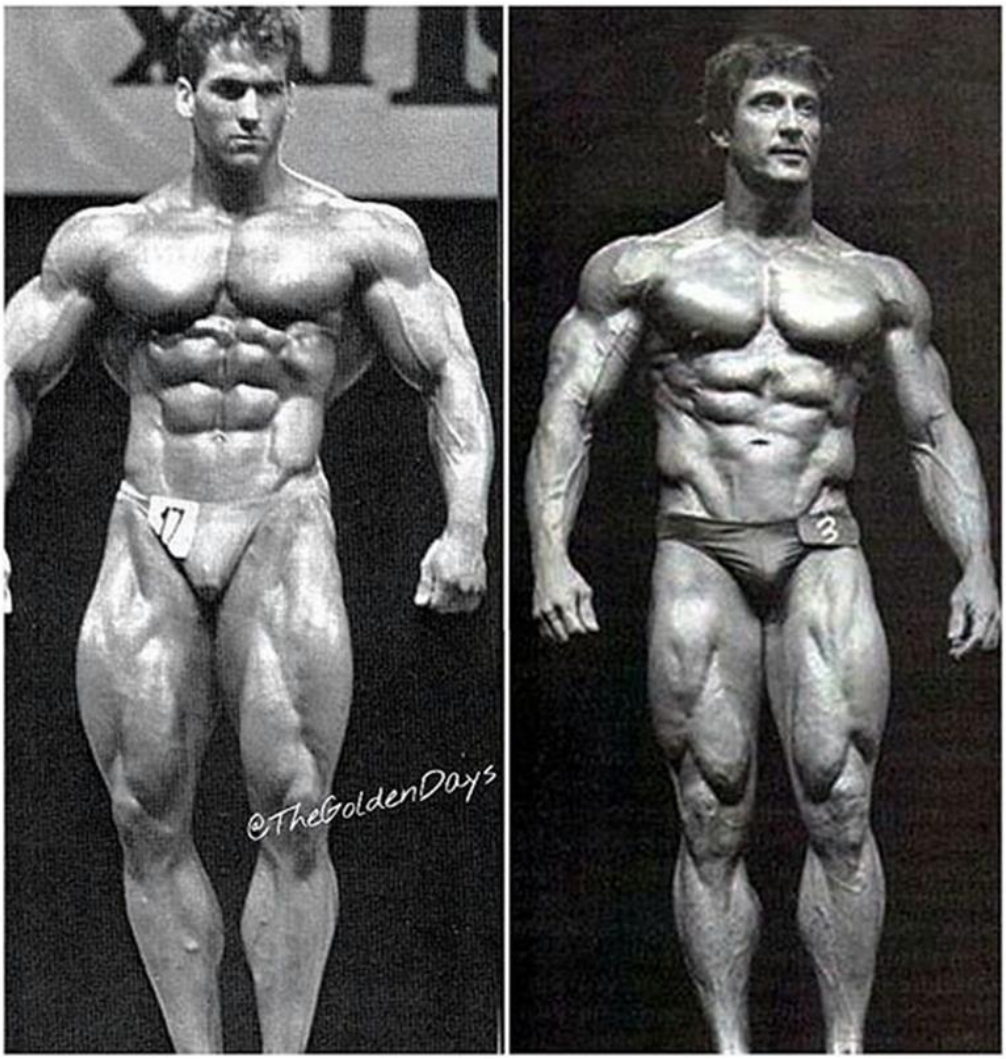
| | | |
|---|---|---|
| | | mass when other mass agents accompany |
| Proviron | Not used for therapeutic purposes | Used for its anti-estrogenic properties – can promote increases in free testosterone |
| Sustanon-250 | Used to treat Low Testosterone or as part of an Andropause treatment plan | Highly versatile – can promote Mass, Strength, Conditioning – Preserve tissue, promote recovery and rejuvenation – tremendous metabolic enhancer |

| | | |
|---|---|---|
| Testopel | Used to treat Low Testosterone or as part of an Andropause treatment plan – sometimes prescribed to treat libido deficiencies in women | Not used for performance purposes |
| Testosterone-Cypionate | Used to treat Low Testosterone or as part of an Andropause treatment plan – sometimes prescribed to treat libido deficiencies in women | Highly versatile – can promote Mass, Strength, Conditioning – Preserve tissue, promote recovery and rejuvenation – tremendous metabolic enhancer |
| Testosterone-Enanthate | Used to treat Low Testosterone or as part of an Andropause treatment plan | Highly versatile – can promote Mass, Strength, Conditioning – Preserve tissue, promote recovery and rejuvenation – tremendous metabolic enhancer |
| Testosterone-Propionate | Used to treat Low Testosterone or as part of an Andropause treatment plan | Highly versatile – can promote Mass, Strength, Conditioning – Preserve tissue, promote recovery and rejuvenation – tremendous metabolic enhancer |

| | | |
|---|---|---|
| Testosterone-Suspension | Used to treat Low Testosterone or as part of an Andropause treatment plan | Highly versatile – can promote Mass, Strength, Conditioning – Preserve tissue, promote recovery and rejuvenation – tremendous metabolic enhancer |
| Trenbolone-Enanthate | Not used for therapeutic purposes | Mass, Strength and tremendous cutting or Conditioning effects – promotes recovery and rejuvenation at a high rate – extreme metabolic enhancer – can be used for all purposes |
| Turinabol | Not used for therapeutic purposes | Used to promote Strength – can promote conditioning to a degree – solid recovery steroid |
| Winstrol | Used to treat NonRegenerative Anemia, Angioedema and Severe strength loss – sometimes used to fight Obesity although rare | Almost always used for Cutting – great for conditioning – used in athletic for strength enhancement – greatly improves muscular endurance – strong metabolic enhancing properties |

| | | |
|---|---|---|
| Winstrol Depot | Used to treat NonRegenerative Anemia, Angioedema and Severe strength loss – sometimes used to fight Obesity although rare | Almost always used for Cutting – great for conditioning – used in athletic for strength enhancement – greatly improves muscular endurance – strong metabolic enhancing properties |

**Appendix 7 Steeve Reeves (left) and Frank Zane (right)**



## Appendix 8 Action Figure Toys

**Figure 1: Phil Heath, 2014 Mr Olympia** (Nieuwoudt, 2014: 16).

**Figure 2: Extreme Sargent Savage, a G. I. Joe action figure** (Nieuwoudt, 2014: 16).

## Appendix 9 Acronyms

| Acronym | Definitions |
|---|---|
| AAS | Anabolic Androgenic Steroids |
| AUA | Adolescent University Students |
| BDD | Body Dysmorphic Disorder |
| CP 1977 | The Criminal Procedure Act 51 of 1977 |
| CPT | Cape Town |
| DDT 1992 | The Drugs and Trafficking Act No. 140 of 1992 |
| DEA | The Drugs Enforcement Agency |
| EL | East London |
| FDA | The Food and Drugs Administration |
| IOC | International Olympic Committee |
| MCC | Medicines Control Council |
| MD | Muscle Dysmorphia |
| MRS 1965 | The Medicines and Related Substances Act 101 of 1965 |
| SA | South Africa |
| SAIDS | South African Institute for Drug-Free Sport |
| SAIDS 1997 | The South African Institute for Drug-Free Sport Act 14 of 1997 |
| SAPC | South Africa Pharmacy Council |
| SAPS | The South African Police Service |
| SSBBS | Single Sex Boys Boarding Schools |
| SS | Sports Supplements |
| UK | United Kingdom |
| USA | United States of America |