

Doping and the Athlete: The Effect of Anabolic Steroids on Elite Sport

A Research Paper submitted to the Department of Engineering and Society

Presented to the Faculty of the School of Engineering and Applied Science
University of Virginia • Charlottesville, Virginia

In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science, School of Engineering

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Spring, 2021

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In 2019, Mack Horton, a participant in the Swimming World Championships, gained notoriety after refusing to stand on the podium following his silver medal race. Horton did this in protest against the gold medal winner, Sun Yang, who Horton believed had participated in doping to gain an advantage in the competition (Holmes, 2020). In reality, the situation was much more complicated than it seemed. The night of the incident, Sun became uncomfortable with the anti-doping testing practices that were being carried out. There was a doping control assistant who he discovered was taking photos of him as he was giving his sample. When this occurred, Sun confronted the doping control assistant and decided to attempt to wait for a new testing team, but the Court of Arbitration for Sport (CAS) panel had to decide whether or not this occurrence was sufficient enough for Sun to request a new testing team. In this time, Sun became frustrated and he and his team destroyed the paperwork that went along with the sample. The CAS panel found that “there was no justification, whether compelling or otherwise, for [Sun] to act as he did” (Holmes, 2020), and the panel decided to administer an eight-year ban. As shown in this example, there are multiple organizational and personal power dynamics at play in this case study, all stemming back to the fact that Sun Yang, whether or not he was intentionally cheating, had little say in what he thought was an unsafe testing environment. This ultimately brings up a key question about anti-doping proceedings: is the athlete an underrepresented and undervalued part of the anti-doping process?

The world of elite sport is one of the most unifying yet deeply competitive activities for athletes and countries around the world. Athletes fight to compete for personal glory, national pride, and international fame, and almost all have spent their entire lives training to become the

peak competitive version of themselves. One of the reasons that athletes are so universally lauded for their success is that they are competing at the highest level based on the immense amount of hard work and skill that they have put in to get where they are today, but this level playing field in which elite athletes try to succeed can be compromised by the use of performance enhancing drugs (PEDs). In spite of extensive testing measures used by anti-doping agencies around the world, there is a concerning lack of regard for the athlete perspective in anti-doping testing. In order to understand this, we have to go beyond the moral punishment attitude held by many of the involved parties to really understand the dynamics at play between athletes, drugs, anti-doping agencies, sports organizations, and others. In this discussion of the social aspects of doping use, Actor Network Theory will be used to further explain doping in sports through the analysis of three main research questions: what are the factors that contribute to the use of anabolic steroids? what are the power dynamics at play in the efforts against anti-doping? and what is the role of ethics concerning doping in professional sports?

Literature Review

Elite sports are some of the most watched and most enjoyed versions of entertainment available to the public. In spite of this, little research has been done looking into the relationships between ethics, athletes, and doping processes, which almost all elite athletes participate in on a regular basis. To understand the importance of this research and how crucial its absence is, it is first important to understand the history and rise of doping abuse in elite athletes. PED use has increased steadily since it first started to be widely used. The availability and use of PED have seen a drastic increase since the first recorded instances of misuse of anabolic steroids (AS) “during the 1954 Olympics, when Russian weightlifters were given testosterone” (NIDA, 2018,

p. 4). As published by the World Anti-Doping Agency (WADA) in the 2017 Anti-Doping Rule Violations Report, 1,804 individuals violated anti-doping rules across 93 sports (2019). The amount of doping violations is also largely undervalued, as WADA is not able to test all athletes worldwide, and “new designer drugs constantly become available that can escape detection and put athletes willing to cheat one step ahead of testing efforts” (NIDA, 2018). With biotechnologies constantly evolving and athletes taking advantage of these new PED variations, the importance of ensuring fair competition in sport is becoming more important than ever.

While the sociological aspects of anti-doping efforts have not been well documented, the issues behind existing anti-doping efforts have been covered extensively. When looking at the adequacy of the World Anti-Doping Agency (WADA) in the prevention of AS abuse, it is easy to see the inadequacies shine through. In spite of a budget of \$37.4 million, the issues “are with WADA’s broken governance, lack of democracy and transparency, and [its habit of] keeping athletes’ voices and any [governmental] influence out of decision-making process” (Pells, 2020).

WADA’s broken governance and poor regulation has led to a variety of issues with both athlete monitoring and public trust. A study conducted by the U.S. government concludes that “Americans don't get their money's worth out of the \$2.7 million that Congress” provides WADA, and the government suggests that “future funding be contingent on changes in the drug-fighting agency’s policies” (Pells, 2020). This study shows that, on a governmental scale, WADA’s broken governance has led to a distrust of the organization by the U.S. government. Additionally, WADA has done a poor job at monitoring countries’ commitment to their policies, stemming from poor regulation standards. In the 22-year span that WADA has existed, it is clear that “much of the commitment [to anti-doping efforts by WADA] was superficial and mere

‘politics of appearance’” (Houlihan et al., 2019). In essence, WADA is a superficial organization that does not carry the best interest of the issue that they are trying to tackle.

In addition to broken governance and poor regulation, WADA regularly upholds a lack of democracy and transparency, leading to many of the issues that athletes and sports organizations alike have with the organization. In a complication of a reinstating of the Russian Anti-Doping Agency (RUSADA), WADA published false information that Russia had accepted responsibility for their failures to monitor doping. In reality, “Russia [had] never accepted that a State doping program even existed, let alone accepted responsibility for it” (Brown, 2020). WADA then went on to attempt to hide its mistake by “selective publication of letters and selective editing of the Executive Committee meeting minutes” (Brown, 2020). This shows that WADA is actively suppressing information and taking power over other organizations through a lack of democratic regulation. WADA has also been accused of intimidating athlete members of WADA’s executive board through “a general attitude of dismissal and belittling of the athlete voice” (Roan, 2018). Not only was there a dismissal of athlete presence at the meeting, there were also incomplete reports written by WADA after the incident. Brown writes that “the simple fact is that WADA dealt with serious complaints [of intimidation] from two internationally respected athletes by conducting a review and producing a report that neither were happy with” (2020). This shows that not only were these athletes intimidated, they also were undermined by a report that WADA produced which did not tell an accurate story, connecting back to the lack of transparency.

The aforementioned shortcomings of WADA are echoed by Larry Bowers (2009), a member of the U.S. Anti-Doping Agency, who says that “support provided for antidoping research, education, and testing is embarrassingly inadequate” (p. 1460). Bowers goes onto explain some of the reasons why anti-doping research has improved, but all of these reasons are

based on testing and do not focus on the holistic prevention of AS abuse (Bowers, 2009), and do not provide any insights into the lack of sociological research which could help improve overall efficiencies through examining power dynamics and ethics issues.

In this discussion of current literature, it is clear to see that something is missing: a deep dive into the power dynamics at play. No matter how much funding is available and how poorly established the governance is of anti-doping agencies, there is a glaring issue with the power that they possess over athletes and their experiences with doping. The research in this paper will help reexamine issues in anti-doping testing from a sociological perspective and help identify problems with how agencies conduct their proceedings.

STS Framework

This research will examine performance enhancing drugs (PEDs), anabolic steroids (AS) in specific, and will use Actor Network Theory (Law, Callon, 1988) to map the interactions existing within the anti-doping system to further analyze the ethics and power dynamics at play. Actor Network Theory is a framework that is used to map human and non-human actors (people, organizations, technology, etc.) in a way that demonstrates their ever-evolving interconnectedness through a complex web of interactions. Actor Network Theory will be important in understanding how the relationship of actors and their interactions will result in social influences leading to issues with doping in elite sports. Through this methodology, a discussion will be generated that focuses on the interaction between human actors, such as athletes, testing officials, coaching and training staff, and medical personnel, and non-human actors, such as profit incentives, media, anti-doping agencies, government entities, cultural beliefs, and the drugs themselves. This network will demonstrate that doping is not a clear-cut

issue of right and wrong and needs to be analyzed in a context that considers the complexity of why doping occurs and the power dynamics that affect athletes.

This paper will use data and information collected from various documents such as scholarly articles, news sites, medical journals, international surveys, and more. By using document analysis, the paper will be able to provide insights into this data and information through a different lens, portraying doping and testing issues in the world as an immensely complex issue.

Data Analysis

Doping in sports is a rampant issue at the professional level, and there are not many programs in place to help prevent doping, opposed to simply testing for it. A large part of this is the lack of sociological study done between doping and sports (Trabal, 2016). The sociological relationship between the abuse of AS and its ties to professional athletes will be analyzed in this discussion of obtained data. As stated previously, the main parts of this research can be divided into three questions concerning the frequency abuse of AS, the power dynamics at play in anti-doping processes and AS abuse, and the roles of ethics concerning doping in professional sports. These three issues will be examined in the following analysis and discussion.

Firstly, it is important to understand how large of an issue AS abuse is and why it occurs. Many athletes train their whole lives to compete at the professional level, and most athletes want to make it to the top of their sport. In one study of a Canadian national track team, greater than 5% of the participants would be willing to take a performance-enhancing drug if it meant that they would die in the next 5 years but win gold (Anawalt, 2018). Similarly, 2% of all elite athletes tested positive for a violation of substance abuse, with the World Anti-Doping Agency

(WADA) recognizing that this number is likely a lot higher than indicated by the data. This shows that many of these athletes are trying to out compete their opponents by using the drugs to gain a competitive edge over competition. As a non-human actor, PEDs have tremendous influence over athletes just by virtue of competition alone, and this is only amplified by the additional interactions between human and non-human actors. Nationalism can also play a large role in encouraging doping, as athletes want to succeed for their respective countries (Connor, 2009). Many athletes feel pressure from fellow teammates and citizens of their home countries to perform well, so they succumb to PED use to fulfill these lofty expectations. Pride for one's country can act as a non-human influence in the network, adding yet another reason to use PEDs and an additional power dynamic over athletes. Another reason that many athletes use PEDs is the implementation of profit into the world of sports (Connor, 2009). For many centuries, sports were used as a form of competition and entertainment, but nothing more. Now athletes are more eager than ever to outperform their competition, as their salary depends on it. The commercialization of sports has led to athletes getting paid based on both their success and their public appeal, and the desire for success as well as the need for a stable salary can drive these athletes to do whatever it takes to increase their earnings. Profit as a non-human actor has great power over athletes, and ties back to the pressure from teammates and countrymen, as many athletes are directly competing with their teammates for salary money delegated by their national appeal and commercial profitability.

In addition to the competitive benefits of using AS, the drug is relatively inexpensive and easily obtained from both legal and illegal sources (Alquraini, Auchus, 2018). In fact, medical practitioners, an important human actor in the network, are drawn into the culture of "winning at all costs" because of a large medicalization of sports (Connor, 2009). This combination has

created an easy way for athletes to obtain AS from wherever they need to, opening a large door for them to participate in using PEDs. AS is also, by far, the largest single drug found to be violated by WADA, accounting for 48% of all violations (Alquraini, Auchus, 2018). Furthermore, athletes have the potential to become addicted to AS, although this is at an unknown rate (US Department of Justice, 2004). The motivations listed above and the ease of access to AS makes the drug an enticing alternative to boost athletes odds of competing at a high level.

There are many power dynamics at play in the use of AS that contribute to the widespread use of the drug detailed above. Starting in 1950s to 1970s, the largely unmonitored use of AS by elite athletes played a significant role in shaping the physique images and ideals that the next generation of athletes possessed (Kanayama, Pope, 2018). This power that the media held as a nonhuman actor over upcoming athletes, who now have stricter regulations on substance use, created a plethora of doping issues within the professional community. Tying back into the pressure that athletes receive to use AS, the media shows amateur athletes the most successful elite athletes in the sport, and in many cases these athletes are successful due to their genetics and natural gifts. The media only perpetuates the pressure to use AS in the actor network, as these amateur athletes feel that the only way to achieve success is to look and perform like the elite athletes they see in the news.

In addition to the power that the media holds over athletes, there are power dynamics that exist within coaching and training staffs. In many parts of the world, coaches and trainers alike encourage athletes to use PEDs (Reardon, Creado, 2014) so that the coaches and trainers themselves can have the glory of assisting a world class athlete win. Coaches and trainers as human actors increase the use of doping through pressure and competition, thus creating an

atmosphere of “win at all costs.” This is unfortunate for the athlete, because these members of the training staff are typically never held accountable for their influence over their athletes’ decisions, especially when a doping violation occurs.

Finally, at a higher level, anti-doping agencies, such as WADA, have extreme power over the athletes. As stated on WADA’s website, their primary duty is “is to monitor anti-doping activities worldwide to ensure proper implementation of and compliance with the World Anti-Doping Code” (World Anti-Doping Agency, n.d.). WADA administers the tests on athletes for drugs, but when they find positives, the athlete is typically not consulted and neither is anyone else in the process; the athlete is simply suspended. WADA’s power as a non-human actor is kept through the use of several actants such as scientists, medical personnel, doping experts, and many more. In spite of its international power, many countries and individual athletes are deeply unsatisfied with many of its decisions and tend to question its role as the highest form of anti-doping agency. There are many athletes who believe that WADA needs to be more proactive in communication with athletes and the prevention of such violations. In a study of elite athletes from all around the world from basketball, skiing, volleyball, and other assorted sports, one male athlete from Central Asia explains that he thinks WADA should give more education to the athletes so as to eliminate the confusion that is typical in anti-doping testing (Qvarfordt et. al., 2019). A female athlete from West Asia states that she does not know anything about prohibited drugs, and she would not know if her coach was giving them to her or not (Qvarfordt et. al., 2019). Many athletes in the study thought that the anti-doping system is problematic, and this largely has to do with the power over athletes that anti-doping agencies refuse to reanalyze or relinquish. As a deeply flawed actor in the network, WADA exists to simply punish athletes, and

this contributes to the doping network a large source of power issues which only perpetuate the problems athletes have with PED abuse.

At an individual level, doping in sports can be attributed to several factors such as the drive for profit, media influence, coaching and training staff pressure, easy ability to obtain, and more. In addition to these individual pressures to abuse PED's, many reasons can be attributed to the varying ethical standards held by cultures and communities throughout the world.

Discussion

The analysis of data provided insights into the complexity of issues experienced in the world of anti-doping, but it is also important to discuss the ethical standards held by athletes as one key reason behind PED use. Ethical beliefs by athletes play a large role in the use or refusal to use AS; many athletes hold themselves to a higher standard when it comes to abusing PEDs, but some athletes see this as an opportunity for them to succeed by using PEDs in order to gain an edge on competition. This can be largely attributed to a lack of informative measures on both the dangers and the destruction that AS causes elite sports. One North American athlete in a study of elite athletes from around the world states that he would like to see a more supportive community around athletes that pushes them to be the best that they can be without indulging in AS abuse (Qvarfordt et. al., 2019). This is very insightful into the lack of ethics awareness that is exacerbated by sports organizations and anti-doping agencies alike. With increased educational measures from anti-doping agencies, ethics can be brought to the forefront of professional sports, and this can be used to curb the abuse of AS.

In order to understand why some athletes have different ethical standards around the world, it is important to look at the many differences in ethical standards among governmental

entities and individual athletes between countries and cultures. For this discussion in national differences in sports ethics, the United States and China will be used as examples due to their vastly different societal views, beliefs, and government policies.

Firstly, in the United States, sports can be a largely independent endeavor, valuing personal achievement over team or national achievement. As stated by Yanmei Gao and Webin Liu, American culture “focus[es] on the individual efforts of the athletes and the scientific training methods of the coach, but seldom attribute[s] the achievements to the whole team, the government agency and higher leadership” (2018). Using AS will help these American athletes improve their personal success and will therefore increase their public status and salary (in most cases). In China, however, many athletes are extremely driven by the opportunity to succeed for their country, and they have a much higher sense of nationality. As said by Gao and Liu, “if [a Chinese] athlete wins the match, he makes his country proud, and when he loses, he disgraces his motherland” (Gao, Liu, 2018). This means that Chinese athletes may be prone to use AS in order to bring success to their country and uphold the high standards that the culture places on them. The distinction in these two mindsets show an interesting culturally based difference in the ethical reasons behind the use of AS. Additionally, this creates multiple different possible approaches to combatting AS abuse, as values in the countries differ and therefore will need to be targeted to help eliminate AS abuse.

Differing levels of government involvement can also play a large role in doping schemes. In the United States, government involvement in sports is minimal and many, if not all, of the administrative decisions are left up to the sports organizations, even in international events. Additionally, the decentralized system of the United States means that they would only be able to have so much control over athletes in the case that they do decide to implement regulations.

China, however, is different in that the government plays a larger role in athletes' lives, because "the governments at all levels still [have] extensive control of sport operations in China" (Li et al., 2011). The Chinese government has even been known to encourage athletes to use prohibited substances; there have been reports of systematic government doping schemes, and it has been reported that upwards of 10,000 athletes may have been involved in doping schemes in the 1980s and 1990s (Deutsche Welle, 2017). This can largely be traced back to the desire of national pride and the valuing of public benefit over private interests by large governmental organizations.

Another ethical difference between the two countries is the mentality of trust in current and new technologies that are culturally ingrained in athletes desire to win. There is a larger distrust of technology in the United States than there is in China. Based on a poll from the Pew Research Center, "four years ago, some 71 percent of Americans thought that tech companies had a positive impact on the United States; that number has now plunged to 50 percent" (Kolakowski, 2021). In the case of doping as a biotechnology, athletes in China are likely more willing to try using AS to gain an advantage on competition, while athletes in the United States are wearier of the drug and are less likely to risk the side effects for a boost in performance. Furthermore, there is less of a 'win at all costs' mentality in the United States than there is in Chinese culture and values. This can affect how far the athletes in each country will go to experiment with new biotechnologies in order to secure a spot among the top competitors of the sport.

Conclusion

The prevalence of AS abuse is grossly underestimated and continues to be an issue within the world of elite sport. The rampant abuse, power dynamics stemming from anti-doping

agencies, and varying ethical issues behind AS abuse give reason for much work to be done in evaluating and understanding the sociological underpinnings of doping. Governmental, anti-doping agency, athlete, coaching and training staff, and national actors all interact in a way that is deeply rooted in two forces: success and fairness. Many times, these forces go hand-in-hand, but they are innately different drives and have the ability to cause a rift in the athletic community. How can anti-doping agencies work with athletes to reduce the amount of doping violations and increase ethical values in elite sport? What is the best way to reduce power dynamics held by anti-doping agencies, coaching staffs, and governments in international events? In order to answer these questions, anti-doping agencies have an important responsibility to focus on the athlete and value their views or opinions. The anti-doping agencies should develop frequent anonymous questionnaires designed to assess elite athletes' current coaching or governmental issues that they might feel threatened by in order to eliminate power dynamics. There needs to be more investment in WADA and other anti-doping agencies so that they can develop ethics programs that help reduce doping violations from the start. Anti-doping agencies and agents need to be more involved in communication with all actors in the network to identify potential scandals. With more research into how the actors interact in the anti-doping network, the sociological and ethical aspects of PEDs and AS abuse can be better understood, and future generations of athletes will be protected from the harmful effects of drug abuse.

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